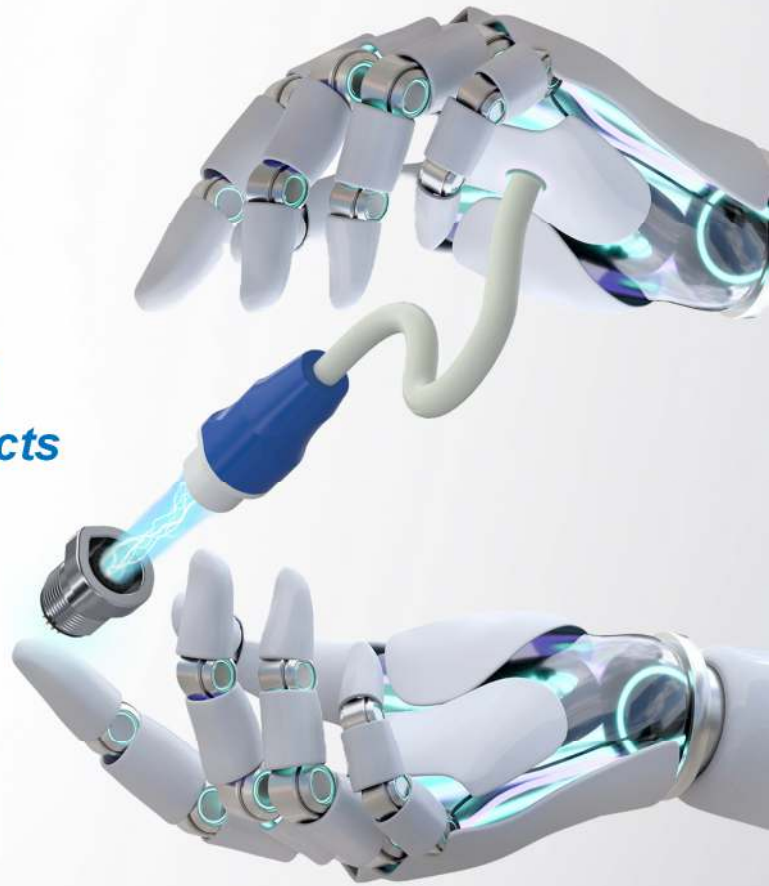




**2026 Edition**  
**Product Catalog**  
*Application Specific Interconnects*  
Medical • Industrial • Aerospace





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## Milpitas, California

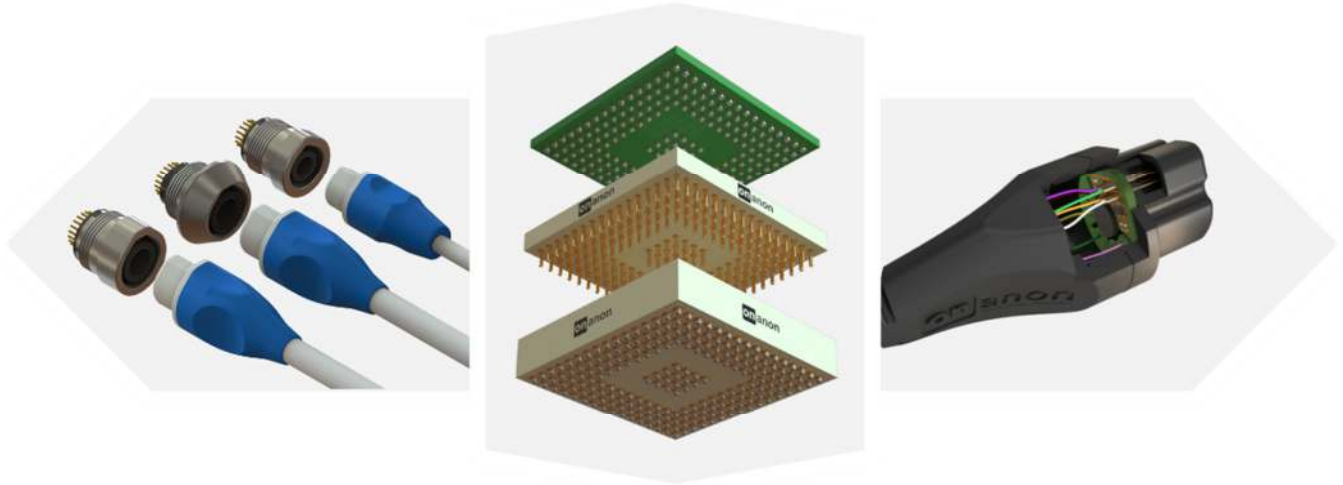


Onanon is a leading connector and cable assembly manufacturer headquartered in Milpitas, California, specializing in custom interconnect solutions for medical, automotive, and industrial applications. With a second production facility in Hermosillo, Mexico, we deliver high-quality, scalable manufacturing to meet global demand.

## Hermosillo, Mexico



Onanon, Inc. is an engineering and manufacturing company capable of producing over 10 million connector components a day, making us one of the largest connector manufacturers in North America.



Established in 1979, Onanon has a tradition of zero defects, on-time delivery and cost competitiveness. Our fully automated Milpitas, California manufacturing facility houses Engineering through Manufacturing.

Onanon is particularly distinguished by our proprietary high speed automated machining and assembly processes. This method of manufacturing gives us the flexibility to easily and quickly reconfigure to make any size/shape connector with little to no tooling cost.

Our product line features advanced connector solutions like MagConnect® and SmartConnect® designed for medical and industrial applications. We also provide BoardConnect®, focusing on board-to-board, BGA sockets, spring-loaded sockets, pin headers, and a wide range of other application specific interconnect solutions.

Onanon products are found in these diverse markets:

- Medical Cables
- Medical Equipment
- Networking Systems
- Power Supplies
- Scanners
- Test Equipment
- Telecommunications
- AC/DC Converters
- Automotive
- Backplanes
- Broadcasting Equipment
- Computers
- Connectors
- Fiber Optics
- Instrumentation

# Quality in Production



Based on the principles of continuous improvement and the commitment to meet the requirement of ISO 13485, Onanon will meet customer requirements the first time, every time.



Certified

X-Ray Fluorescence Measurement



Touch Probe Measurement



Custom Packaging



Part Cleanliness Tester



# Automated Manufacturing & Machining

Growth oriented companies have found employing Onanon to source, fabricate and inventory product to be the fastest, most cost-effective way to bring products to the market.



Pin Loading

Onanon is a skilled team of knowledgeable engineers, product managers and trained technicians that continuously seek ways to lower final product cost while raising quality.



Surface Mount Technology (SMT) Assembly

## Expertly Engineered End-to-End Solutions



Overmolding

## Vertically Driven In-House Capabilities



CNC Machining

Using fully automated manufacturing equipment, Onanon has been writing protocols and developing procedures to match the specifications of the most demanding customers worldwide since 1979.

# Overmolding & Electronic Encapsulation

## Variations

### Low Pressure Overmolding

Overmolding is a low pressure/low temperature injection molding process used for encapsulating and protecting delicate electronic components with a thermoplastic material.



### Multistep Overmolding

Two-step Overmolding uses low-pressure molding as the 1<sup>st</sup> encapsulation step to protect the delicate electronics and a 2<sup>nd</sup> shot using regular engineering thermoplastics.



### Epoxy Overmolding

Epoxy Overmolding enhances the resilience of electronic components, making them more resistant to environmental factors and extending their lifespan. Additionally, epoxy materials offer good thermal conductivity, aiding in heat dissipation and overall performance.



## Prototyping

### DFM

Efficiently and cost-effectively produced with minimal complexity and maximum functionality.

### Rapid/Quick Test Tools

3D printing, CNC machining, & other technologies that provide fast and cost-effective ways to create physical prototypes for evaluation and validation.

### Material Selection

We choose the best materials for intended application, performance requirements, and environmental conditions.

### Production Tools

Designed to shape, assemble, or otherwise process materials to create finished products efficiently.

## Contract Manufacturing

Low-to-high volume production

Value added services: engraving / color

Turnkey & supply management.



# Why Choose Us?

## Cost Effective

Overmolding is more cost-effective than traditional potting methods.

## Specifications Reduction

Reduces the weight and space of finished components.

## Ingress Protection & Ruggedization

Encapsulation can make electronics waterproof up to IPX8 and protect them from impacts, strains, and vibrations.

## Sterilization

Ensures safety, regulatory compliance, and the prevention of microbial contamination.

## Resistance to Harsh Chemicals

Withstand exposure to aggressive or corrosive chemical substances without undergoing degradation, damage, or loss of functionality.

## Environmentally Friendly & Safe

Utilizes eco-friendly materials, including recyclable thermoplastics, which align with sustainable manufacturing practices.



## Markets

Medical

Defense

Aerospace

Automotive

Industrial

Commercial



## Onanon's engineering is here to help.

Our goal is to work closely with the customer to efficiently develop products together that are both high quality, cost effective and designed for manufacturing.

Once we understand the application, we can incorporate processes that we have developed in the manufacturing of millions of connectors.

### DESIGN FOR MANUFACTURING

We understand that engineering is a continuous innovation to build a better product. Rapid prototyping is as important as volume production. Nothing beats having a prototype in your hands in days rather than months. It not only helps with “buy in” at the customer, but it also shapes our process for volume production. Our rapid robotic milling allows one or many to flow to you by scheduled delivery for just-in-time production.

### COMPLIANT PIN TECHNOLOGY

Onanon's Compliant Pin Technology enables the integration of PCBAs directly onto connector substrates, allowing for terminal connections and the addition of components like resistors, op-amps, and microprocessors. This creates a flexible, application-specific solution that can serve the needs of multiple devices. By embedding components at the board level, Onanon simplifies design while enhancing performance, offering custom solutions with faster turnaround and lower overall cost.

### RAPID WIRE TERMINATION TECHNOLOGY

Our solder ball rapid wire termination technology not only insures well-fit quick connections, but it also insures connections with low inductance, capacitance and resistance.

### HIGH QUALITY/COST EFFECTIVE

We understand that modern electronics requires high tolerance, strong, light, rugged connectors that are often required to pass wide band signals without distortion. This is what we make.

## From Concept to Connector or Cable Assembly

At Onanon, every solution begins with a deep understanding of your application. Our design process starts by identifying your exact requirements, led by engineers who understand how connectors perform in real-world environments and ends with a solution to your needs.

### After You Submit an RFQ

Our engineers take these next steps

#### 1. Product Design

Engineers learn the needs of our customer and design a solution. We communicate with our customer through this whole process.



#### 2. Prototyping

With our in house manufacturing we create a prototype and work with our customers to ensure it meets all their requirements.



#### 3. Tooling

Take proven out designs and create tooling for production level plastics.



#### 4. Qualification

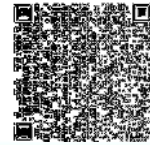
Our engineers conduct rigorous testing and collaborate with you through validation to ensure the final solution once again meets all performance and reliability requirements.



#### 5. Production

After qualification, we transition your project into production with a focus on quality, consistency, and on-time delivery.





## MagConnect® | Rho - Magnetic

- Magnetic latching connector with elliptical keying
- Populates **up to 16 pins**; 3A current; 1kVAC & 1.5kVAC operating voltage; 2 lbf Min
- Designed for modular reusable and disposable systems
- Circuitry with components are easily added via PCBA platform
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



## MagConnect® | Echo - Magnetic

- Compact magnetic latching connector for high-cycle use
- Populates **up to 20 pins**; 3A current; 1kVAC & 1.5kVDC operating voltage; 3.5 lbf Min
- Designed for surgical, diagnostic, and therapeutic disposable devices
- Circuitry with components are easily added to this connector
- Panel mount or in-line cable configurations; reusable and disposable options with ETO, Gamma, and autoclave safe materials
- Female pins located on panel mount receptacle



## MagConnect® | Hero - Magnetic

- Self-mating magnetic latching connector for critical care systems
- Populates **2–20 pins**; 3A current; 1kVAC and 1.5kVDC operating voltage; 3.5 lbf Min
- Used in reusable high-performance medical environments
- Supports EEPROMs, resistors, and capacitors
- Built with chemical-resistant materials; ETO, Gamma, and autoclave safe
- Female pins located on plug



## MagConnect® | High Voltage - Magnetic

- Magnetic latching connector for high-voltage, rugged environments
- Hybrid **11-pin system**: 5 HV (4.5kV) and 6 LV (2kVDC); 3.3 lbf Min
- Ideal for surgical, diagnostic, aerospace, and industrial tools
- Supports circuit integration with intelligent electronics
- Panel mount or in-line cable formats; reusable and disposable with ETO, Gamma, and autoclave safe materials



## FiberPlus™

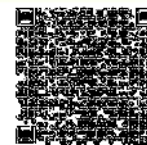
- Self-mating, magnetic latching connector used in medical applications
- Hybrid system with up to **8 electrical contacts** and **2 fiber optic connections**
- Option to incorporate circuitry with components into connector
- Designed using chemical-resistant materials; EtO and autoclave safe



## MedLock® | Ultra - High Density

- Ultra high-density connector for large power and bandwidth needs
- Populates **up to 146 pins**; rated to 5 amps & 10Ghz
- Suitable for a wide range of medical device applications
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials





## Medlock® | HD - High Density

- Snap latch connector with elliptical keying for surgical tools
- Populates **up to 62 pins**; rated to 3A; 600 VDC & 500 VAC operating voltage
- Designed for surgical and high-density medical applications
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



## Apollo® - Latching

- Compact snap latch connector with elliptical keying
- Populates **up to 34 pins**; rated to 5 amps & 10Ghrz
- Ideal for surgical and reusable medical devices
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



## Pluto® - Friction Fit

- Small footprint push-pull connector with elliptical keying
- Populates **up to 14 pins**; rated at 5 amps & 10Ghrz
- Suited for compact medical tools and portable devices
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



## Neutrino® - Friction Fit

- Microscale push-pull connector for limited-space applications
- Populates **up to 10 pins**; rated to 3A; 600MQ @ 800 VDC & 10MQ @ 400 VAC operating voltage
- Perfect for compact and lightweight medical systems
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



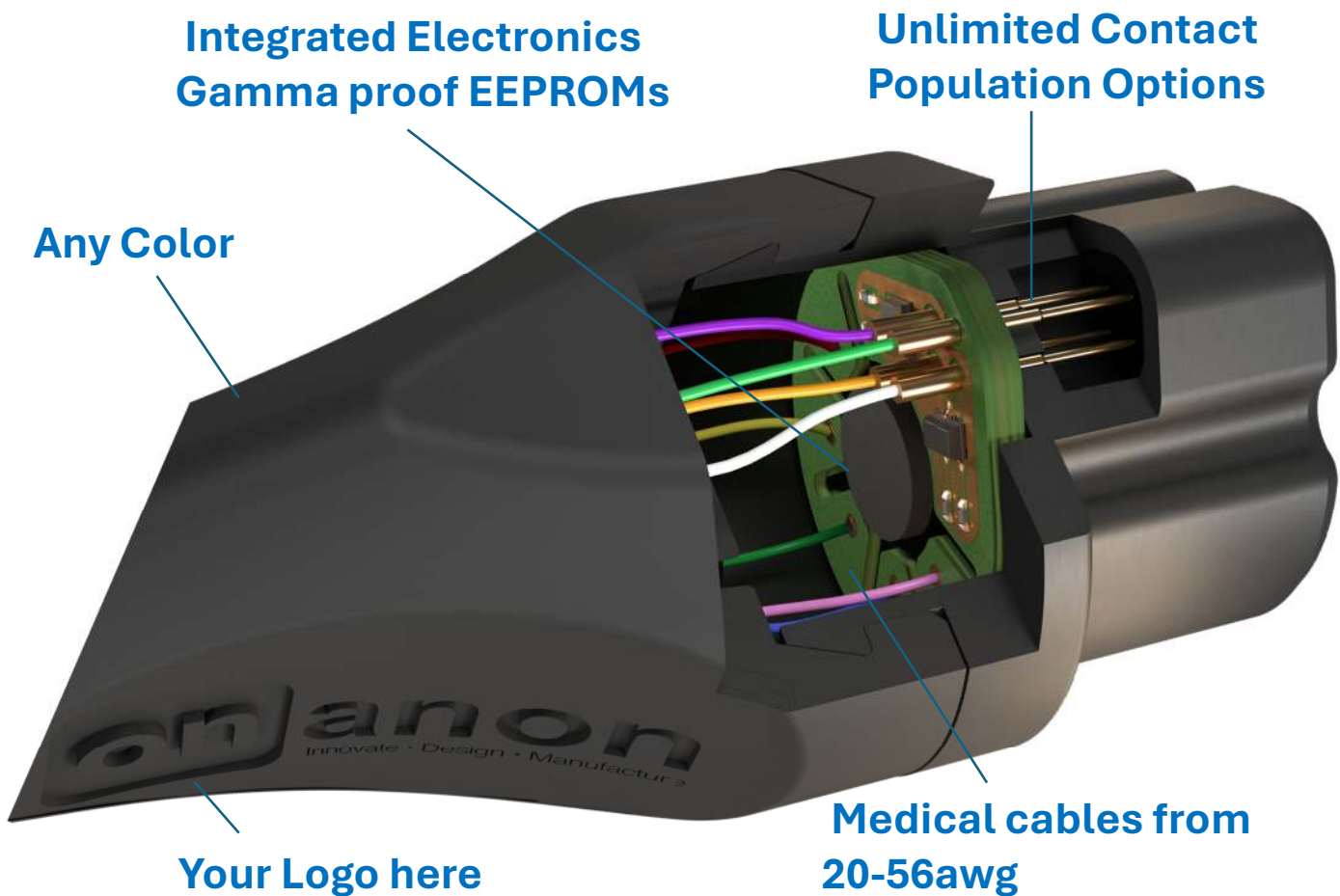
## Redi-Mate™ | 1M Series

- Rugged metal push-pull connector for reusable applications
- Pin count customizable; compatible with circular industry connectors
- Ideal for surgical tools, neuromodulation, and diagnostics
- Secure locking mechanism for reliable connectivity
- Built from sterilizable, durable materials for hospital-grade use



## Redi-Mate™ | 1P Series

- Lightweight plastic push-pull connector for cost-effective applications
- Pin count customizable; built for single-use or semi-disposable designs
- Ideal for imaging, handheld clinical tools, and electrophysiology
- Secure locking mechanism for reliable connectivity
- Compatible with standard connectors and sterilization protocols



*Our decades of success stories for OEM's allows those who break free from the "wimpy" to prosper with our lower costs solutions. Solutions that are scalable to the OEM's growing electronic device demands. Getting their product to market faster, all with the added benefits of increasing the end users experience. Our turnkey solutions puts OEM's lightyears ahead of their competition.*

*We understand not all OEM's like to lead their industry, and are happy with the expensive "wimpy" but the market leaders, come to Onanon for their muscles!*

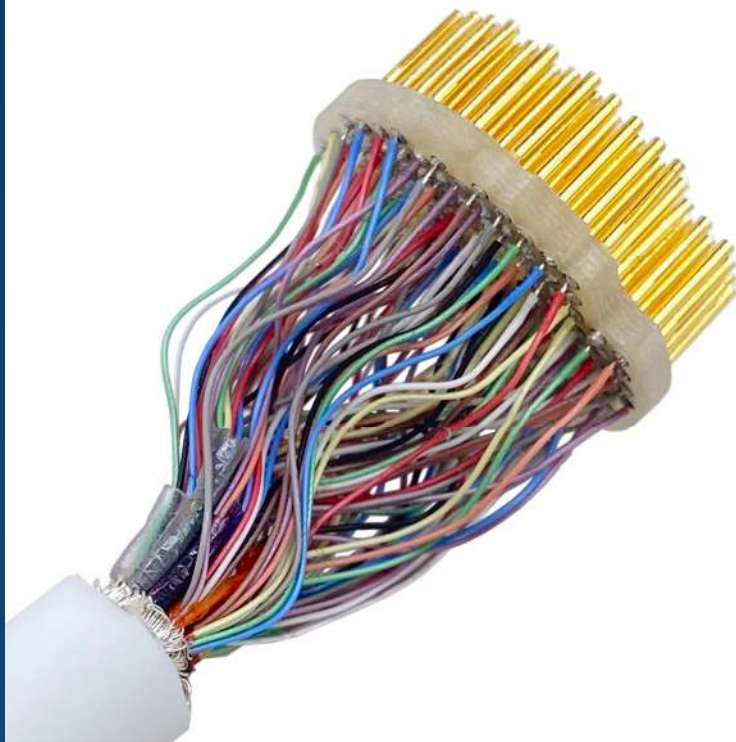
**Onanon invented and patented  
RoboSolder® technology**

**Robotically terminates down  
to 56awg fine wires to IPC  
Class III**

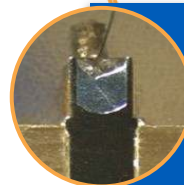
**Onanon is the industry leader  
in terminating wire and cables**



**"Removing the human variable"**



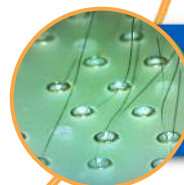
**Solder and Heating  
Process 100%  
automated**



**Accurate and  
repeatable IPC Class  
III Standards**



**Programmable to  
configure around  
different pinouts**



**Terminate 20 to 56  
AWG Wires**

## What makes MagConnect® unique?



Onanon's MagConnect® is the most intuitive interconnect in the world with magnetic, self-mating features. It's popular in the medical industry, making the lives of physicians easier and safer to prevent accidents during various medical procedures.

Across medical, industrial, and military spaces, MagConnect® is incredibly easy to use, due to its simple elliptical shape and its ability to magnetically plug itself in. Unlike many basic connectors which can be awkward and cumbersome to plug in, MagConnect® does not require precise key alignment or any force to connect. Simply get the connector close enough and it will plug itself in.

## Industries Served

### Medical Equipment

MagConnect® is popular in the medical industry and is often used with surgical equipment in situations where intuitive quick connection and quick disconnection must occur. The retention force can be modified to ensure patient safety across a variety of procedures.

### Common Use Cases

- Bronchoscopy
- Ultrasound Devices
- RF Ablation Procedures
- Electrosurgical



# MagConnect®

## Case Studies

“FDA preferred a magnetic safety latch versus a locking connector” – Director of Engineering at Medical Device OEM

### Military Equipment

MagConnect® is popular in the military space, due to its reliability and dependability. It is frequently used in a variety of wearable applications.

#### Common Use Cases

- Wearable Intelligence Equipment
- Communications Equipment
- Missile Launch Applications

### Industrial Equipment

MagConnect® is often found in a variety of other industrial applications. It is the perfect solution for field technicians when using equipment with hard-to-reach areas.

#### Common Use Cases

- Power Transmission
- Autonomous Mobile Robots
- Automation Equipment
- E-Bikes & E-Scooters

### High Voltage Intravascular Lithotripsy

Magconnect® was also the perfect solution for high voltage Intravascular Lithotripsy for Vascular Calcium. The OEM commented that once Magconnect® was seamlessly integrated into their device that it was predictably safe, distinctively intuitive, and consistently effective.

### Laryngoscope

Onanon was approached by a top medical video laryngoscope manufacturer in need of a creative solution for its laryngoscope connectors. Previously, they had been using HDMI connectors for this equipment, HDMI's inability to plug and unplug with ease were causing injuries to patients during procedures..

## What makes SmartConnect® unique?

Onanon's SmartConnect® is an application specific interconnect allowing for digital scalability at the connector and cable level. SmartConnect® utilizes a PCBA within the connector, with electronic components, allowing for one connector to differentiate between multiple different devices.

SmartConnect® allows for a clean and simple solution by having components such as EEPROM's microprocessors, resistors, and capacitors integrated directly into the connector. Customers who cannot easily find a solution for their specific application partner with Onanon as an extension of their own team to design and build a custom SmartConnect® solution from scratch, at a fraction of the time and cost.

## Industries Served

### Medical Equipment

SmartConnect® is popular in the medical industry, often used in applications which require unique device identifiers, use-limiters, personality resistors, EEPROM's and other products using the same connector platform while performing multiple tasks.

### Common Use Cases

Capacitance Clock Speed

Disposable Use Limiting

Diagnostic Data

Traceability



# SmartConnect®

## Case Studies

Onanon was approached by a top medical device OEM that sells over 100 variations of electrosurgical devices.

### Military Equipment

SmartConnect® is used in a variety of military applications, often integrated into wearables to add intelligence within the interconnects.

#### Common Use Cases

Communication Devices

Field Failure Diagnostics

Wearables



### Agricultural Equipment

SmartConnect® can be found in the agricultural industry in an assortment of smart electromechanical agricultural equipment.

#### Common Use Cases

IP Rated Cables for Tractor

Sprayers

Headers with Built-in

Capacitance

Wire Harnesses



After speaking with them and learning about their product requirements, we set out to design a SmartConnect® that would work with all of these product variations with one connector with built in electronics.

We created a universal SmartConnect® that had integrated device recognition. As soon as the device is plugged in, the equipment recognizes the device and immediately turns on all the correct settings. In addition to improving ease of use and convenience, this also eliminated any human error associated with altering settings on a device before a procedure.

## What makes BoardConnect® unique?

Onanon's BoardConnect® represents Onanon's robust capabilities when it comes to designing customizable board to board connectors for a variety of applications.

BoardConnect® is not a one-size-fits-all solution, but a custom solution tailor-made for your application. It can be assembled as a board-to-board connector or as a cable assembly with a connector on it to connect it to a circuit board.

Scan here to  
Build-a-Socket!



## Industries Served

### Medical Equipment

BoardConnect® is popular in the medical industry, often used for integrating off the shelf connectors into application specific assemblies.

### Common Use Cases

Med Device Interconnect Adaptors

Next Gen Device Upgrades

Catheters



# BoardConnect® Case Studies

BoardConnect® can be designed for a variety of applications.

## Military Equipment

BoardConnect® is often found in many applications in the military space, due to its reliability and dependability. It is frequently used in a variety of applications.

### Common Use Cases

Board Connect with Flex  
High Density



## Agricultural Equipment

BoardConnect® is frequently found in the agricultural space, used in smart tractors and other intelligent harvesting equipment.

### Common Use Cases

Right Angle PCB Connectors  
Bladed Headers



One customer, a top military interconnect manufacturer, came to us in a dire situation which was costing their end customer over \$10,000 a day. They needed a custom board to board connector and provided us with a rough concept of what they needed.

Our engineering team was able to provide a drawing complete with tolerancing, DFM suggestions, and a cost competitive quote that same day. We manufactured their custom board solution and had it shipped within 4 days, a quick turnaround time when compared to the industry average of 4-6 weeks. In the process, we ended up saving them nearly \$100,000.

## What makes CableConnect® unique?

Onanon's CableConnect® is another example of Onanon's creativity, ingenuity, and flexibility when it comes to designing custom cable assembly solutions for our customers. Decades of experience in the medical, industrial, military markets with fine wire (30-50 awg), high conductor count, micro-coax, high impedance, high voltage and silicone requirements together with a deep understanding of cable design engineering, have given us the ability to design cable assemblies that optimize function, performance, value, and appearance.

### Industries Served

### Medical Equipment

CableConnect® is frequently used in medical applications due to our ability to deliver exactly what you need in your cable assembly to meet your product requirements.

### Common Use Cases

Autoclave Silicone Cables

Overmold OR Cables

Single Use Cables

Catheters



# CableConnect®

## Case Studies

A top medical robotics company needed a cable assembly that would fit into a very tight space within the cartridge of a disposable robotic arm.

### Military Equipment

CableConnect® is a trusted tool of the military, and is frequently found in a variety of applications, such as custom self-mating and decoupling cables on wearable equipment.

#### Common Use Cases

Self-Mating Cables on Wearables

Self-Cleaning Interconnects



### Agricultural Equipment

Onanon's CableConnect® has revolutionized the agriculture industry helping steward the industries evolution from mechanical to electromechanical and electrification, in the harsh environment that is the agricultural industry.

#### Common Use Cases

Intelligent Harvesters/Combines

Hi-tech Sprayer Systems

Wire Harnesses

Turf Equipment



Additionally, it needed to be hermetically sealed so that no gas, air, or other substances would leak in and compromise the integrity of the assembly. The sensor inside needed to be able to work under harsh conditions, including high temperatures, humidity, vibration, and exposure to chemicals.

This assembly would be used in robotic surgery equipment, so it was critical that it would be able to withstand these conditions. This medical robotics company was unable to find this specific solution anywhere else, so they approached Onanon to help design it from scratch.

## What makes CustomConnect® unique?

Onanon's CustomConnect® represents Onanon's broad and flexible capabilities when it comes to producing custom interconnect solutions. CustomConnect® is not a one-size-fits-all solution, but a customizable interconnect made specifically for your application. Onanon's representatives will talk to you, figure out exactly what you need, take your specifications and product requirements, and bring them to life. Our vast expertise in electromechanical interconnect allows us to design interconnects that optimize function, value, and appearance.

### Industries Served

#### Medical Equipment

CustomConnect® is used in a variety of applications in the medical market. Custom solutions are often needed when there are no readily available interconnects on the market that meet a customer's requirements.

#### Common Use Cases

- High Voltage Heart Catheters
- Electrosurgical Procedures
- Neuromodulation Devices
- Heart Pumps



# CustomConnect®

## Case Studies



## The Problem

The existing design relied on non-value added manual gluing, crimping, taping, and overall poor design for manufacturability, adding cost, quality issues and reliability issues in the field. Surgeons were also experiencing fatigue during this time-consuming operation which requires precision and dexterity from the surgeon. The instruments were causing unneeded strain, discomfort and fatigue in the surgeon's hands. Surgeons had to use foot pedals in conjunction with the instruments to complete procedures. This led the OEM to approach Onanon for help to make their product and reliable at a disposable cost point.

## Our Solution

Onanon designed a CustomConnect® solution which removed all manual gluing, taping and crimping operations to name a few. The new design allowed it to be a plug and play device eliminating all scrap throughout the supply chain. Onanon redesigned the device to be more user friendly, improving the tactile feel, grip and button performance so that surgeons could more easily perform the operation without any of the strain, discomfort, or fatigue experienced previously. This also eliminated the need to use the additional foot pedal during procedures. All in all, Onanon's CustomConnect® solution led to a better product, which meant that surgeons were able to perform operations with more safety, efficiency and reliability.

### Industrial Equipment

Onanon can integrate proven electromechanical methodologies to create the perfect custom solution for industrial applications to match the rapidly changing needs of the fast-paced industry moving from mechanical to electromechanical.

### Common Use Cases

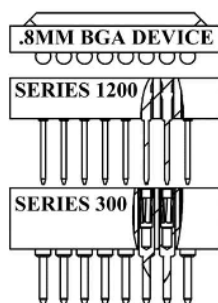
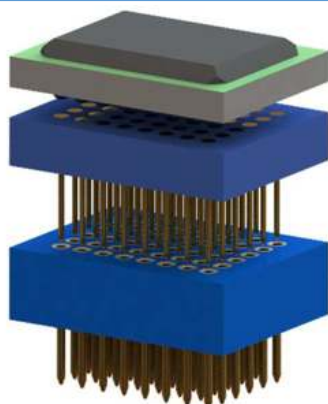
Aerospace

Agriculture

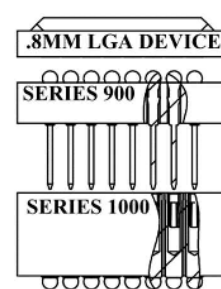
Robotics

Lidar





**THRU HOLE**



**SURFACE MOUNT**

## PERFORMANCE AND MATERIALS SPECIFICATIONS

### Thermal Performance [FR-4 Standard]:

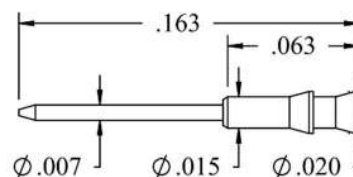
|                                     |                    |
|-------------------------------------|--------------------|
| Operating Temperature Range:        | -55° to 140°C      |
| Glass Transition Temperature Range: | 150° to 200°C      |
| Resistance to Soldering Heat:       | 10 seconds @ 288°C |
| Flammability Rating [UL-94]:        | UL94V-0            |
| IEC Climatic Category:              | 55/125/21          |

### Electrical Performance: Tests IAW MIL-STD-202 or 1344 Methods:

|                                  |                            |
|----------------------------------|----------------------------|
| Maximum Voltage:                 | 75 VAC / 100 VDC           |
| Maximum Current:                 | 1 Amperes per contact      |
| Contact Resistance: Dry Circuit: | .01 Ω Max. @ .1 Amps/5 VDC |
| Insulation Resistance, @ 500 VDC | 10,000 MegOhms Min.        |
| Dielectric Withstanding Voltage  | 500 VAC Min.               |
| Capacitance:                     | 1 pF [PicoFarads] Max.     |
| Self Inductance                  | 2 nH [NanoHenries] Max.    |

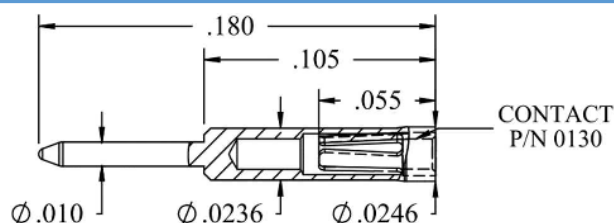
### Contact Materials & Finishes [Other finishes available]:

|               |                                                                                           |
|---------------|-------------------------------------------------------------------------------------------|
| Bodies:       | Brass Alloy C36000 per ASTM-B16, ½ Hard                                                   |
| Plated        | 10µin. Min. Gold over 100µin. Min. Nickel, [or] 100µin. Min. Tin Over 100µin. Min. Nickel |
| Contacts:     | Beryllium Copper Alloy C17200 per ASTM-B194 Plated                                        |
|               | 10µin. Min. Gold over 50µin. Min. Nickel                                                  |
| Solder Balls: | Eutectic, Sn 96.5/Ag 3.0/Cu .5 Solder, Ø.015 ~ Ø.020                                      |
|               | Melting Temperature 218.5° C [425.3°F]                                                    |

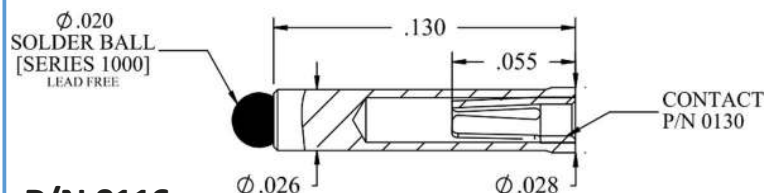


**P/N 0108**

Ø.020 EUTECTIC  
SOLDER BALL  
[SERIES 900]  
LEAD FREE



**P/N 0114**



**P/N 0116**

## PART NUMBER: ORDERING INFORMATION

**300**

**100**

**F – 0104**

**10A3**

### PRODUCT CODE

300 = Socket Pin Grid Array [PGA]  
900 = LGA Interposer [BPGA]  
1000 = Socket, Ball Grid Array [SBGA]  
1200 = Ball Grid Array Interposer [PBGA]

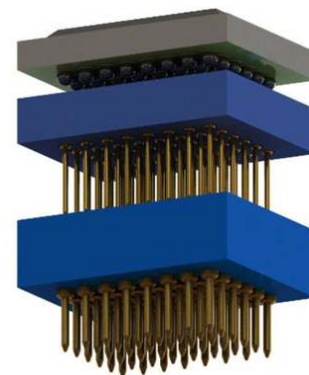
### PIN COUNT

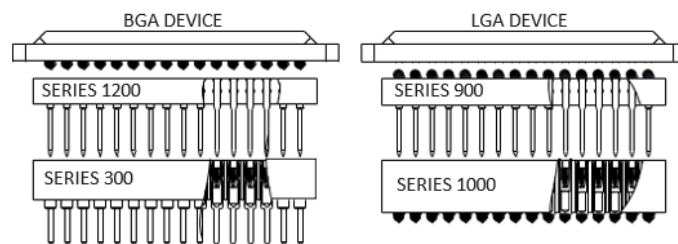
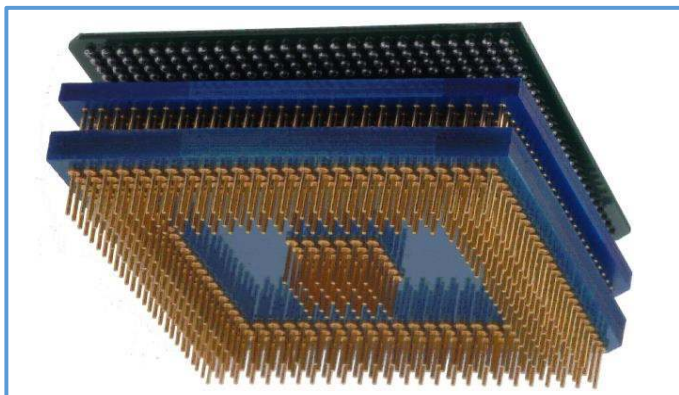
### MATERIAL CONTACT P/N

A = ACRYLIC  
E = PEEK [POLYETHERETHERKETONE]  
H = POLYIMIDE, [MIL-L-13949/10]  
F = FR-4, [IPC 4101/24]  
R = RYTON [POLYPHENYLENE SULFIDE]  
U = G.E. ULTEM [POLYETHERIMIDE]

### PATTERN CODE

OVER 25,000  
PATTERNS  
AVAILABLE





THRU HOLE

SURFACE MOUNT

## PERFORMANCE AND MATERIALS SPECIFICATIONS

### Thermal Performance [FR-4 Standard]:

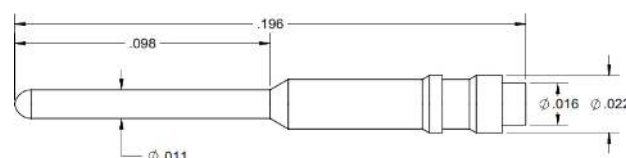
|                                     |                    |
|-------------------------------------|--------------------|
| Operating Temperature Range:        | -55° to 140°C      |
| Glass Transition Temperature Range: | 150° to 200°C      |
| Resistance to Soldering Heat:       | 10 seconds @ 288°C |
| Flammability Rating [UL-94]:        | UL94V-0            |
| IEC Climatic Category:              | 55/125/21          |

### Electrical Performance: Tests IAW MIL-STD-202 or 1344 Methods:

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Maximum Voltage:                 | 75 VAC / 100 VDC                  |
| Maximum Current:                 | 1 Amperes per contact Contact     |
| Resistance: Dry Circuit:         | .01 $\Omega$ Max. @ .1 Amps/5 VDC |
| Insulation Resistance, @ 500 VDC | 10,000 M $\Omega$ Min.            |
| Dielectric Withstanding Voltage  | 500 VAC Min.                      |
| Capacitance:                     | 1 pf [PicoFarads] Max.            |
| Self Inductance                  | 2 nH [NanoHenries] Max.           |

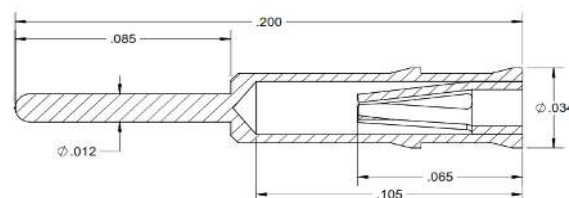
### Contact Materials & Finishes [Other finishes available]:

|               |                                                                                                                                                                        |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bodies:       | Brass Alloy C36000 per ASTM-B16, ½ Hard Plated<br>10 $\mu$ in. Min. Gold over 100 $\mu$ in. Min. Nickel, [or] 100 $\mu$ in.<br>Min. Tin Over 100 $\mu$ in. Min. Nickel |
| Contacts:     | Beryllium Copper Alloy C17200 per ASTM-B194 Plated<br>10 $\mu$ in. Min. Gold over 50 $\mu$ in. Min. Nickel                                                             |
| Solder Balls: | Eutectic, Sn 96.5/Ag 3.0/Cu .5 Solder, $\phi$ .015 ~ $\phi$ .020<br>Melting Temperature 218.5° C [425.3°F]                                                             |



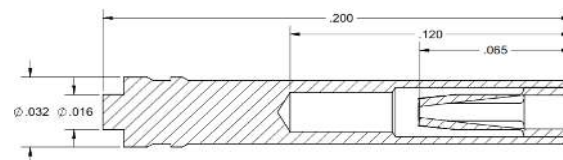
P/N 0556

$\phi$  0.022" LEAD FREE  
SOLDER BALL  
(USED FOR SERIES 900)



P/N 0104

CONTACT PN: 0048  
MATING PIN PN: 0556



P/N 0799

$\phi$  0.032" LEAD FREE  
SOLDER BALL



## PART NUMBER: ORDERING INFORMATION



PRODUCT CODE  
**300**



PIN COUNT  
**640**

MATERIAL  
**F**

CONTACT P/N  
**0556**

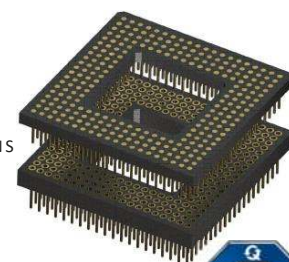
PATTERN CODE  
**11A4**

OVER 25,000 PATTERNS  
AVAILABLE

300 = Socket Pin Grid Array [PGA]  
900 = LGA Interposer [BPGA]  
1000 = Socket, Ball Grid Array [SBGA]  
1200 = Ball Grid Array Interposer [PBGA]

A = ACRYLIC  
E = PEEK [POLYETHERETHERKETONE]  
H = POLYIMIDE, [MIL-L-13949/10]  
F = FR-4, [IPC 4101/24]  
R = RYTON [POLYPHENYLENE SULFIDE]  
U = G.E. ULTEM [POLYETHERIMIDE]

If unknown put XXXX  
Factory will add pattern  
code



## SOCKET PINS



Socket pins are single components that have inner BeCu clip that feature multi-finger contact and are fastened to PCB by being press-fit or solder mount. It is primarily used for plugging and unplugging of components on PCB and can accommodate round, square, or rectangular leads.

## PRINTED CIRCUIT PINS



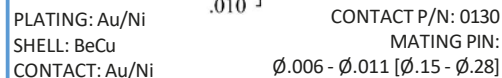
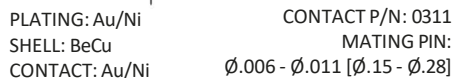
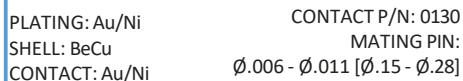
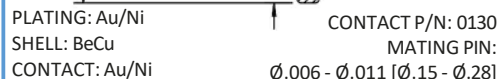
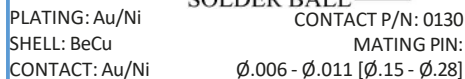
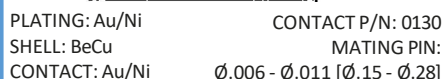
Printed Circuit Pins are fastened to PCB by being press-fit or solder mount. These pins are used for numerous plug-in applications and PCB to PCB interconnection.

## CONTACTS & CLIPS

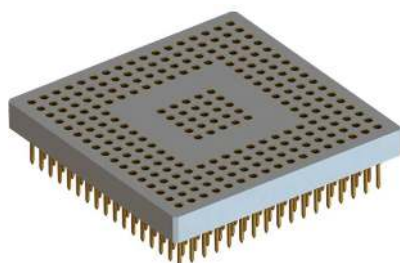
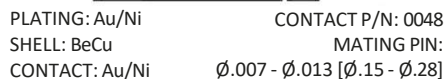


Contacts, also called clips, are round multi-finger components with spring properties which are primarily used for plugging and unplugging of components on PCB. Clips are able to accept a broad range of mating pin diameters from 0.007" to 0.102" and maintain retentions after multiple insertions.

Socket Pins, Printed Circuit Pins, and Contacts are electronic interconnect devices for printed circuit boards. These pins are made of metallic elements or alloys. Socket Pins and Printed Circuit Pins are mainly machined of Brass Alloy C36000 per ASTM-B16 and has a finish of either Gold over Nickel or Tin over Nickel. Contacts are made of BeCu (Beryllium Copper) Alloy C17200 per ASTM-B194 and has a finish of either Gold over Nickel or Tin over Nickel.



|         |        |
|---------|--------|
| PART NO | FINISH |
| 0130    | Au/Ni  |
| 0311    | Sn/Ni  |



**NOTES: UNLESS OTHERWISE SPECIFIED**

## SHELL / BODIES

## MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard  
plated Gold per MIL-G-45204 Type 2, Grade C,  
10μ In. Min. over Nickel, 100μ In. Min. per QQ-  
N-290 Class 4. Or Tin per MIL-T-10727 Type I,  
200u In. Min. over Nickel 100u In. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS  
±.002

DIMENSIONAL TOLERANCES:

ANGLES  
 $\pm 2^\circ$

DRAWINGS NOT TO SCALE

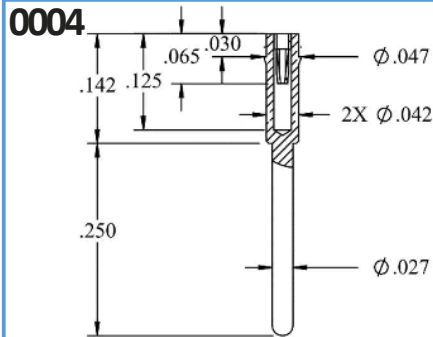
LENGTHS  
±.005

## CONTACTS

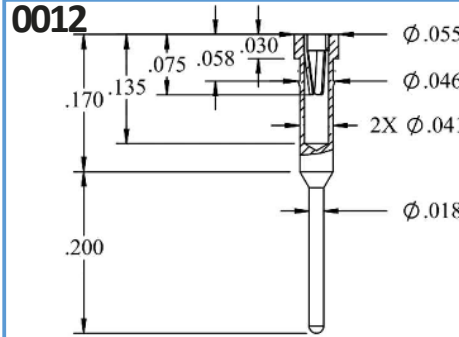
## MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µIn. Min. or Class 00, 10µIn. Min., over Nickel per QQ-N-290 Class 4, 50µIn. Min. Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn. Min.

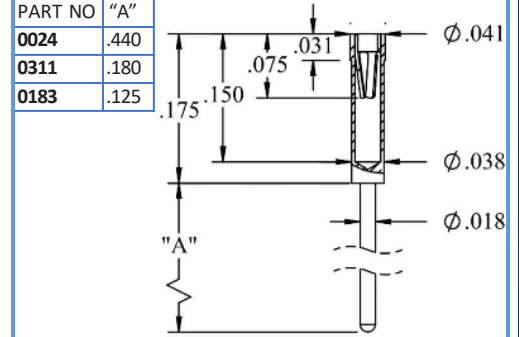
# SOCKET PINS FOR Ø0.007 ~ Ø0.020 PINS



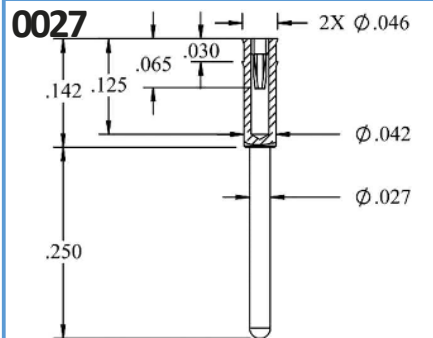
PLATING: Au/Ni CONTACT P/N: 0048  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]



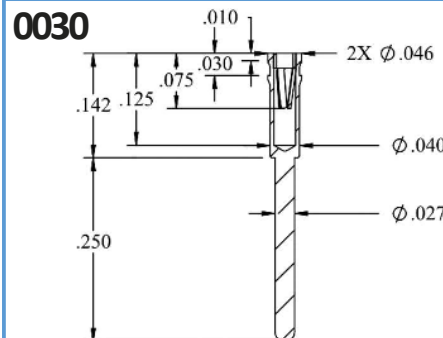
PLATING: Au/Ni CONTACT P/N: 0069  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



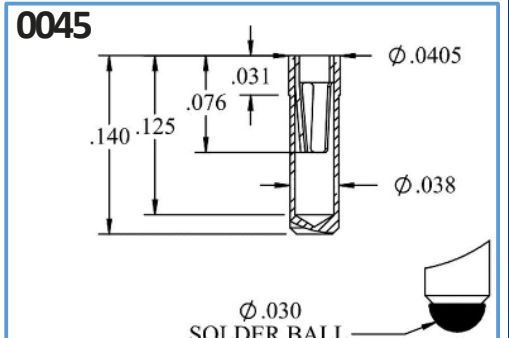
PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



PLATING: Au/Ni CONTACT P/N: 0048  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

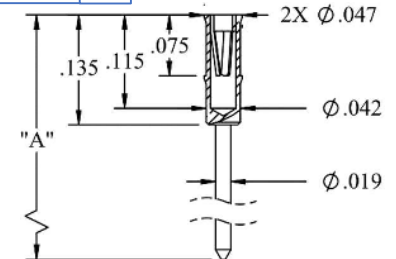


PLATING: Au/Ni CONTACT P/N: 0069  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

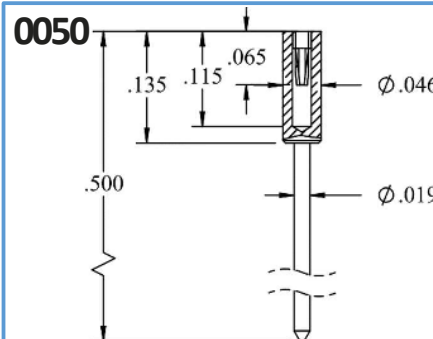


PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

| PART NO | "A"  |
|---------|------|
| 0049    | .500 |
| 0094    | .650 |

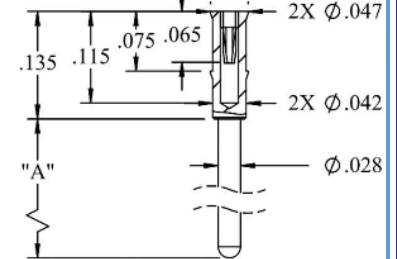


PLATING: Au/Ni CONTACT P/N: 0069  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

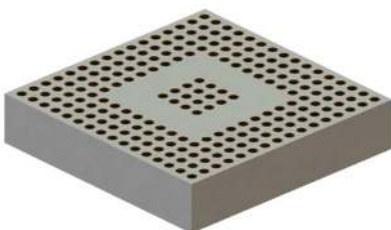


PLATING: Au/Ni CONTACT P/N: 0048  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

| PART NO     | "A"  |
|-------------|------|
| 0051 [0080] | .365 |
| 0083        | .515 |



PLATING: Au/Ni CONTACT P/N:  
0048 SHELL: BeCu MATING  
PIN: CONTACT: Au/Ni Ø.007 - Ø.012  
[Ø.18 - Ø.31]



## NOTES: UNLESS OTHERWISE SPECIFIED

### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard  
plated Gold per MIL-G-45204 Type 2, Grade C,  
10µ In. Min. over Nickel, 100µ In. Min. per QQ-  
N-290 Class 4. Or Tin per MIL-T-10727 Type I,  
200µ In. Min. over Nickel 100µ In. Min.

### CONTACTS

#### MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,  
heat treated, plated Gold per MIL-G-45204 Type  
2, Grade C, Class 0, 30µ In. Min. or Class 00,  
10µ In. Min., over Nickel per QQ-N-290 Class 4,  
50µ In. Min. Or; Tin per MIL-T-10727 Type I,  
200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

DRAWINGS NOT TO SCALE

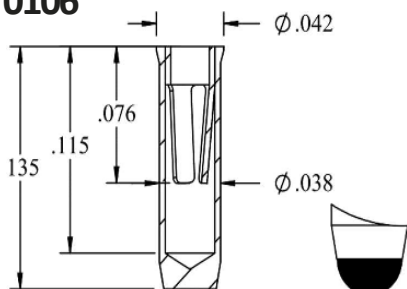
DIAMETERS  
±.002

ANGLES  
±2°

LENGTHS  
±.005

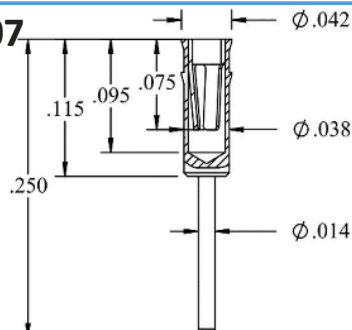
## E4

**0106**



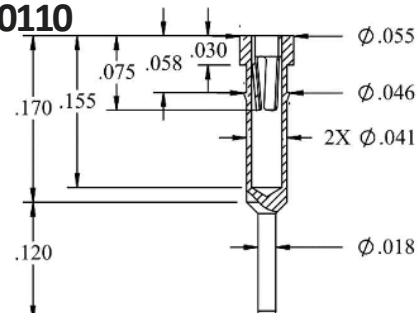
PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

**0107**



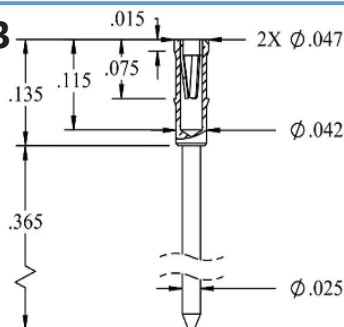
PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

**0110**



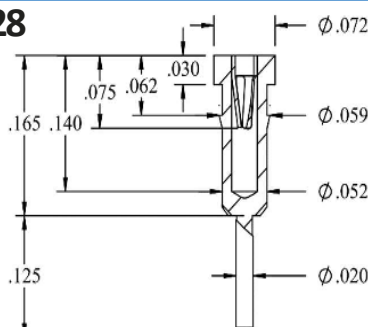
PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

**0113**



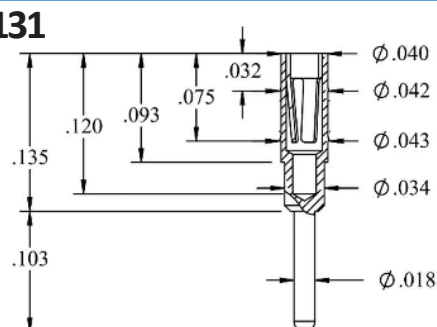
PLATING: Au/Ni CONTACT P/N: 0069  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

**0128**



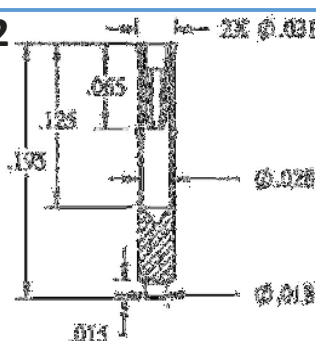
PLATING: Au/Ni CONTACT P/N: 0286  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

**0131**

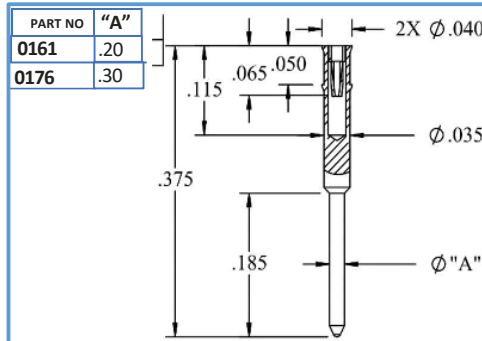


PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

**0142**

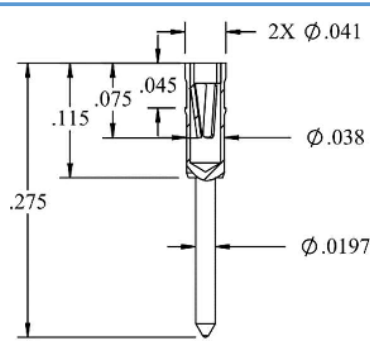


PLATING: Au/Ni CONTACT P/N: 0048  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]



PLATING: Au/Ni CONTACT P/N: 0048  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

**0170**



PLATING: Au/Ni CONTACT P/N: 0069  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard  
plated Gold per MIL-G-45204 Type 2, Grade C,  
10µ In. Min. over Nickel, 100µ In. Min. per QQ-  
N-290 Class 4. Or Tin per MIL-T-10727 Type I,  
200µ In. Min. over Nickel 100µ In. Min.

#### CONTACTS

#### MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,  
heat treated, plated Gold per MIL-G-45204 Type  
2, Grade C, Class 0, 30µ In. Min. or Class 00,  
10µ In. Min., over Nickel per QQ-N-290 Class 4,  
50µ In. Min. Or; Tin per MIL-T-10727 Type I,  
200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

DRAWINGS NOT TO SCALE

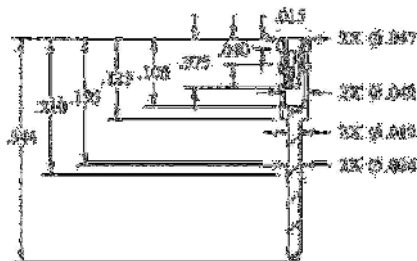
DIAMETERS  
±.002

ANGLES  
±2°

LENGTHS  
±.005

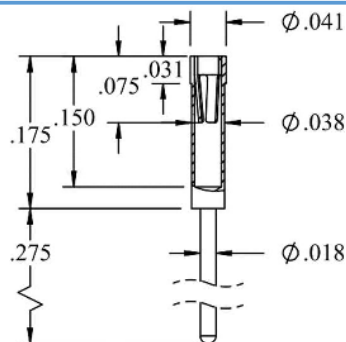


**0177**



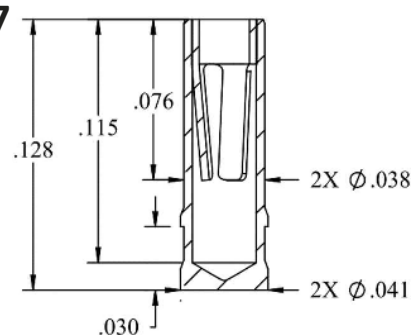
PLATING: Au/Ni CONTACT P/N: 0069  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.007 - Ø.020 [Ø.38 - Ø.51]

**0191**

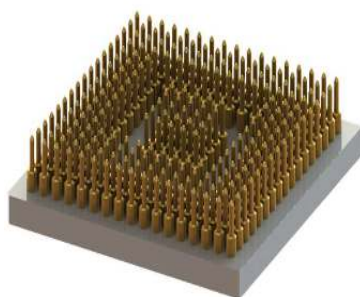


PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

**0357**



PLATING: Au/Ni CONTACT P/N: 0132  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



## NOTES: UNLESS OTHERWISE SPECIFIED

### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard  
plated Gold per MIL-G-45204 Type 2, Grade C,  
10µ In. Min. over Nickel, 100µ In. Min. per QQ-  
N-290 Class 4. Or Tin per MIL-T-10727 Type I,  
200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

DRAWINGS NOT TO SCALE

DIAMETERS  
±.002

ANGLES  
±2°

LENGTHS  
±.005

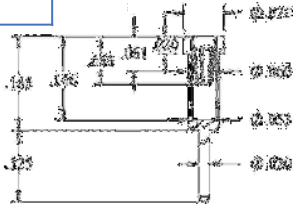
### CONTACTS

#### MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,  
heat treated, plated Gold per MIL-G-45204 Type  
2, Grade C, Class 0, 30µIn. Min. or Class 00,  
10µIn. Min., over Nickel per QQ-N-290 Class 4,  
50µIn. Min. Or; Tin per MIL-T-10727 Type I,  
200µIn. Min over Nickel, 50µIn. Min.

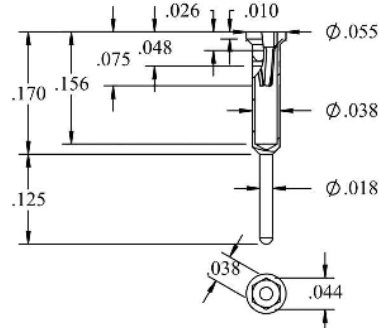
# SOCKET PINS FOR Ø0.015 ~ Ø0.035 PINS

| PART NO | SHELL       |
|---------|-------------|
| 0001    | Pure Tin    |
| 0002    | Tin Plated  |
| 0005    | Gold/Nickel |



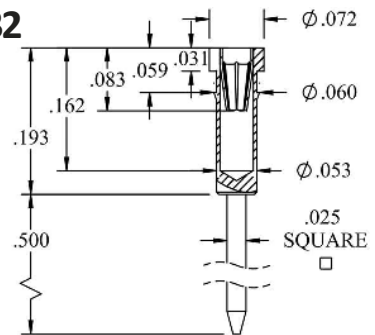
PLATING: Au/Ni CONTACT P/N: 0072  
SHELL: See Table MATING PIN:  
CONTACT: Sn/Ni Ø.025 - Ø.035 [Ø.64 - Ø.89]

**0026**



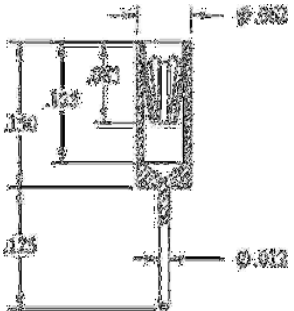
PLATING: Au/Ni CONTACT P/N: 0286  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.021 [Ø.38 - Ø.53]

**0032**



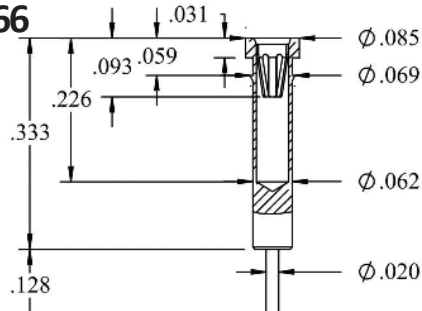
PLATING: Au/Ni CONTACT P/N: 0072  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.022 [Ø.38 - Ø.56]

**0033**



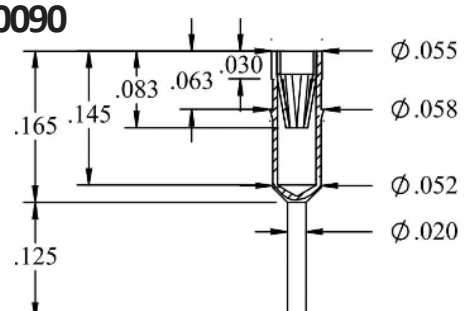
PLATING: Au/Ni CONTACT P/N: 0284  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.022 [Ø.38 - Ø.56]

**0066**



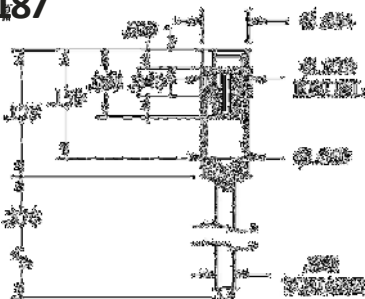
PLATING: Au/Ni CONTACT P/N: 0284  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.025 - Ø.034 [Ø.64 - Ø.86]

**0090**



PLATING: Au/Ni CONTACT P/N: 0141  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.015 - Ø.026 [Ø.38 - Ø.66]

**0187**



PLATING: Au/Ni CONTACT P/N: 0284  
SHELL: BeCu MATING PIN:  
CONTACT: Au/Ni Ø.025 - Ø.034 [Ø.64 - Ø.86]

## NOTES: UNLESS OTHERWISE SPECIFIED

### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard  
plated Gold per MIL-G-45204 Type 2, Grade C,  
10µ In. Min. over Nickel, 100µ In. Min. per QQ-  
N-290 Class 4. Or Tin per MIL-T-10727 Type I,  
200µ In. Min. over Nickel 100µ In. Min.

### CONTACTS

#### MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,  
heat treated, plated Gold per MIL-G-45204 Type  
2, Grade C, Class 0, 30µ In. Min. or Class 00,  
10µ In. Min., over Nickel per QQ-N-290 Class 4,  
50µ In. Min. Or; Tin per MIL-T-10727 Type I,  
200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS

±.002

DIMENSIONAL TOLERANCES:

ANGLES

±2°

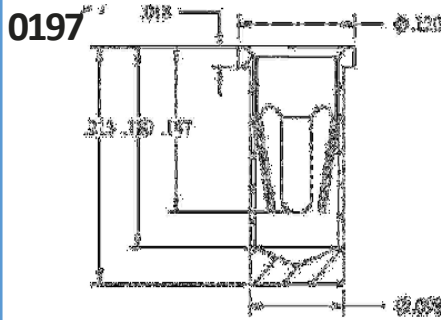
DRAWINGS NOT TO SCALE

LENGTHS

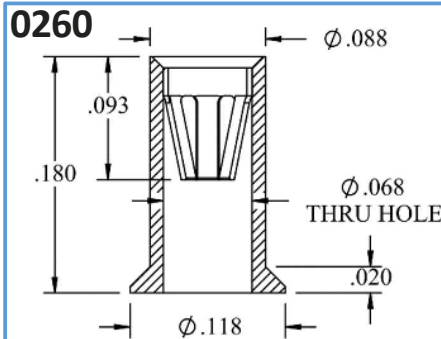
±.005



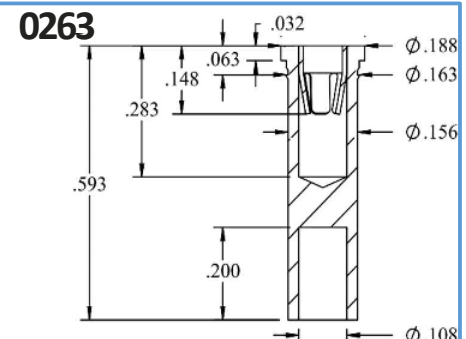
# SOCKET PINS FOR Ø0.025 ~ Ø0.082 PINS



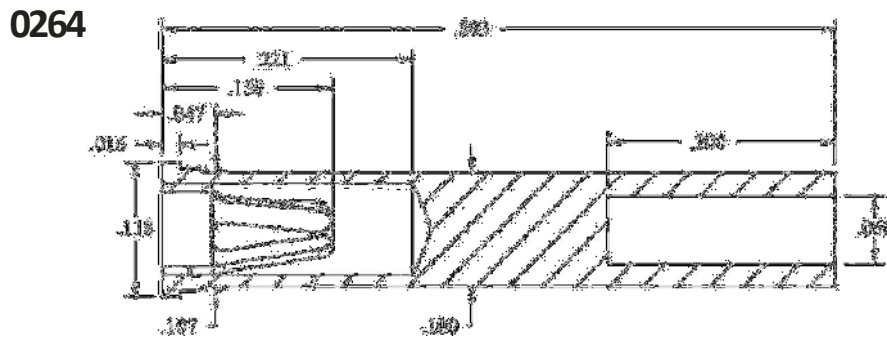
PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni  
CONTACT P/N: 0291  
MATING PIN:  
Ø.040 - Ø.059 [Ø1.07 - Ø1.50]



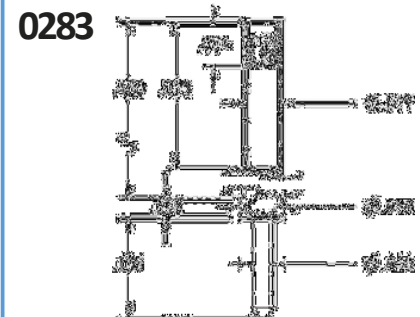
PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni  
CONTACT P/N: 0248  
MATING PIN:  
Ø.040 - Ø.050 [Ø1.02 - Ø1.27]



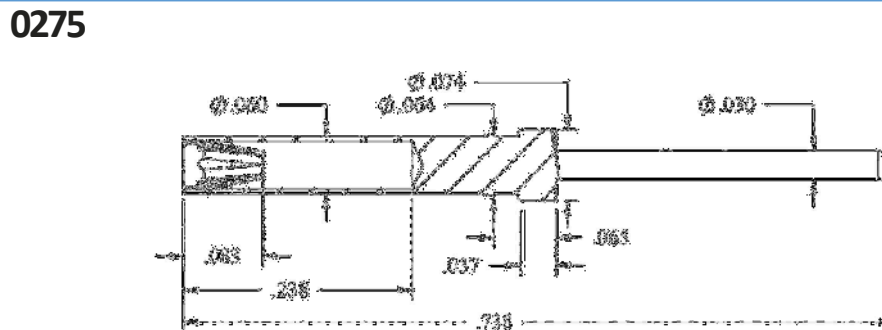
PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni  
CONTACT P/N: 0291  
MATING PIN:  
Ø.040 - Ø.059 [Ø1.07 - Ø1.50]



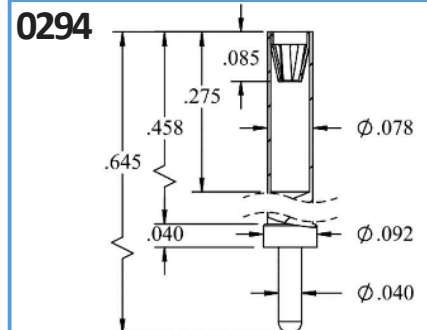
PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni  
CONTACT P/N: 0291  
MATING PIN:  
Ø.040 - Ø.059 [Ø1.07 - Ø1.50]



PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni  
CONTACT P/N: 0248  
MATING PIN:  
Ø.040 - Ø.050 [Ø1.02 - Ø1.27]



PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni  
CONTACT P/N: 284  
MATING PIN:  
Ø.025 - Ø.035 [Ø.64 - Ø.89]



PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni  
CONTACT P/N: 0248  
MATING PIN:  
Ø.040 - Ø.050 [Ø1.02 - Ø1.27]



## NOTES: UNLESS OTHERWISE SPECIFIED

### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard  
plated Gold per MIL-G-45204 Type 2, Grade C,  
10µ In. Min. over Nickel, 100µ In. Min. per QQ-  
N-290 Class 4. Or Tin per MIL-T-10727 Type I,  
200µ In. Min. over Nickel 100µ In. Min.

### CONTACTS

#### MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,  
heat treated, plated Gold per MIL-G-45204 Type  
2, Grade C, Class 0, 30µ In. Min. or Class 00,  
10µ In. Min., over Nickel per QQ-N-290 Class 4,  
50µ In. Min. Or; Tin per MIL-T-10727 Type I,  
200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

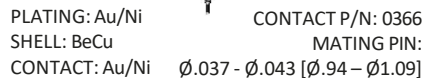
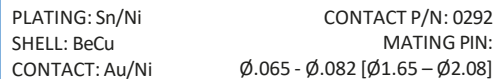
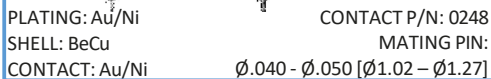
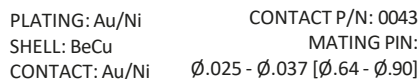
DIMENSIONAL TOLERANCES:

DRAWINGS NOT TO SCALE

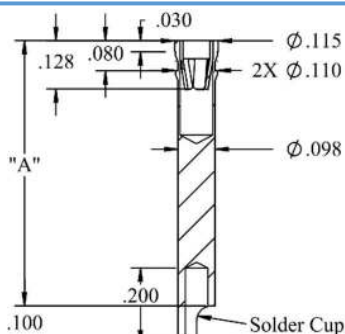
DIAMETERS  
±.002

ANGLES  
±2°

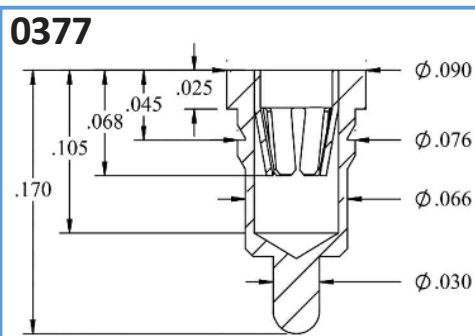
LENGTHS  
±.005



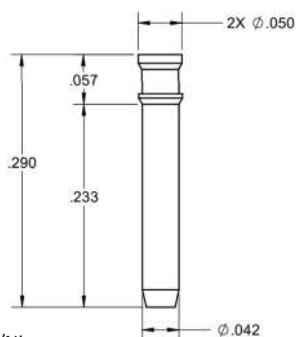
|         |      |
|---------|------|
| PART NO | "A"  |
| 0362    | .702 |
| 0393    | .782 |



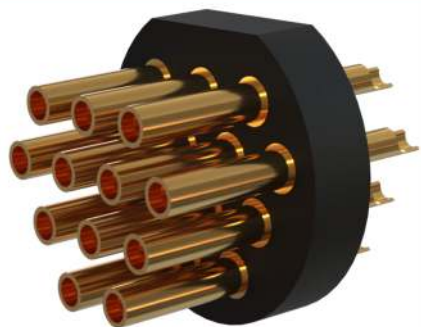
PLATING: Au/Ni      CONTACT P/N: 0365  
SHELL: BeCu      MATING PIN:  
CONTACT: Au/Ni      Ø.048 - Ø.064 [Ø1.22 - Ø1.63]



PLATING: Sn/Ni  
SHELL: BeCu  
CONTACT: Au/Ni



PLATING: Au/Ni  
SHELL: BeCu  
CONTACT: Au/Ni



**NOTES: UNLESS OTHERWISE SPECIFIED**

## SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard  
plated Gold per MIL-G-45204 Type 2, Grade C,  
10μ In. Min. over Nickel, 100μ In. Min. per QQ-  
N-290 Class 4. Or Tin per MIL-T-10727 Type I,  
200μ In. Min. over Nickel 100μ In. Min.

## CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µIn. Min. or Class 00, 10µIn. Min., over Nickel per QQ-N-290 Class 4, 50µIn. Min. Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS  
±.002

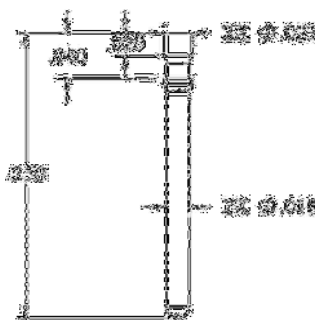
DIMENSIONAL TOLERANCES:

ANGLES  
 $\pm 2^\circ$

DRAWINGS NOT TO SCALE

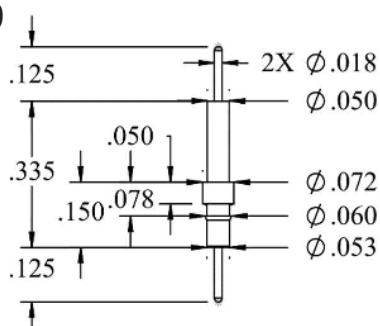
LENGTHS  
±.005

**0006**



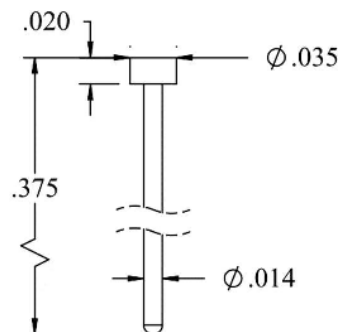
PLATING: Au/Ni  
SHELL: BeCu

**0009**



PLATING: Au/Ni  
SHELL: BeCu

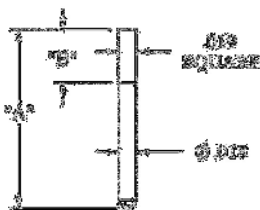
**0026**



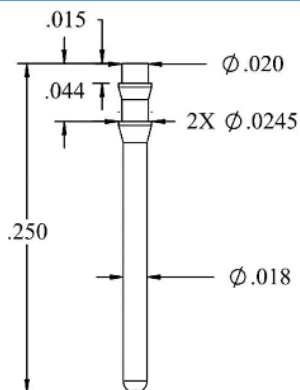
PLATING: Au/Ni  
SHELL: BeCu

| PART NO | DIM"A" | DIM"B" | PLATING |
|---------|--------|--------|---------|
| 0013    | .200   | .060   | Sn/Ni   |
| 0070    | .260   | .070   | Sn/Ni   |
| 0021    | .303   | .060   | Sn/Ni   |
| 0022    | .200   | .060   | Au/Ni   |

PLATING:  
See Table  
SHELL: See  
Table

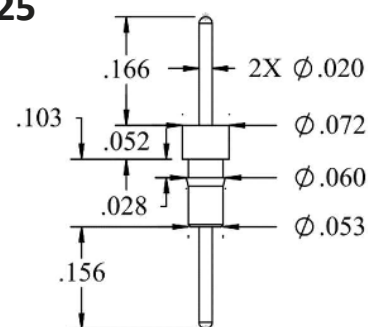


**0015**



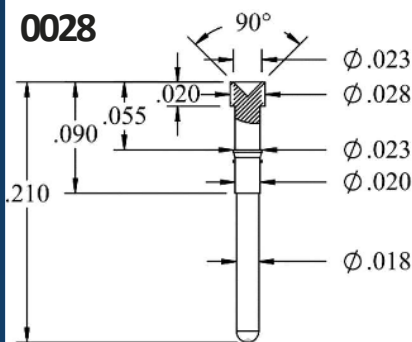
PLATING: Au/Ni  
SHELL: BeCu

**0025**



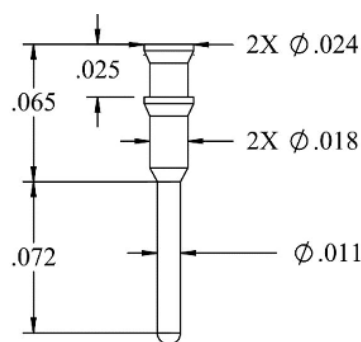
PLATING: Sn/Ni  
SHELL: BeCu

**0028**



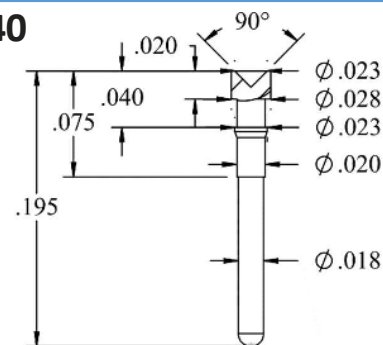
PLATING: Au/Ni  
SHELL: BeCu

**0039**

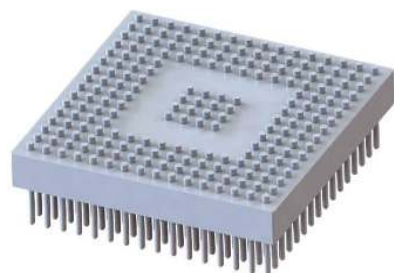


PLATING: Au/Ni  
SHELL: BeCu

**0040**



PLATING: Au/Ni  
SHELL: BeCu



### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

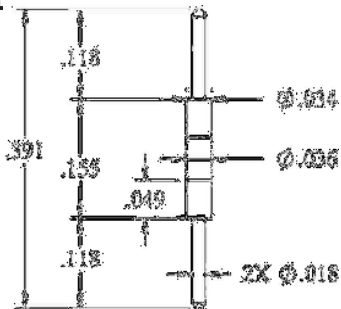
DRAWINGS NOT TO SCALE

DIAMETERS  
±.002

ANGLES  
±2°

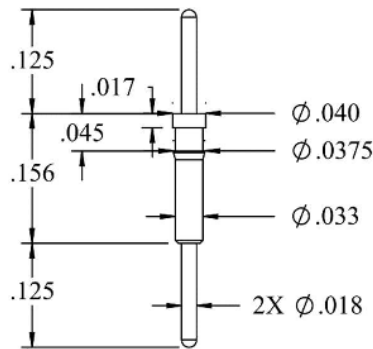
LENGTHS  
±.005

**0041**



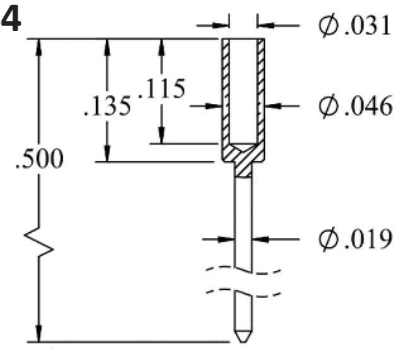
PLATING: Au/Ni  
SHELL: BeCu

**0058**



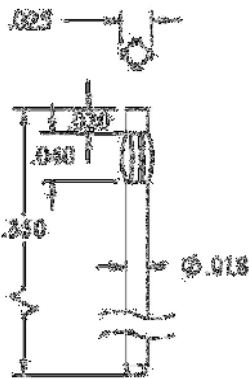
PLATING: Au/Ni  
SHELL: BeCu

**0064**



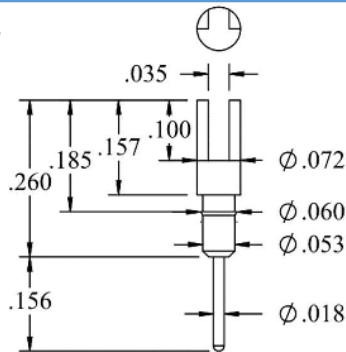
PLATING: Au/Ni  
SHELL: BeCu

**0076**



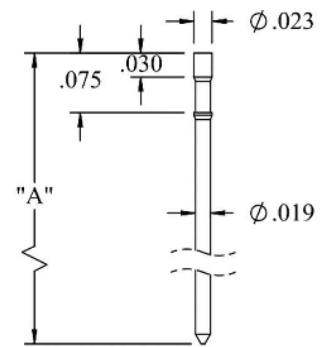
PLATING: Au/Ni  
SHELL: BeCu

**0084**



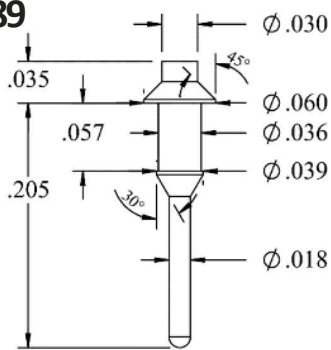
PLATING: Sn/Ni  
SHELL: BeCu

| PART NO | "A"  |
|---------|------|
| 0087    | .650 |
| 0088    | .500 |



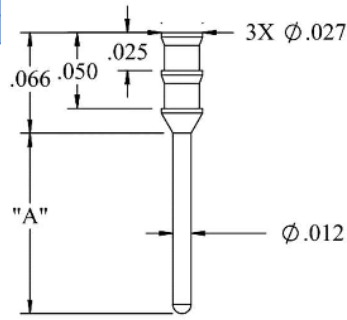
PLATING: Au/Ni  
SHELL: BeCu

**0089**



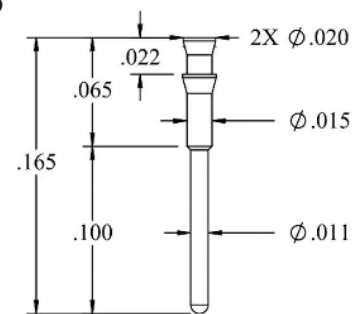
PLATING: Au/Ni  
SHELL: BeCu

| PART NO | "A"  |
|---------|------|
| 0091    | .119 |
| 0246.B  | .129 |

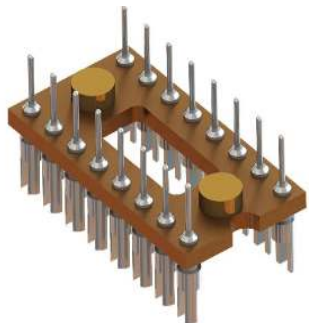


PLATING: Au/Ni  
SHELL: BeCu

**0095**



PLATING: Au/Ni  
SHELL: BeCu



### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10μ In. Min. over Nickel, 100μ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200μ In. Min. over Nickel 100μ In. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS  
±.002

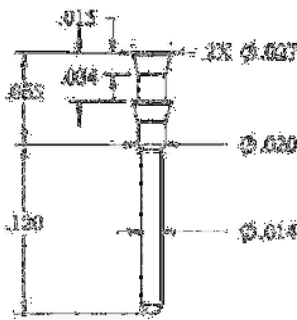
DIMENSIONAL TOLERANCES:

ANGLES  
±2°

DRAWINGS NOT TO SCALE

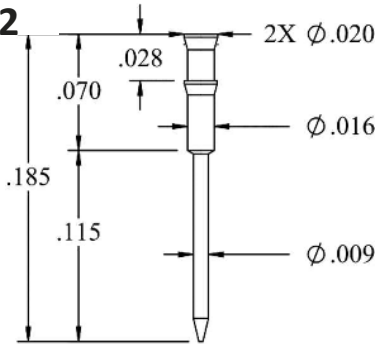
LENGTHS  
±.005

**0097**



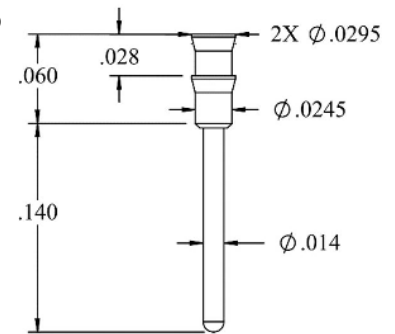
PLATING: Au/Ni  
SHELL: BeCu

**0102**



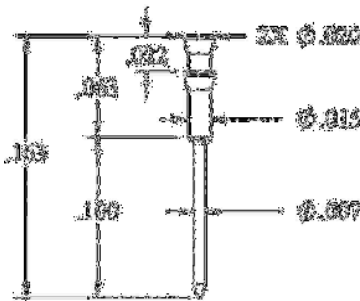
PLATING: Au/Ni  
SHELL: BeCu

**0105**



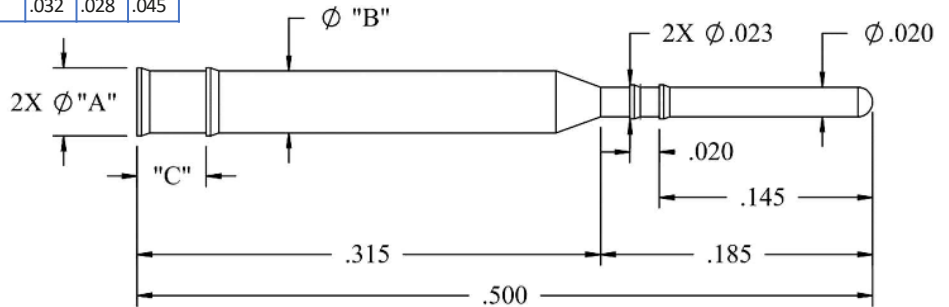
PLATING: Au/Ni  
SHELL: BeCu

**0108**



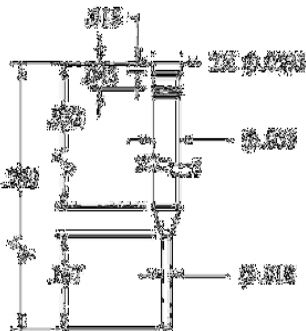
PLATING: Au/Ni  
SHELL: BeCu

| PART NO | "A"  | "B"  | "C"  |
|---------|------|------|------|
| 0134    | .046 | .042 | .047 |
| 0135    | .032 | .028 | .045 |



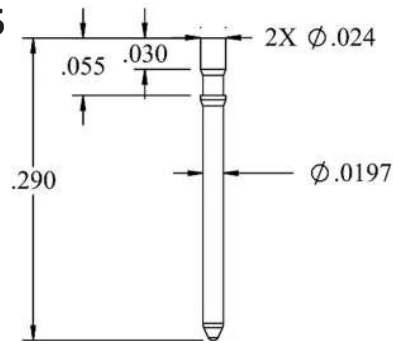
PLATING: Au/Ni  
SHELL: BeCu

**0164**



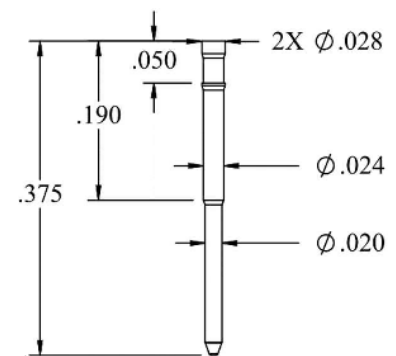
PLATING: Au/Ni  
SHELL: BeCu

**0165**



PLATING: Au/Ni  
SHELL: BeCu

**0173**



PLATING: Au/Ni  
SHELL: BeCu



### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS  
±.002

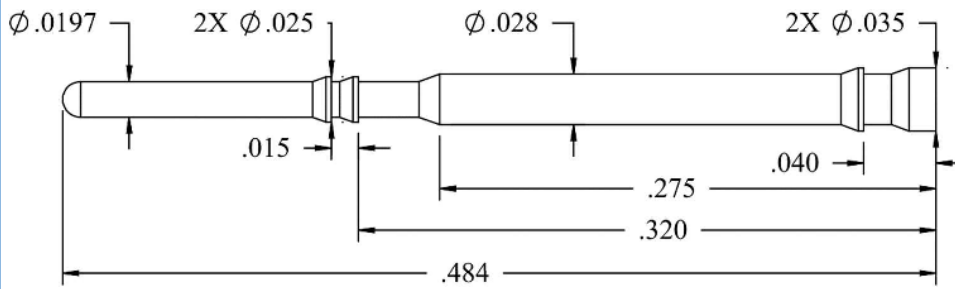
DIMENSIONAL TOLERANCES:

ANGLES  
±2°

DRAWINGS NOT TO SCALE

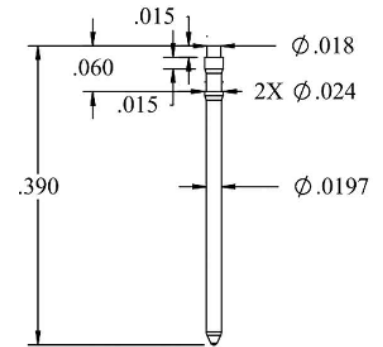
LENGTHS  
±.005

**0175**



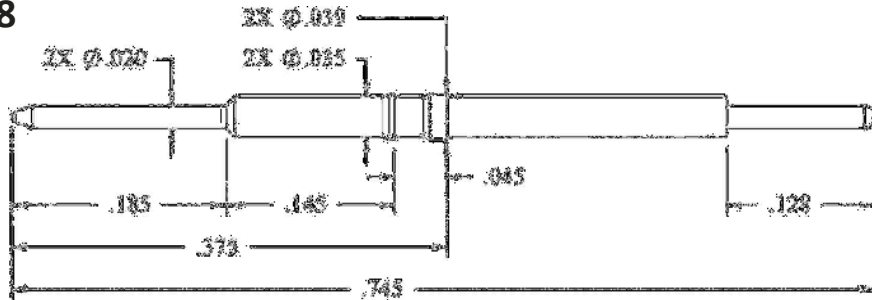
PLATING: Au/Ni  
SHELL: BeCu

**0179**



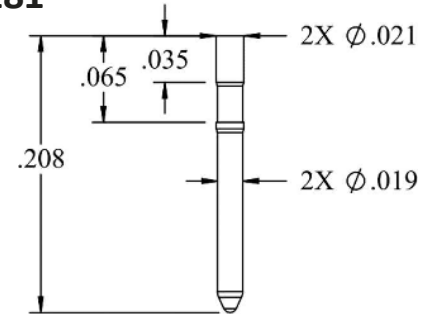
PLATING: Au/Ni  
SHELL: BeCu

**0178**



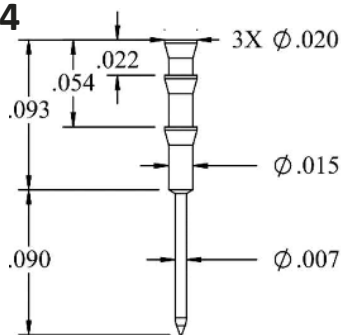
PLATING: Au/Ni SHELL:  
BeCu

**0181**



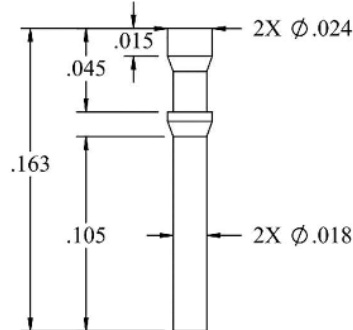
PLATING: Au/Ni  
SHELL: BeCu

**0184**



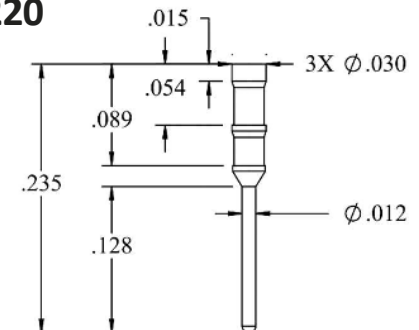
PLATING: Au/Ni  
SHELL: BeCu

**0186**



PLATING: Au/Ni  
SHELL: BeCu

**0220**



PLATING: Au/Ni  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

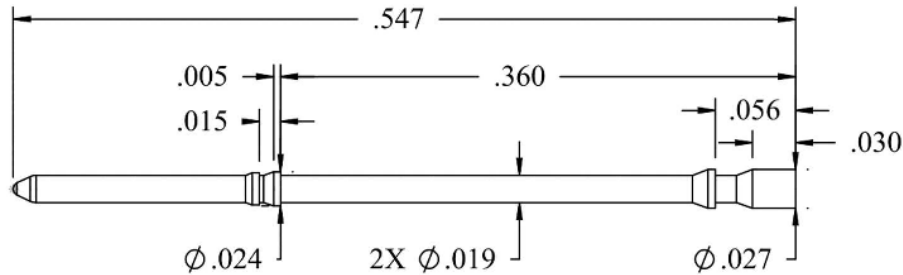
DIMENSIONS ARE IN INCHES  
DIAMETERS  
±.002

DIMENSIONAL TOLERANCES:  
ANGLES  
±2°

DRAWINGS NOT TO SCALE  
LENGTHS  
±.005

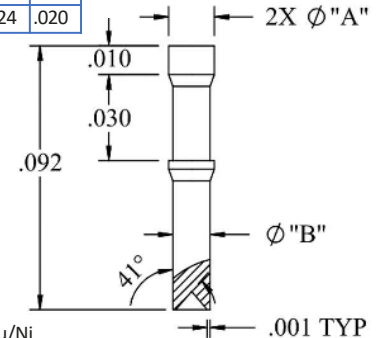


### 0223



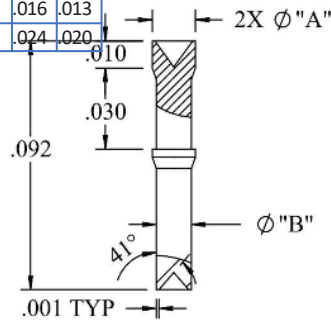
PLATING: Au/Ni  
SHELL: BeCu

| PART NO | Ø"A" | Ø"B" |
|---------|------|------|
| 0237    | .016 | .013 |
| 0238    | .024 | .020 |



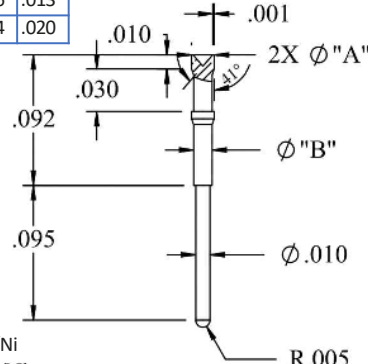
PLATING: Au/Ni  
SHELL: BeCu

| PART NO | Ø"A" | Ø"B" |
|---------|------|------|
| 0240    | .016 | .013 |
| 0241    | .024 | .020 |



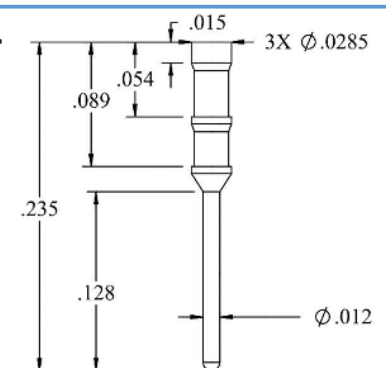
PLATING: Au/Ni  
SHELL: BeCu

| PART NO | Ø"A" | Ø"B" |
|---------|------|------|
| 0242    | .016 | .013 |
| 0243    | .024 | .020 |



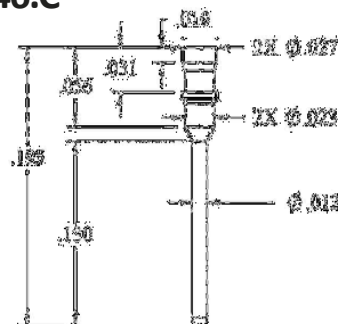
PLATING: Au/Ni  
SHELL: BeCu

### 0244



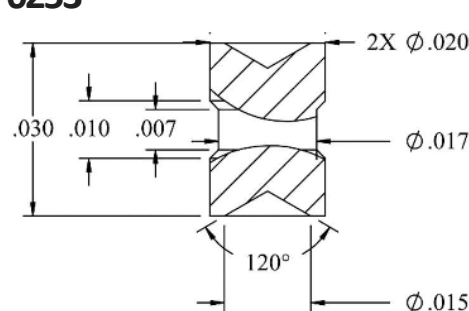
PLATING: Au/Ni  
SHELL: BeCu

### 0246.C



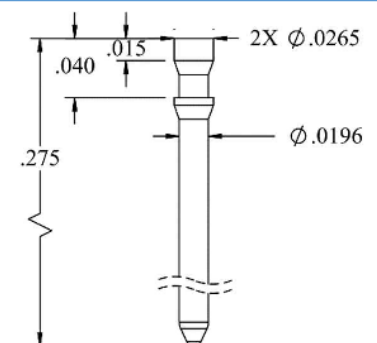
PLATING: Au/Ni  
SHELL: BeCu

### 0253

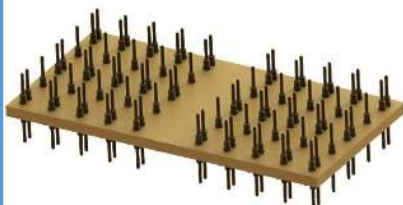


PLATING: Au/Ni  
SHELL: BeCu

### 0267



PLATING: Au/Ni  
SHELL: BeCu



#### NOTES: UNLESS OTHERWISE SPECIFIED

##### SHELL / BODIES

##### MATERIAL \ FINISH

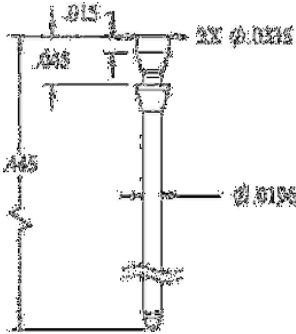
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES  
DIAMETERS  
±.002

DIMENSIONAL TOLERANCES:  
ANGLES  
±2°

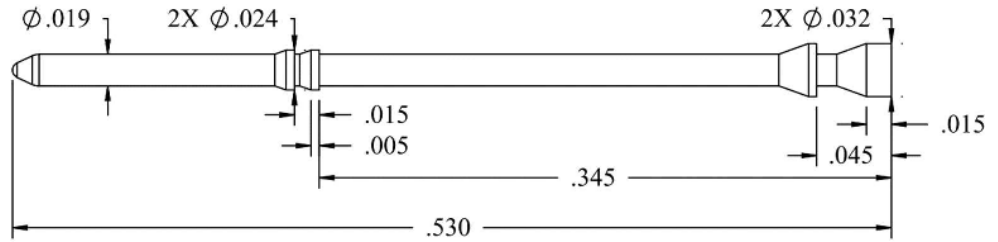
DRAWINGS NOT TO SCALE  
LENGTHS  
±.005

**0268**



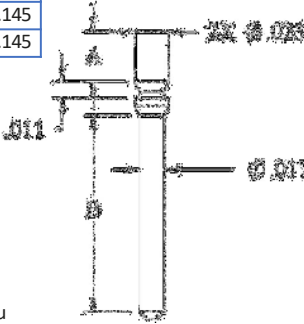
PLATING:  
Au/Ni  
SHELL: BeCu

**0269**



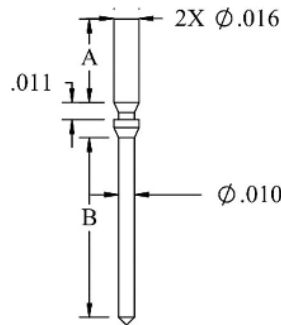
PLATING: Au/Ni  
SHELL: BeCu

| PART NO | Ø"A" | Ø"B" |
|---------|------|------|
| 0287    | .033 | .130 |
| 0290    | .053 | .145 |
| 0302    | .033 | .145 |



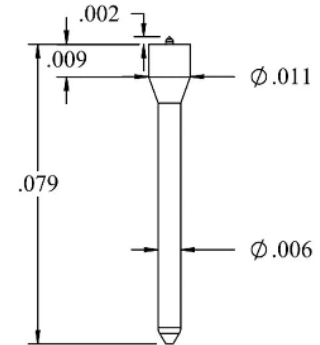
PLATING:  
Au/Ni  
SHELL: BeCu

| PART NO | Ø"A" | Ø"B" |
|---------|------|------|
| 0288    | .033 | .090 |
| 0289    | .053 | .114 |
| 0301    | .033 | .115 |



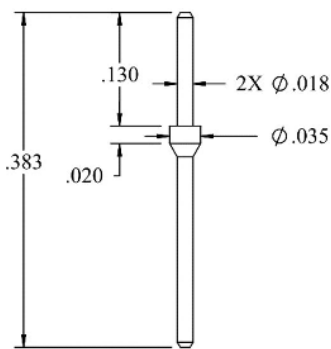
PLATING: Au/Ni  
SHELL: BeCu

**0352**



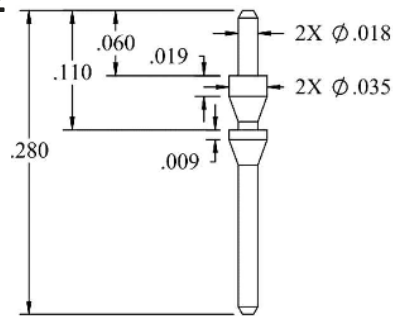
PLATING: Au/Ni  
SHELL: BeCu

**0371**



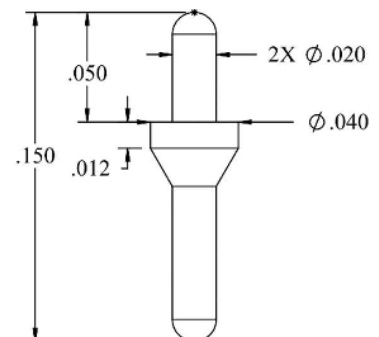
PLATING: Sn/Ni  
SHELL: BeCu

**0372**



PLATING: Sn/Ni  
SHELL: BeCu

**0373**



PLATING: Au/Ni  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

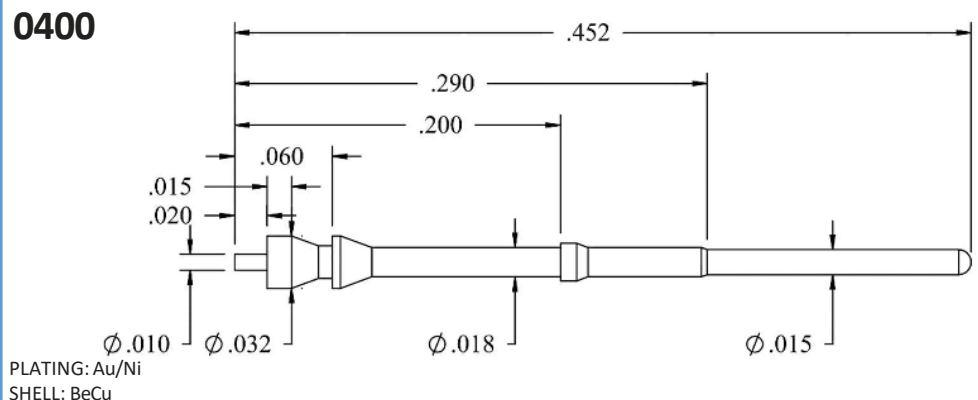
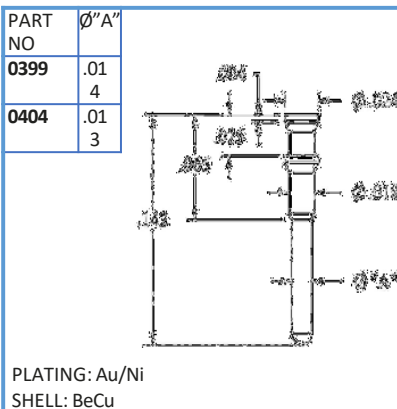
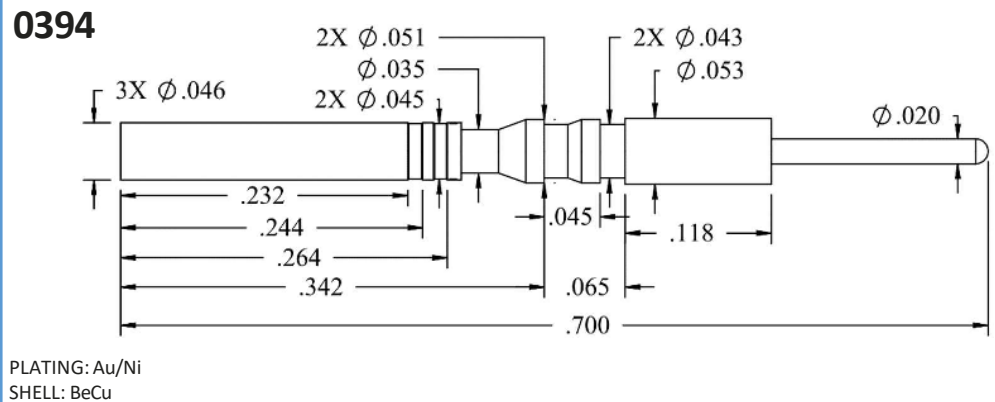
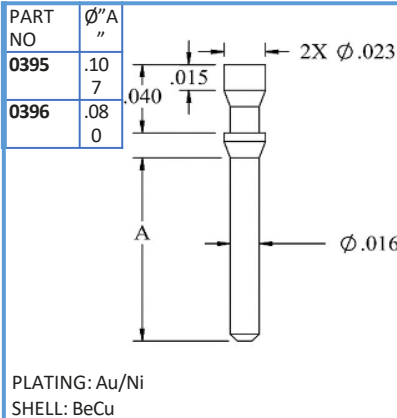
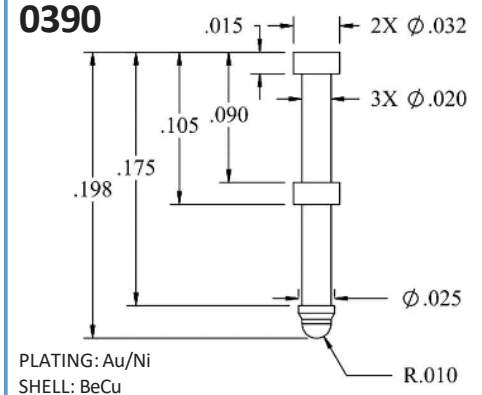
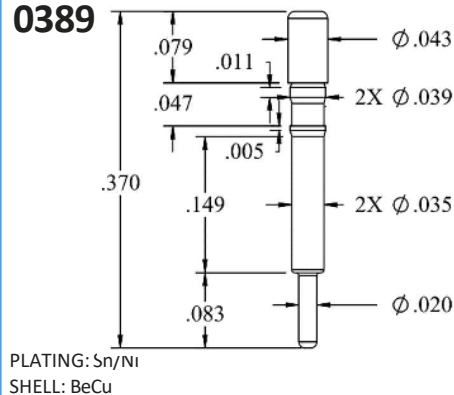
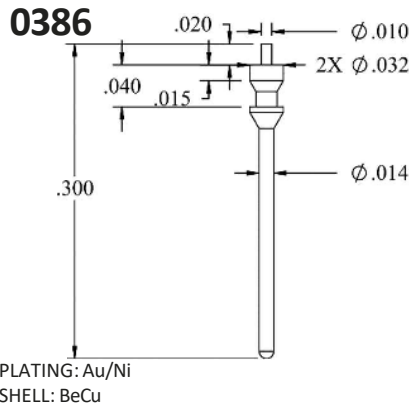
#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10μ In. Min. over Nickel, 100μ In. Min, per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200μ In. Min. over Nickel 100μ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:  
LENGTHS ±.005  
DIAMETERS ±.002  
ANGLES ±2°

DRAWINGS NOT TO SCALE



### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

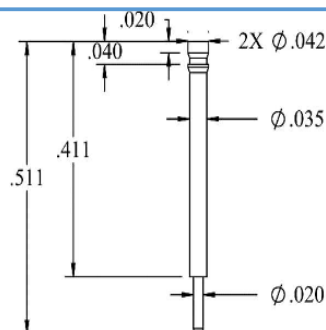
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

|         |           |        |
|---------|-----------|--------|
| LENGTHS | DIAMETERS | ANGLES |
| ±.005   | ±.002     | ±2°    |

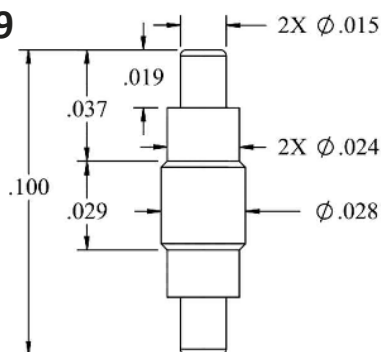
DRAWINGS NOT TO SCALE

**0416**



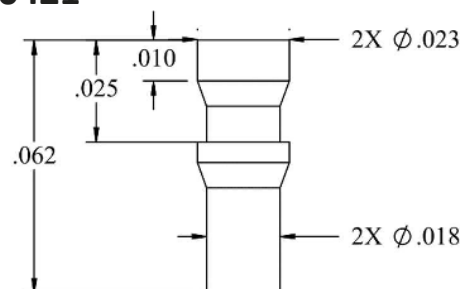
PLATING: Sn/Ni  
SHELL: BeCu

**0419**



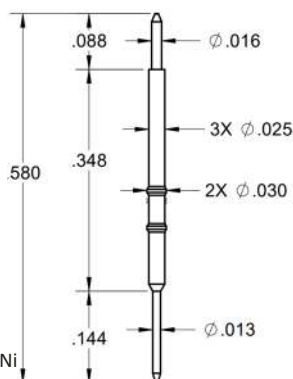
PLATING: Au/Ni/Cu  
SHELL: BeCu

**0421**



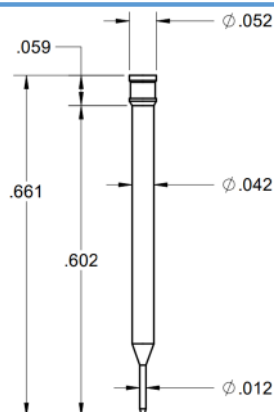
PLATING: Sn/Ni/Cu  
SHELL: BeCu

**0763**



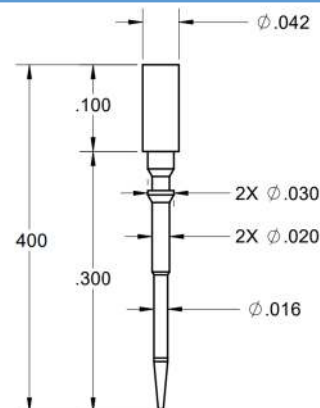
PLATING: Au/Ni  
SHELL: BeCu

**0769**



PLATING: Au/Ni  
SHELL: BeCu

**0507**



PLATING: Au/Ni  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

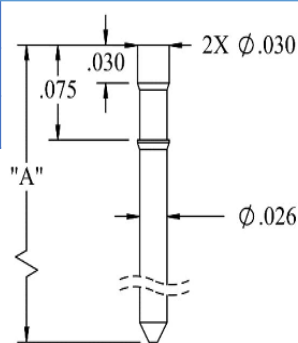
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:  
LENGTHS    DIAMETERS    ANGLES  
±.005        ±.002        ±2°

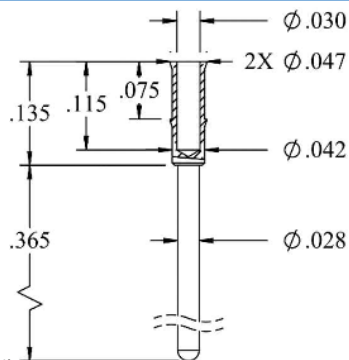
DRAWINGS NOT TO SCALE

| PART NO | "A"  |
|---------|------|
| 0046    | .340 |
| 0086    | .530 |



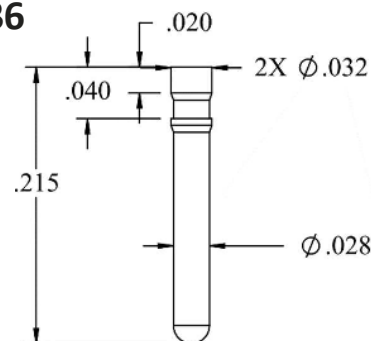
PLATING: Au/Ni  
SHELL: BeCu

**0063**



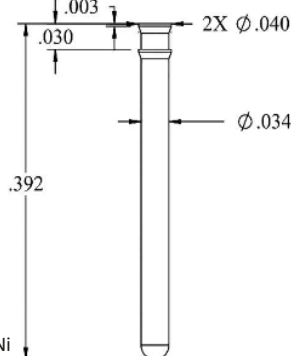
PLATING: Au/Ni  
SHELL: BeCu

**0136**



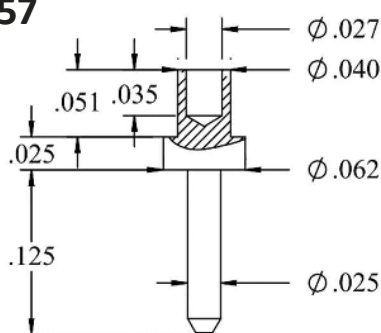
PLATING: Au/Ni  
SHELL: BeCu

**0146**



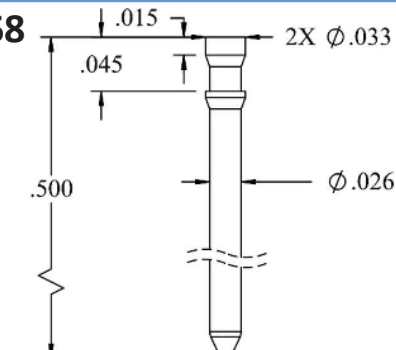
PLATING: Au/Ni  
SHELL: BeCu

**0157**



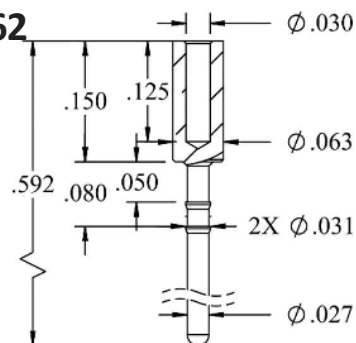
PLATING: Au/Ni  
SHELL: BeCu

**0158**



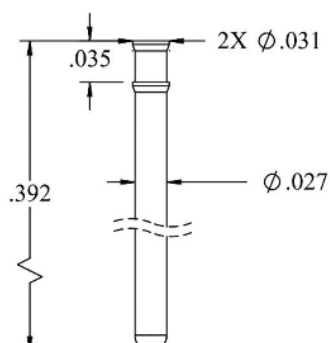
PLATING: Au/Ni  
SHELL: BeCu

**0162**



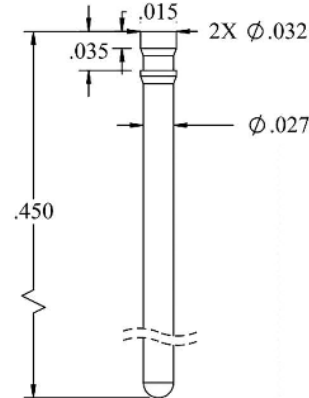
PLATING: Au/Ni  
SHELL: BeCu

**0163**



PLATING: Au/Ni  
SHELL: BeCu

**0201**



PLATING: Au/Ni  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

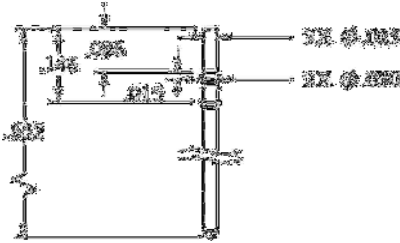
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

LENGTHS    DIAMETERS    ANGLES  
±.005           ±.002           ±2°

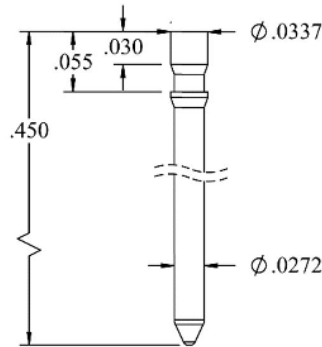
DRAWINGS NOT TO SCALE

**0217**



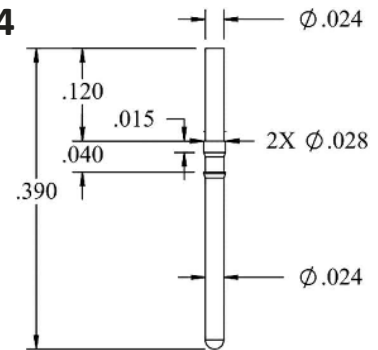
MATERIAL: PHOSPHOR BRONZE  
PLATING: MATTE TIN 150-350µIN OVER  
50µIN Ni. SHELL: BeCu

**0234**



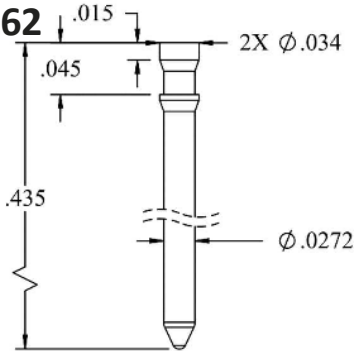
PLATING: Au/Ni  
SHELL: BeCu

**0254**

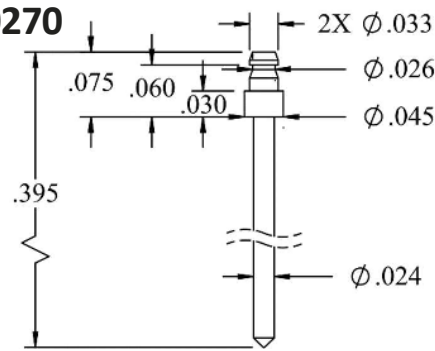


PLATING: Au/Ni  
SHELL: BeCu

**0262**

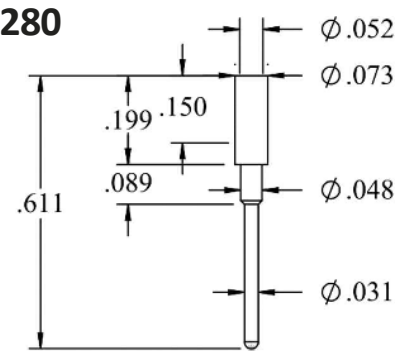


**0270**



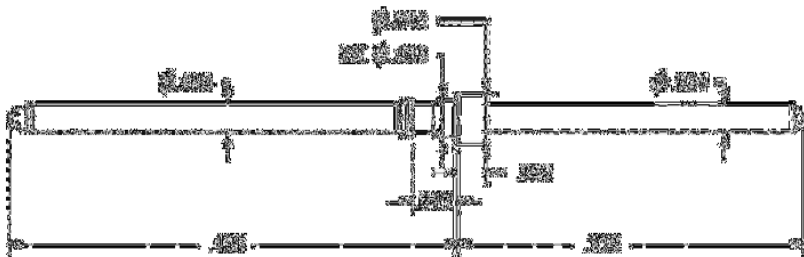
PLATING: Au/Ni  
SHELL: BeCu

**0280**



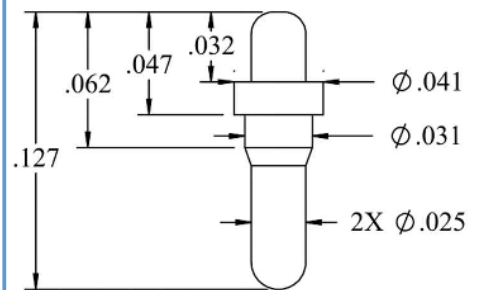
PLATING: Au/Ni  
SHELL: BeCu

**0282**



PLATING: Au/Ni  
SHELL: BeCu

**0316**



PLATING: Au/Ni  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

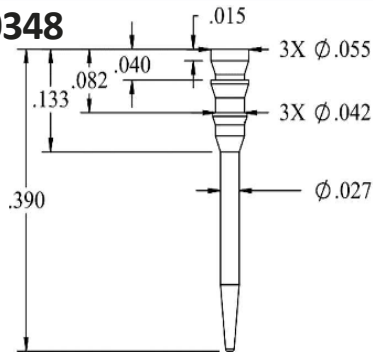
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

| LENGTHS | DIAMETERS | ANGLES |
|---------|-----------|--------|
| ±.005   | ±.002     | ±2°    |

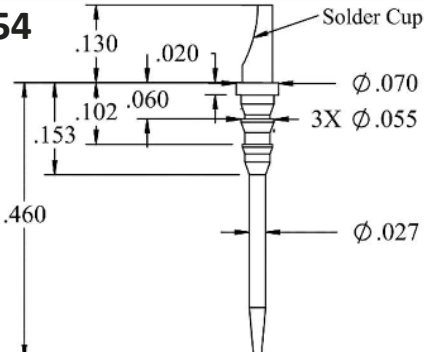
DRAWINGS NOT TO SCALE

**0348**



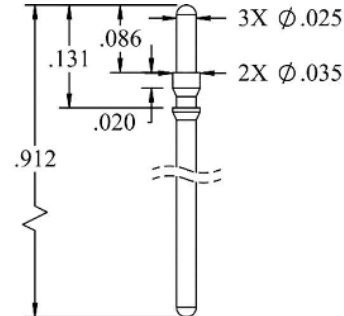
PLATING: Au/Ni  
SHELL: BeCu

**0354**

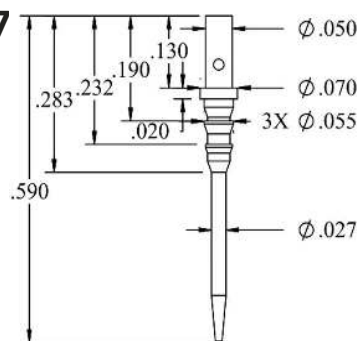


PLATING: Au/Ni  
SHELL: BeCu

| PART NO | FINISH            |
|---------|-------------------|
| 0368    | 150-350µSn, 50µNi |
| 0414    | Au/Ni             |

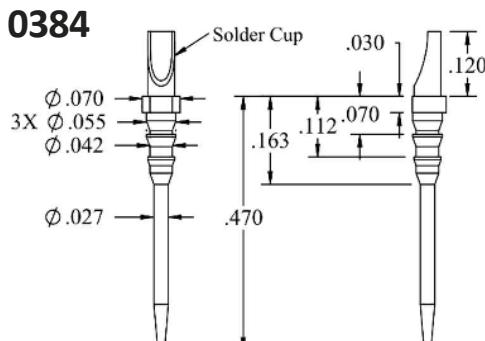


**037**



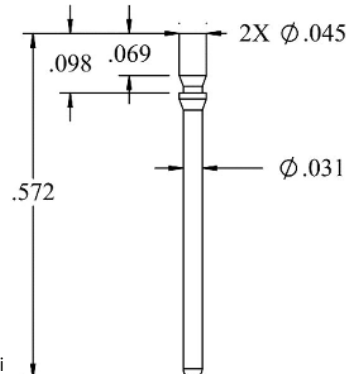
PLATING: Au/Ni  
SHELL: BeCu

**0384**



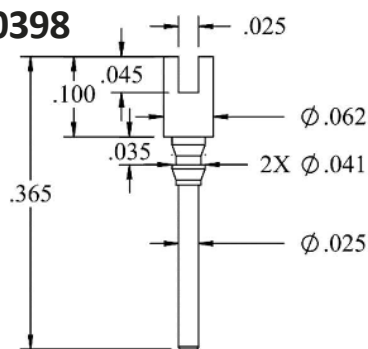
PLATING: Au/Ni  
SHELL: BeCu

**0388**



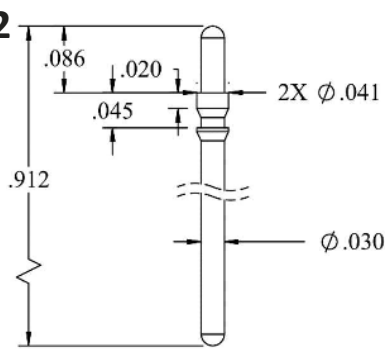
PLATING: Au/Ni  
SHELL: BeCu

**0398**



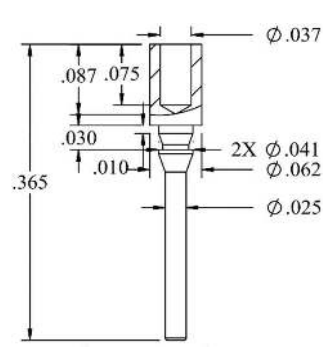
PLATING: 50µIn Au/100-200µIn Ni/10-50µIn Cu  
SHELL: BeCu

**0402**



PLATING: Au/Ni  
SHELL: BeCu

**0403**



PLATING: 50µIn Au/100-200µIn Ni/10-50µIn Cu  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

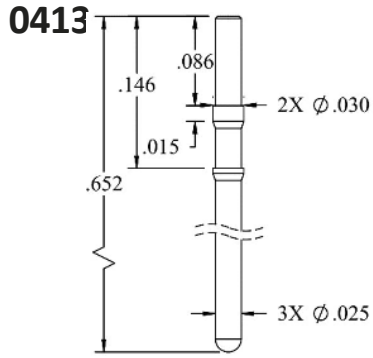
#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

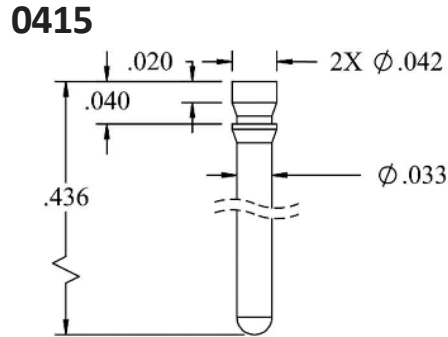
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:  
LENGTHS    DIAMETERS    ANGLES  
±.005        ±.002        ±2°

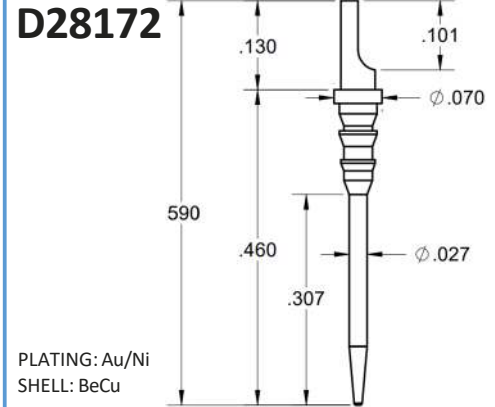
DRAWINGS NOT TO SCALE



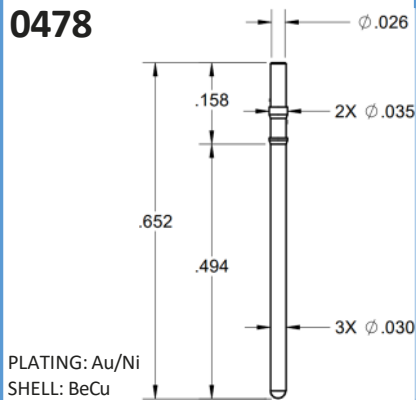
PLATING: Au/Ni  
SHELL: BeCu



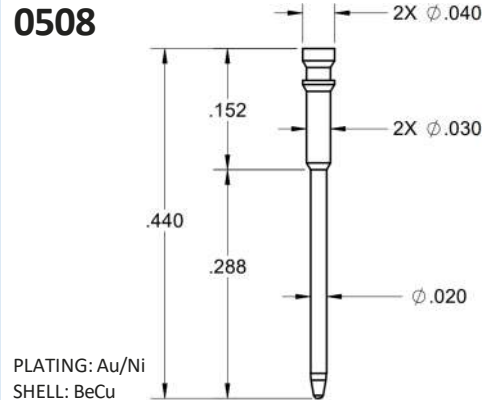
PLATING: Sn/Ni  
SHELL: BeCu



PLATING: Au/Ni  
SHELL: BeCu



PLATING: Au/Ni  
SHELL: BeCu



PLATING: Au/Ni  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \

#### FINISH

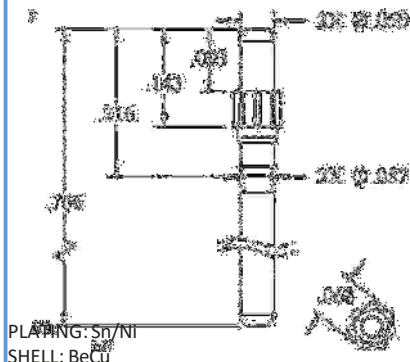
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min, per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

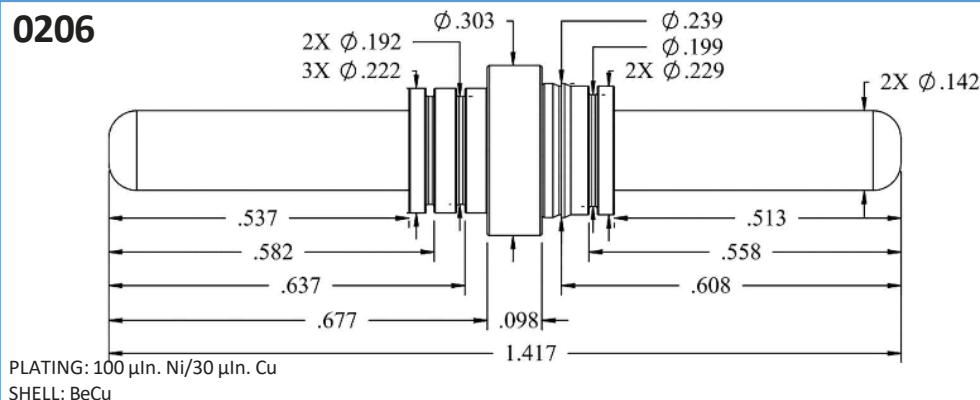
DIMENSIONAL TOLERANCES:  
LENGTHS    DIAMETERS    ANGLES  
±.005        ±.002        ±2°

DRAWINGS NOT TO SCALE

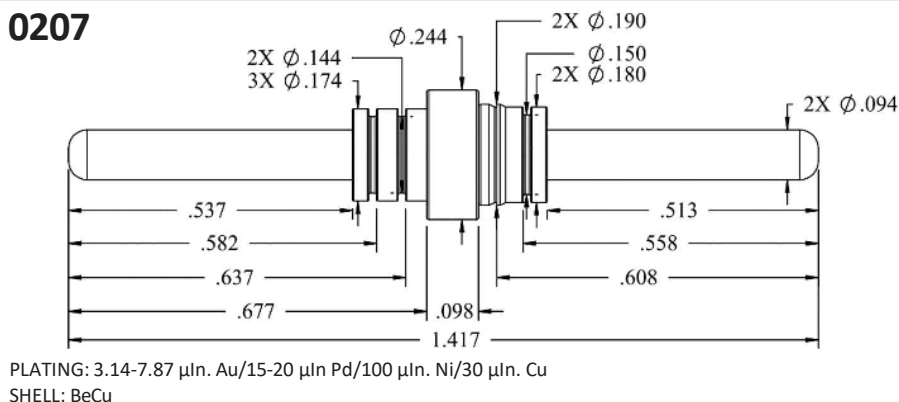
### 0204



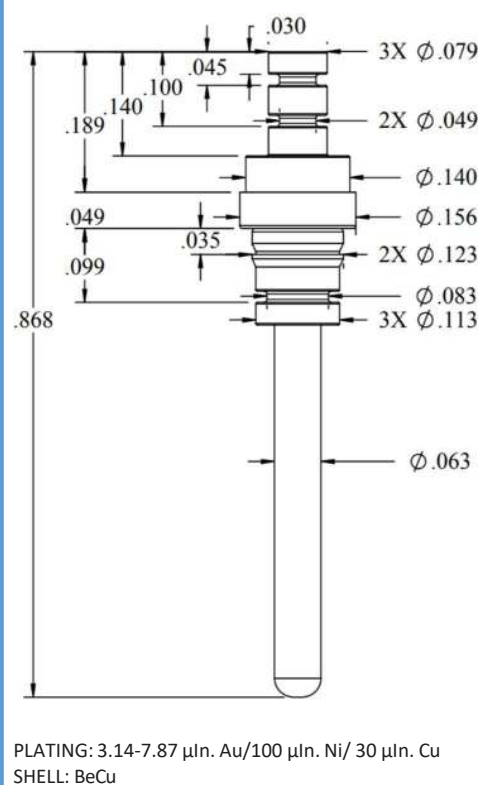
### 0206



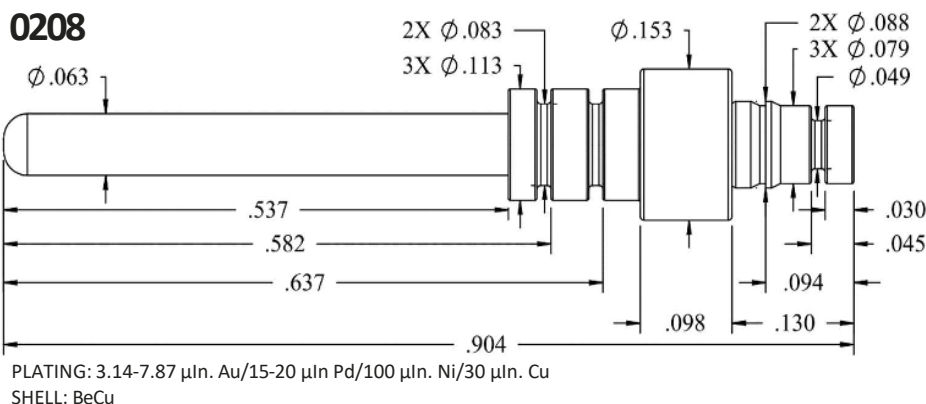
### 0207



### 0209



### 0208



#### NOTES: UNLESS OTHERWISE SPECIFIED

##### SHELL / BODIES

##### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10 $\mu$  In. Min. over Nickel, 100 $\mu$  In. Min, per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200 $\mu$  In. Min. over Nickel 100 $\mu$  In. Min.

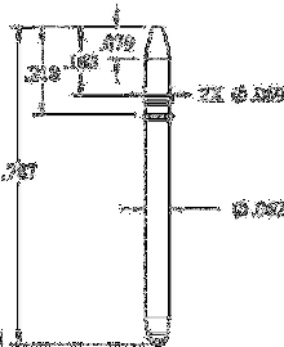
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:  
LENGTHS    DIAMETERS    ANGLES  
 $\pm 0.005$         $\pm 0.002$         $\pm 2^\circ$

DRAWINGS NOT TO SCALE

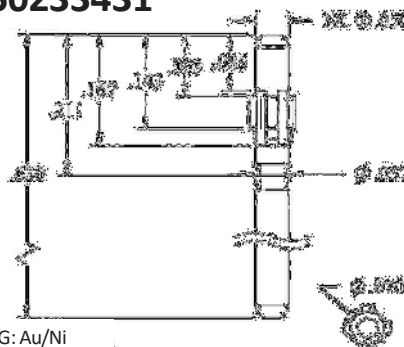


**0213**



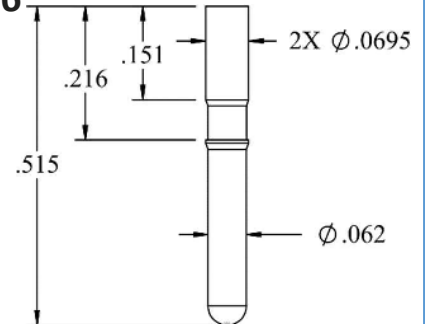
PLATING: Au/Ni  
SHELL: BeCu

**PH50233431**



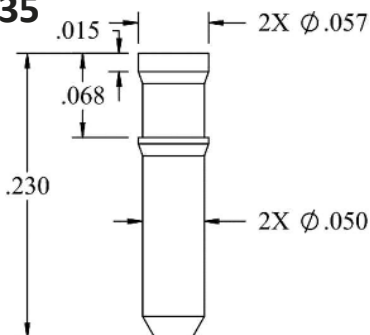
PLATING: Au/Ni  
SHELL: BeCu

**0216**



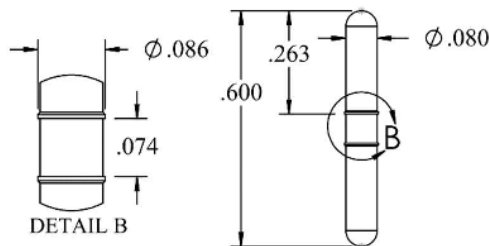
PLATING: Au/Ni  
SHELL: Tellurium Copper Alloy C14500

**0235**



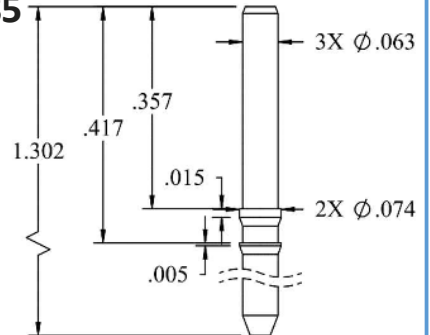
PLATING: 118 $\mu$  Sn/50 $\mu$  Ni  
SHELL: BeCu

**0256**



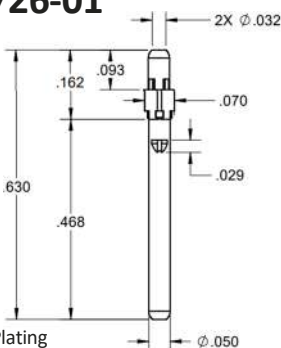
PLATING: Sn/Ni  
SHELL: BeCu

**0285**



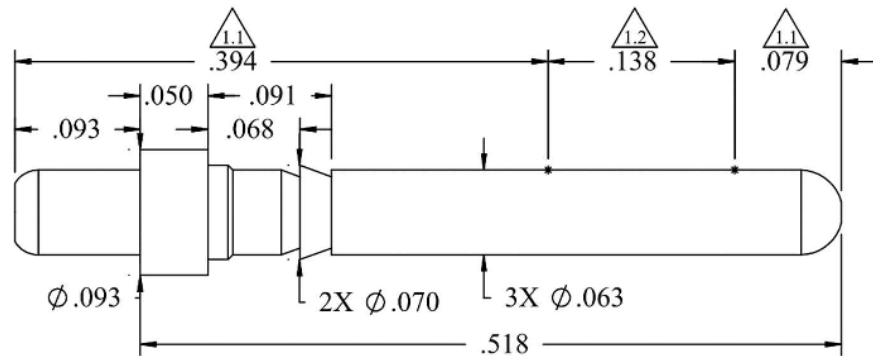
PLATING: Au/Ni  
SHELL: BeCu

**50-164726-01**



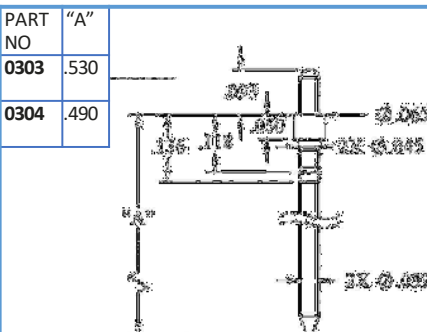
PLATING: No Plating  
SHELL: BeCu

**0305**



PLATING: Select Gold Plating

SHELL:  $\triangle 1.1$  130 $\mu$  Sn/100 $\mu$  Ni  $\triangle 1.2$  30 $\mu$  Au/100 $\mu$  Ni



PLATING: 10 $\mu$  Au/80 $\mu$  Ni  
SHELL: BeCu

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10 $\mu$  In. Min. over Nickel, 100 $\mu$  In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200 $\mu$  In. Min. over Nickel 100 $\mu$  In. Min.

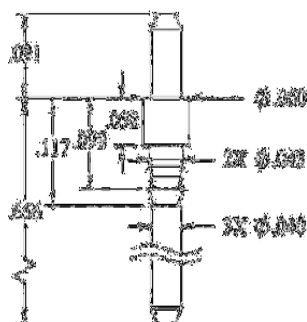
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

LENGTHS  $\pm .005$  DIAMETERS  $\pm .002$  ANGLES  $\pm 2^\circ$

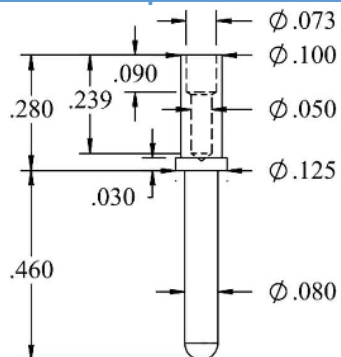
DRAWINGS NOT TO SCALE

**0308**



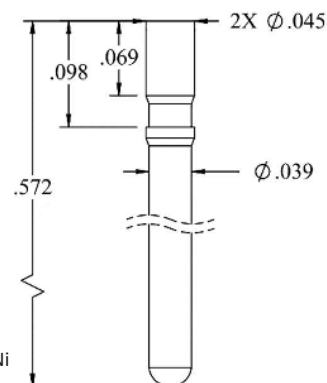
PLATING: 118 $\mu$  Sn/50 $\mu$  Ni SHELL: BeCu

**0310**



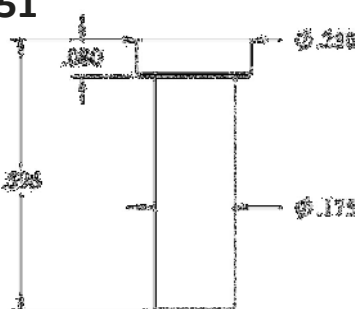
PLATING: Sn/Ni  
SHELL: BeCu

**0343**



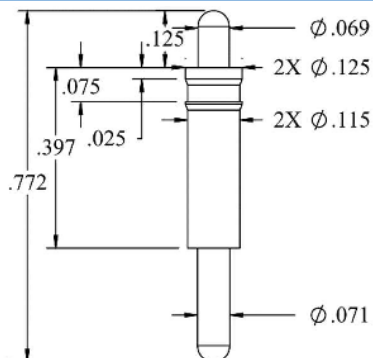
PLATING: Au/Ni  
SHELL: BeCu

**0351**



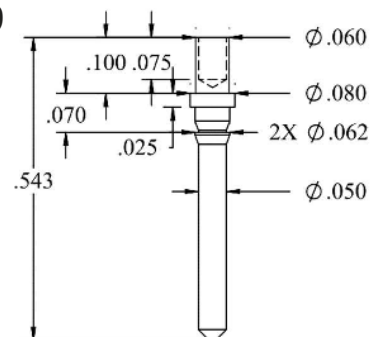
PLATING: None  
MATERIAL: UNS S42000 Stainless Steel

**0358**



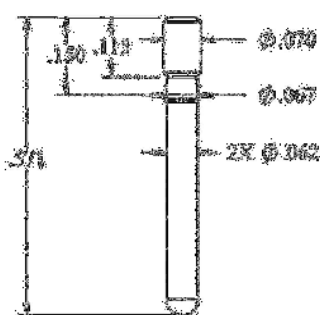
PLATING: Sn/Ni  
SHELL: BeCu

**0369**



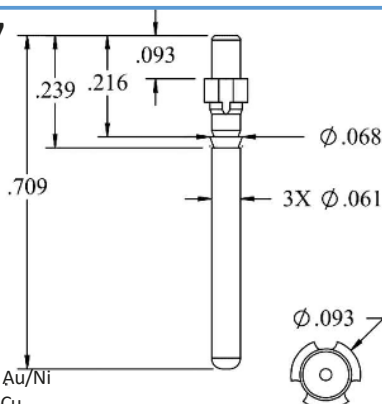
PLATING: 200 $\mu$  Ni  
SHELL: BeCu

**0397**



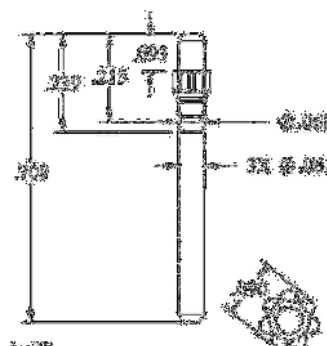
PLATING: Au/Ni  
SHELL: Tellurium Copper Alloy C14500

**0407**



PLATING: Au/Ni  
SHELL: BeCu

**0408**



PLATING: Au/Ni  
SHELL: E

### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10 $\mu$  In. Min. over Nickel, 100 $\mu$  In. Min. per QQ-N-290 Class

4. Or Tin per MIL-T-10727 Type I, 200 $\mu$  In. Min. over Nickel 100 $\mu$  In. Min.

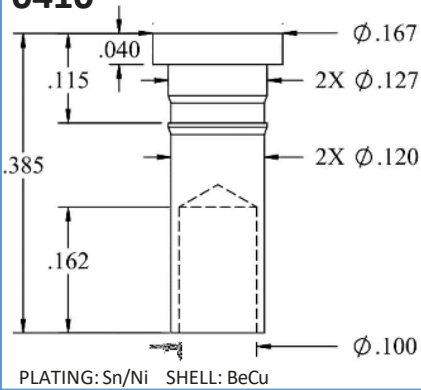
DIMENSIONS ARE IN INCHES

#### DIMENSIONAL TOLERANCES:

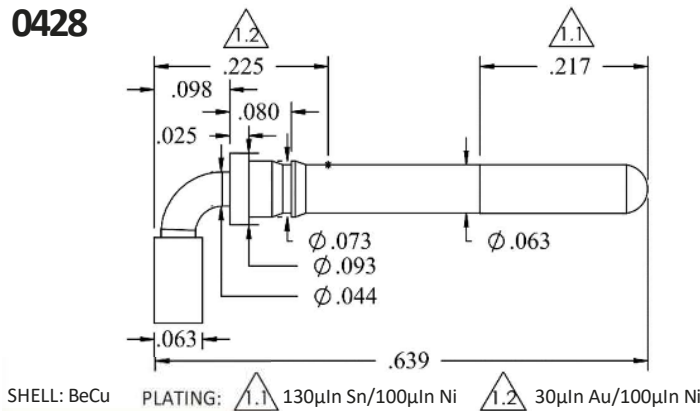
| LENGTHS    | DIAMETERS  | ANGLES        |
|------------|------------|---------------|
| $\pm .005$ | $\pm .002$ | $\pm 2^\circ$ |

DRAWINGS NOT TO SCALE

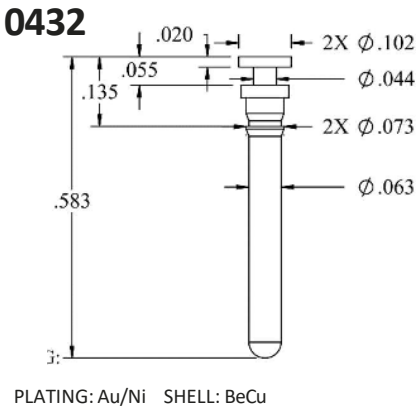
**0410**



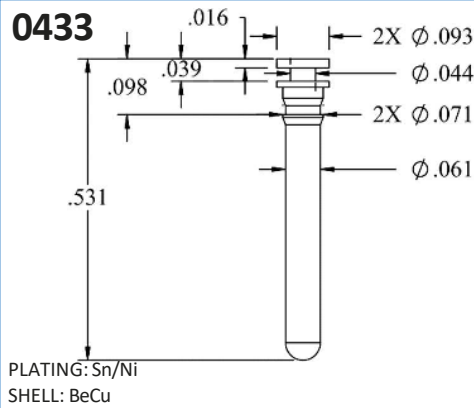
**0428**



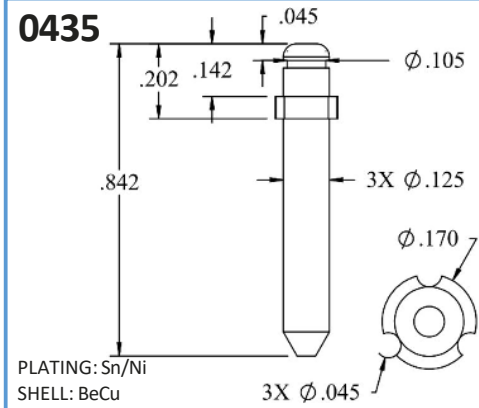
**0432**



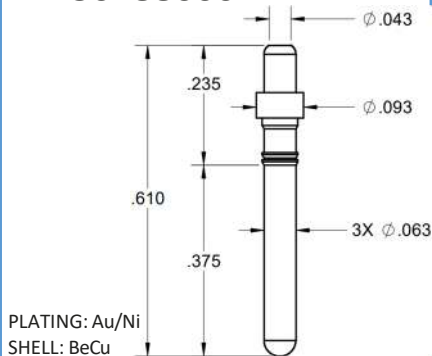
**0433**



**0435**



**PH50188660**



### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

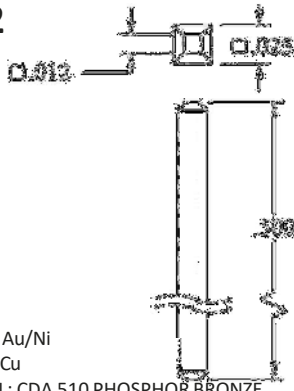
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:  
LENGTHS  $\pm .005$  DIAMETERS  $\pm .002$  ANGLES  $\pm 2^\circ$

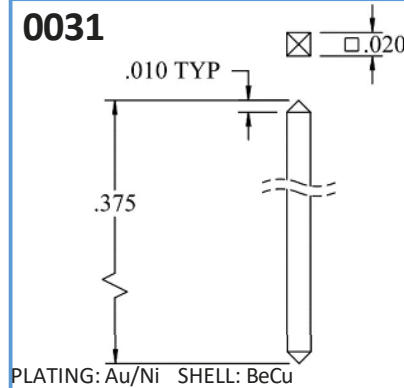
DRAWINGS NOT TO SCALE

**0202**



PLATING: Au/Ni  
SHELL: BeCu  
MATERIAL: CDA 510 PHOSPHOR BRONZE

**0031**



PLATING: Au/Ni SHELL: BeCu

## NOTES: UNLESS OTHERWISE SPECIFIED

### SHELL / BODIES

### MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10μ In. Min. over Nickel, 100μ In. Min. per QQ-N-290 Class

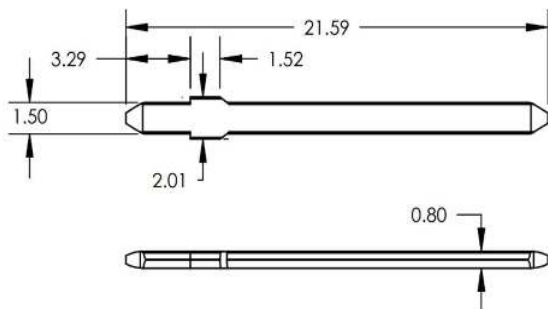
4. Or Tin per MIL-T-10727 Type I, 200μ In. Min. over Nickel 100μ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:  
LENGTHS    DIAMETERS    ANGLES  
±.005           ±.002           ±2°

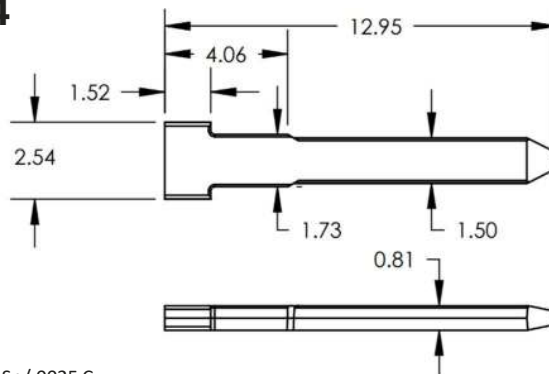
DRAWINGS NOT TO SCALE

**0193**



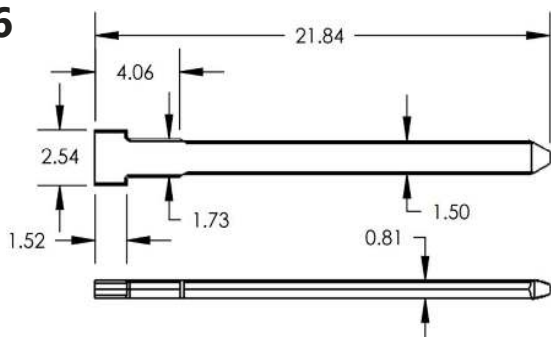
PLATING: Sn/Ni

**0194**



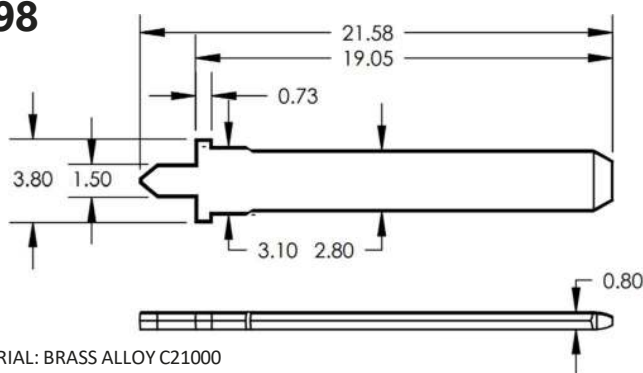
PLATING: Sn/.0025 Cu

**0196**



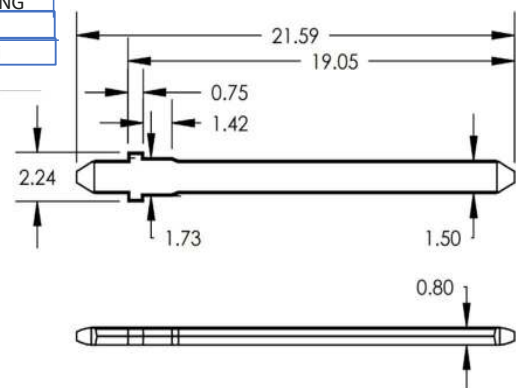
PLATING: Sn/.0025 Cu

**0198**

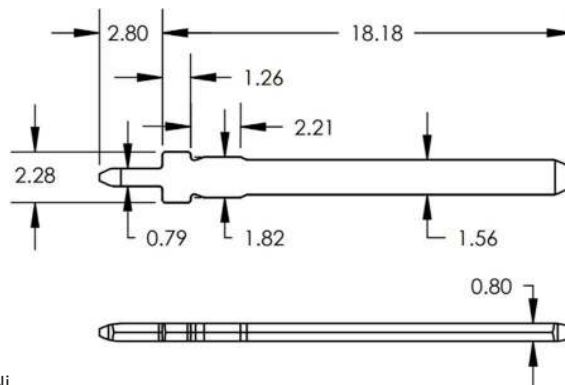


MATERIAL: BRASS ALLOY C21000  
PLATING: Sn/Ni

| PART NO | PLATING |
|---------|---------|
| 0229    | Sn/Ni   |
| 0431    | Au/Ni   |



**0230**



PLATING: Sn/Ni

## NOTES: UNLESS OTHERWISE SPECIFIED

### SHELL / BODIES

### MATERIAL \ FINISH

BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni

Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

DIMENSIONS ARE IN  
MILIMETERS

DIAMETERS  
±.05

DIMENSIONAL TOLERANCES:

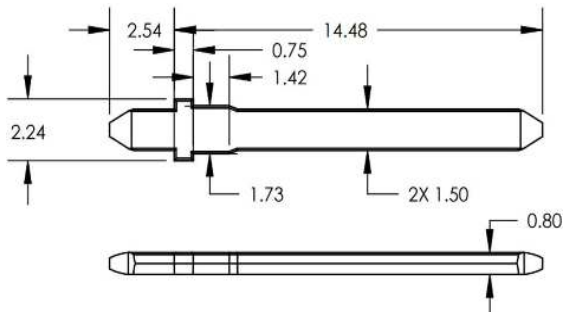
ANGLES  
±2°

DRAWINGS NOT TO SCALE

LENGTHS  
±.013

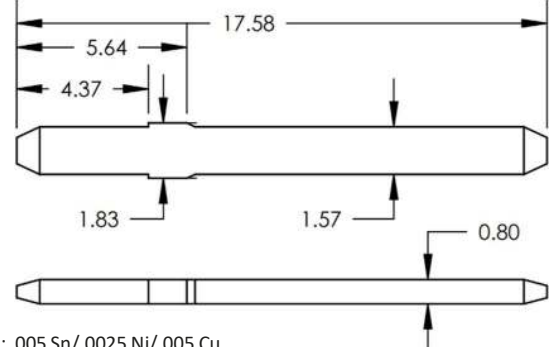


## 0231



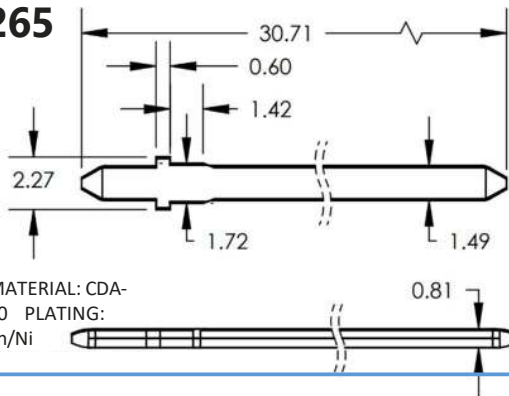
PLATING: Sn/Ni

## 0232



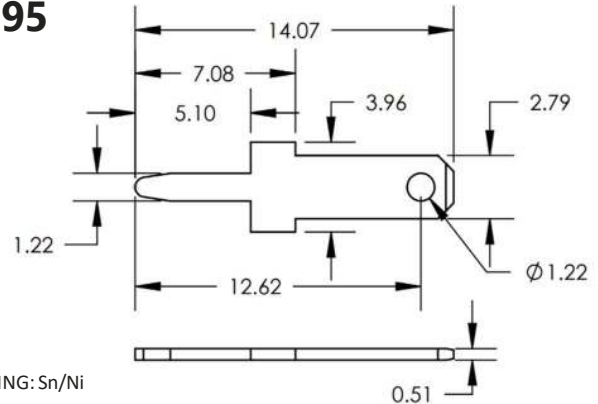
PLATING: .005 Sn/.0025 Ni/.005 Cu

## 0265



MATERIAL: CDA-20  
PLATING: Sn/Ni

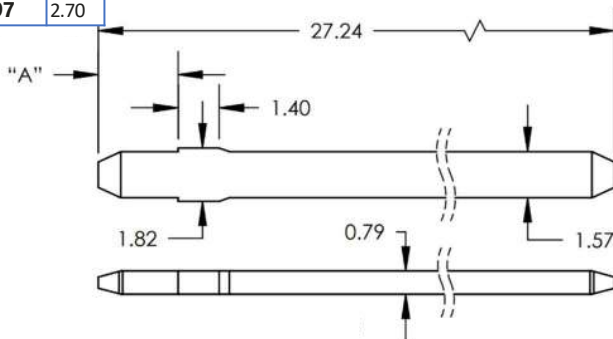
## 0295



PLATING: Sn/Ni

### PART NO "A"

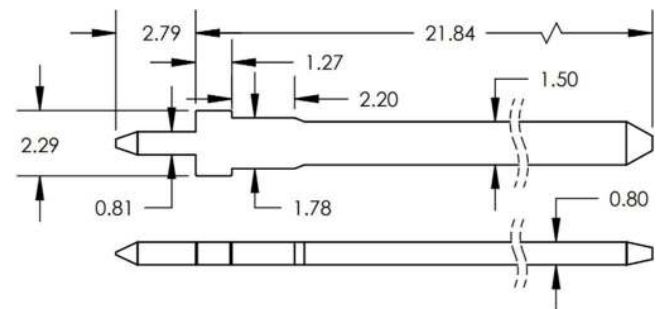
|      |      |
|------|------|
| 0296 | 3.55 |
| 0297 | 2.70 |



PLATING: 0.000762 Au/0.00127 Ni

### PART NO FINISH

|      |                   |
|------|-------------------|
| 0298 | Sn/Ni             |
| 0299 | .0005 Au/.0013 Ni |



### NOTES: UNLESS OTHERWISE SPECIFIED

#### SHELL / BODIES

#### MATERIAL \ FINISH

BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni

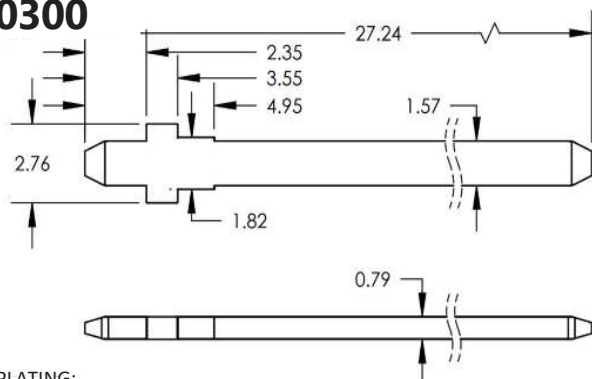
Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

DIMENSIONS ARE IN  
MILIMETERS  
DIAMETERS  
±.05

DIMENSIONAL TOLERANCES:  
ANGLES  
±2°

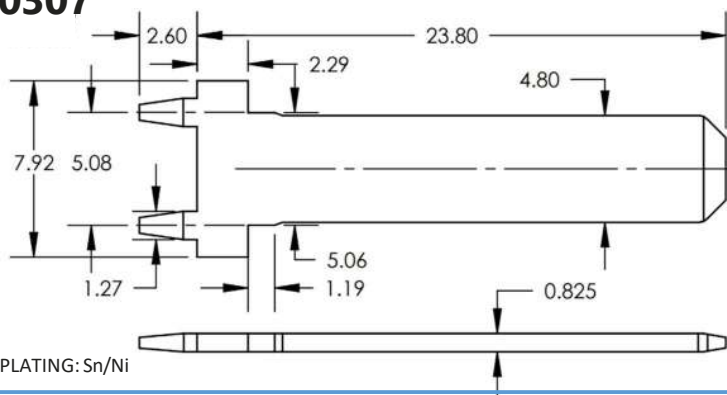
DRAWINGS NOT TO SCALE  
LENGTHS  
±.013

**0300**



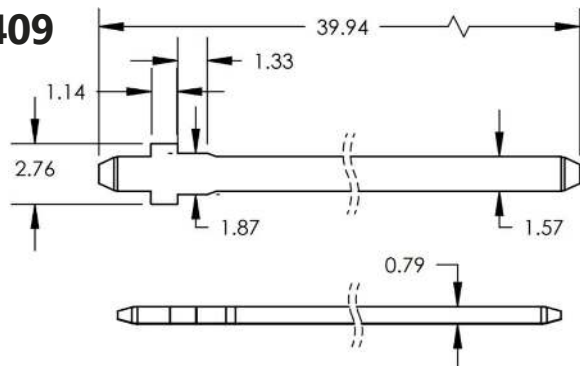
PLATING:

**0307**



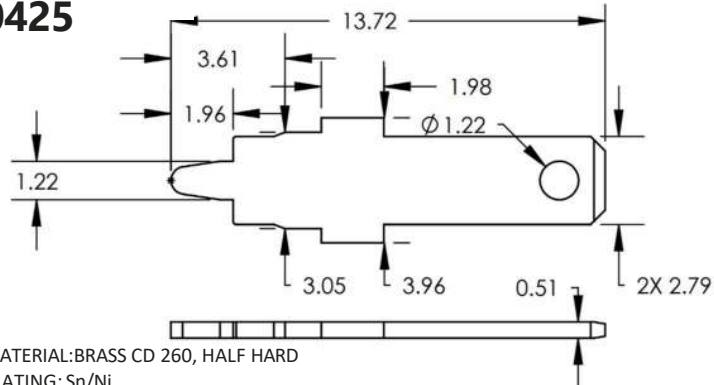
PLATING: Sn/Ni

**0409**



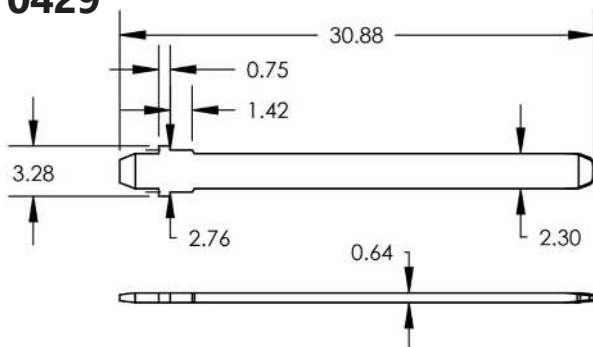
PLATING: Au/Ni/Cu

**0425**



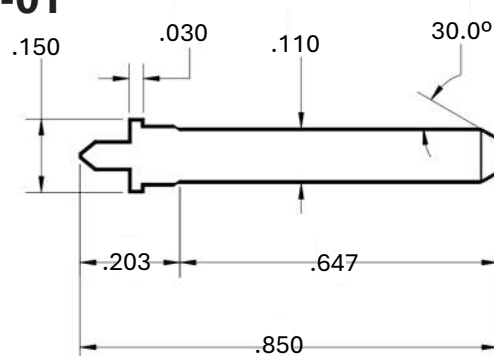
MATERIAL: BRASS CD 260, HALF HARD  
PLATING: Sn/Ni

**0429**

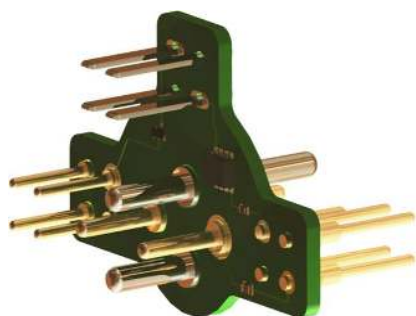


PLATING: Sn/Ni

**50-161004-01**



PLATING: Sn/Ni



## NOTES: UNLESS OTHERWISE SPECIFIED

### SHELL / BODIES

### MATERIAL \ FINISH

BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni

Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

DIMENSIONS ARE IN  
MILIMETERS

DIAMETERS  
±.05

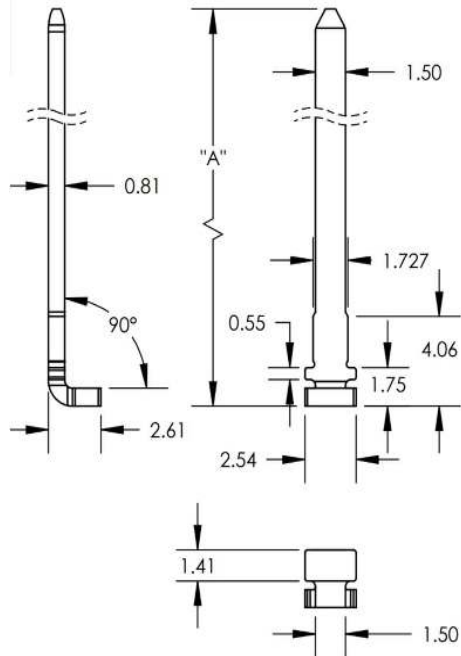
DIMENSIONAL TOLERANCES:

ANGLES  
±2°

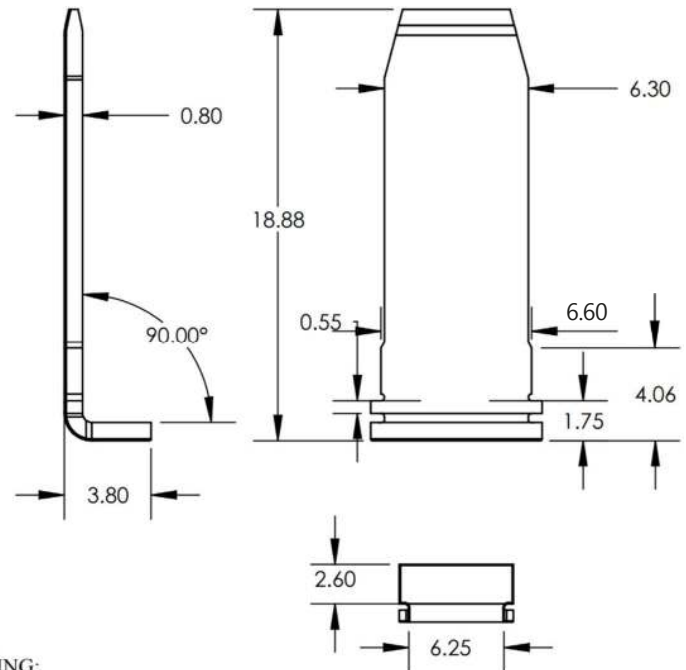
DRAWINGS NOT TO SCALE

LENGTHS  
±.013

| PART NO | "A"   | FINISH   |
|---------|-------|----------|
| 0266    | 21.84 | Au/Ni    |
| 0277    | 21.84 | Sn/Ni    |
| 0279    | 16.55 | Sn/Ni    |
| 0278    | 12.95 | Sn/Ni    |
| 0434    | 12.95 | Au/Ni    |
| 0430    | 18.01 | Sn/Ni/Cu |

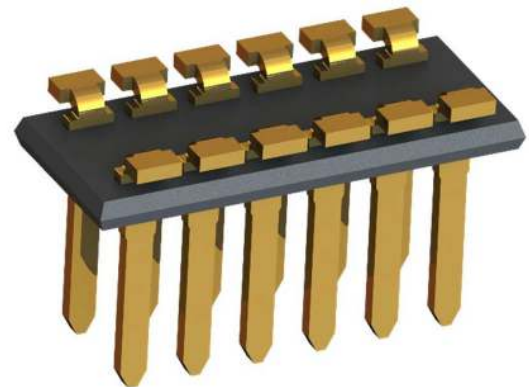


**0426**



PLATING:

PLATING: Sn/Ni/Cu



## NOTES: UNLESS OTHERWISE SPECIFIED

SHELL /

BODIES

MATERIAL \

FINISH

BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

DIMENSIONS ARE IN  
MILIMETERS

LENGTHS  
±.013

DIMENSIONAL  
TOLERANCES:  
DIAMETERS  
±.05

DRAWINGS NOT TO  
SCALE

ANGLES  
±2°



OVERALL LENGTH

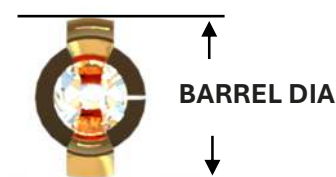


BARREL  
DIA

| PART NUMBER | FINGER CONTACT | BARREL DIAMETER (in) | OVERALL LENGTH (in) | TEST PIN            | MAXIMUM INSERTION FORCE | MINIMUM WITHDRAWAL FORCE |
|-------------|----------------|----------------------|---------------------|---------------------|-------------------------|--------------------------|
| 838         | 4              | 0.053                | 0.315               | .017 DIA            | 165 GM                  | 45 GM                    |
| 839         | 3              | 0.034                | 0.300               | .018 DIA            | 25 Gm                   | 10 GM                    |
| 840         | 3              | 0.034                | 0.262               | .018 DIA            | 25 GM                   | 10 GM                    |
| 23          | 3              | 0.034                | 0.285               | .018 DIA            | 25 GM                   | 10 GM                    |
| 57          | 3              | 0.028                | 0.300               | .012 SQ<br>.014 DIA | 42 GM                   | 10 GM                    |
| 37          | 3              | 0.028                | 0.220               | .012 SQ<br>.014 DIA | 42 GM                   | 10 GM                    |
| 14          | 3              | 0.028                | 0.180               | .012 SQ<br>.014 DIA | 42 GM                   | 10 GM                    |
| 11          | 3              | 0.028                | 0.250               | .012 SQ<br>.014 DIA | 42 GM                   | 10 GM                    |



OVERALL LENGTH



BARREL DIA

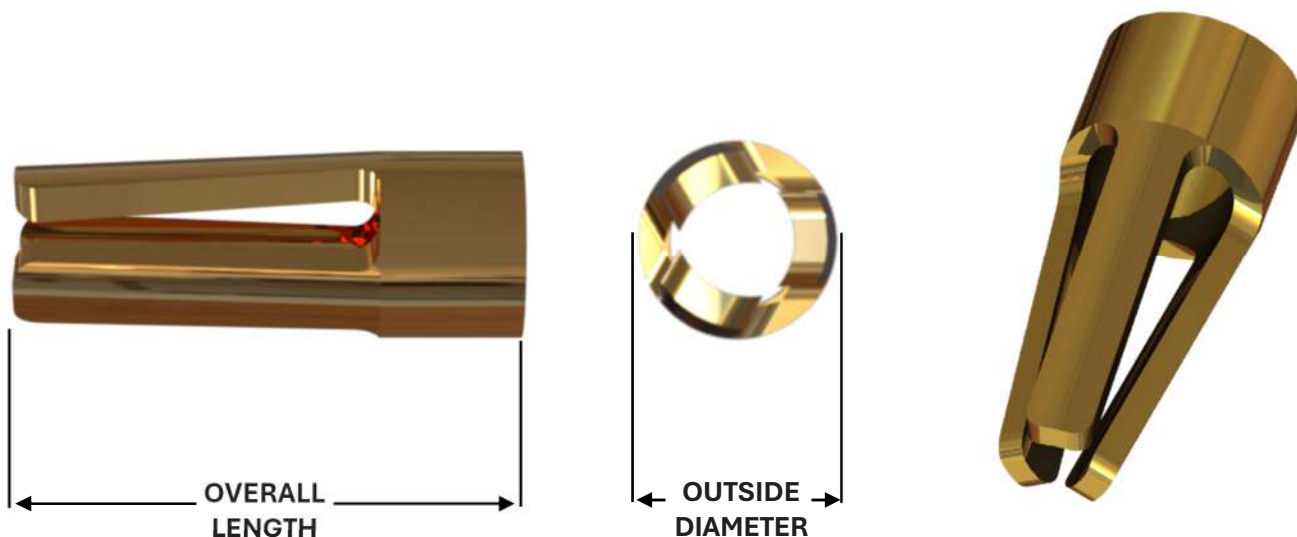
| PART NUMBER | FINGER CONTACT | BARREL DIAMETER (in) | OVERALL LENGTH (in) | TEST PIN | MAXIMUM INSERTION FORCE | MINIMUM WITHDRAWAL FORCE |
|-------------|----------------|----------------------|---------------------|----------|-------------------------|--------------------------|
| 0437        | 2              | 0.035                | .293                | .012 DIA | 42 GM                   | 10 GM                    |



## NOTES: UNLESS OTHERWISE SPECIFIED

### CONTACTS MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µIn. Min. or Class 00, 10µIn. Min., over Nickel per QQ-N-290 Class 4, 50µIn. Min.  
Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn.



| PART NUMBER | OUTSIDE DIAMETER (in) | OVERALL LENGTH (in) | OPERATING RANGE PIN DIA. (in) | TEST PIN DIAMETER (in) | MAXIMUM INSERTION FORCE | MINIMUM REMOVAL FORCE |
|-------------|-----------------------|---------------------|-------------------------------|------------------------|-------------------------|-----------------------|
| 94          | 0.031                 | 0.075               | .015-.020                     | 0.017                  | 80 GM                   | 15 GM                 |
| 823         | 0.031                 | 0.075               | .015-.021                     | 0.018                  | 90 GM                   | 14 GM                 |
| 203         | 0.032                 | 0.05                | .015-.018                     | 0.017                  | 400 GM                  | 100 GM                |
| 132         | 0.031                 | 0.075               | .015-.020                     | 0.017                  | 42 GM                   | 14 GM                 |
| 286         | 0.031                 | 0.075               | .015-.021                     | 0.018                  | 30 GM                   | 10 GM                 |
| 462         | 0.0235                | 0.065               | .007-.013                     | 0.011                  | 30 GM                   | 9 GM                  |
| 311         | 0.0196                | 0.053               | .006-.011                     | 0.008                  | 30 GM                   | 10 GM                 |

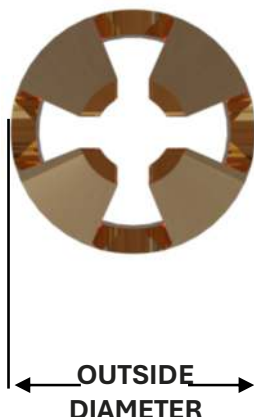
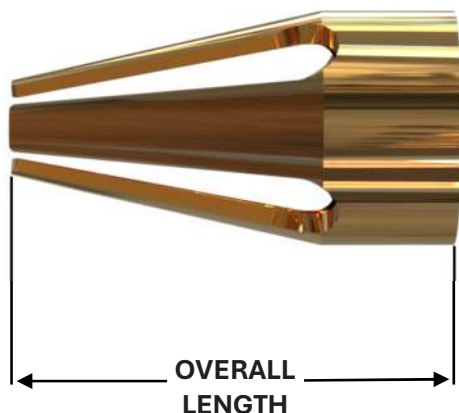


## NOTES: UNLESS OTHERWISE SPECIFIED

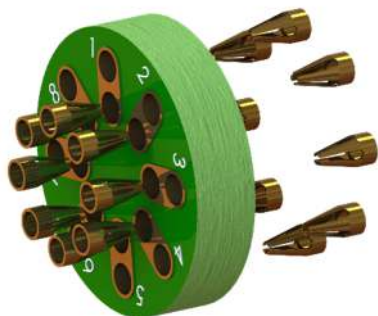
### CONTACTS

#### MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µIn. Min. or Class 00, 10µIn. Min., over Nickel per QQ-N-290 Class 4, 50µIn. Min.  
Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn.



| PART NUMBER | OUTSIDE DIAMETER (in) | OVERALL LENGTH (in) | OPERATING RANGE PIN DIA. (in) | TEST PIN DIAMETER (in) | MAXIMUM INSERTION FORCE | MINIMUM WITHDRAWAL FORCE |
|-------------|-----------------------|---------------------|-------------------------------|------------------------|-------------------------|--------------------------|
| 42          | 0.044                 | 0.065               | .015-.022                     | 0.018                  | 135 GM                  | 25 GM                    |
| 822         | 0.044                 | 0.065               | .015-.022                     | 0.018                  | 260 Gm                  | 55 GM                    |
| 824         | 0.044                 | 0.065               | .015-.022                     | 0.018                  | 520 GM                  | 120 GM                   |
| 825         | 0.044                 | 0.083               | .015-.022                     | 0.018                  | 45 GM                   | 15 GM                    |
| 137         | 0.044                 | 0.083               | .015-.025                     | 0.017                  | 270 GM                  | 90 GM                    |
| 826         | 0.044                 | 0.083               | .015-.025                     | 0.018                  | 675 Gm                  | 200 GM                   |
| 827         | 0.053                 | 0.117               | .022-.032                     | I - 0.026 W - 0.024    | 385 GM                  | 50 GM                    |
| 828         | 0.069                 | 0.15                | .036-.050                     | 0.040 / 0.030          | 325 GM / 55 GM          | 60 GM / 15 GM            |
| 291         | 0.08                  | 0.15                | .040-.059                     | I - 0.05 W 0.04        | 375 GM                  | 35 GM                    |
| 829         | 0.064                 | 0.095               | .032-.045                     | 0.04                   | 5 LB                    | 200 GM                   |
| 830         | 0.0635                | 0.12                | .032-.046                     | 0.041 / 0.039          | 350 GM                  | 55 GM                    |
| 831         | 0.064                 | 0.12                | .032-.045                     | I - 0.04 W - 0.035     | 2.25 LB                 | 110 GM                   |
| 365         | 0.088                 | 0.124               | .048-.064                     | I - 0.06 W - 0.05      | 440 GM                  | 60 GM                    |
| 292         | 0.108                 | 0.148               | .065-.082                     | I - 0.074 W - 0.072    | 3 LB                    | 230 GM                   |

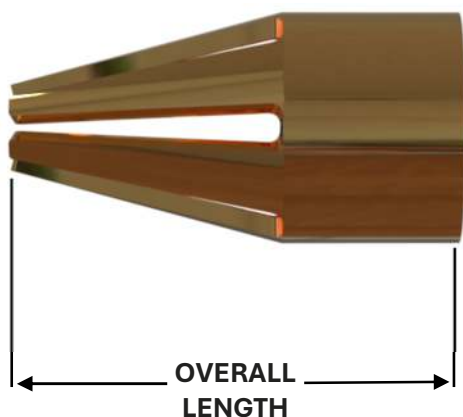


## NOTES: UNLESS OTHERWISE SPECIFIED

### CONTACTS

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Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn.



| PART NUMBER | OUTSIDE DIAMETER (in) | OVERALL LENGTH (in) | OPERATING RANGE PIN DIA. (in) | TEST PIN DIAMETER (in) | MAXIMUM INSERTION FORCE | MINIMUM WITHDRAWAL FORCE |
|-------------|-----------------------|---------------------|-------------------------------|------------------------|-------------------------|--------------------------|
| 309         | 0.028                 | 0.06                | 0.012 - 0.017                 | 0.015                  | 250GM                   | 42GM                     |
| 452         | 0.031                 | 0.06                | 0.012-0.019                   | 0.015                  | 60GM                    | 15GM                     |
| 832         | 0.044                 | 0.062               | 0.015-0.023                   | 0.017                  | 150GM                   | 40GM                     |
| 833         | 0.044                 | 0.062               | 0.015-0.023                   | 0.017                  | 120GM                   | 20GM                     |
| 834         | 0.044                 | 0.083               | 0.015-0.026                   | 0.017                  | 90GM                    | 25GM                     |
| 329         | 0.044                 | 0.083               | 0.015-0.026                   | 0.018                  | 42GM                    | 15GM                     |
| 835         | 0.044                 | 0.083               | 0.015-0.026                   | 0.018                  | 20GM                    | 10GM                     |
| 284         | 0.05                  | 0.083               | 0.025-0.035                   | 0.026                  | 140GM                   | 25GM                     |
| 836         | 0.052                 | 0.083               | 0.025-0.037                   | 0.026                  | 375GM                   | 100GM                    |
| 837         | 0.052                 | 0.083               | 0.025-0.037                   | 0.026                  | 125GM                   | 40GM                     |
| 366         | 0.055                 | 0.065               | 0.037-0.043                   | 0.04                   | 160GM                   | 50GM                     |
| 455         | 0.068                 | 0.085               | 0.04-0.05                     | 0.04                   | 300GM                   | 75GM                     |
| 457         | 0.1235                | 0.12                | 0.084-0.102                   | 0.093                  | 600GM                   | 150GM                    |

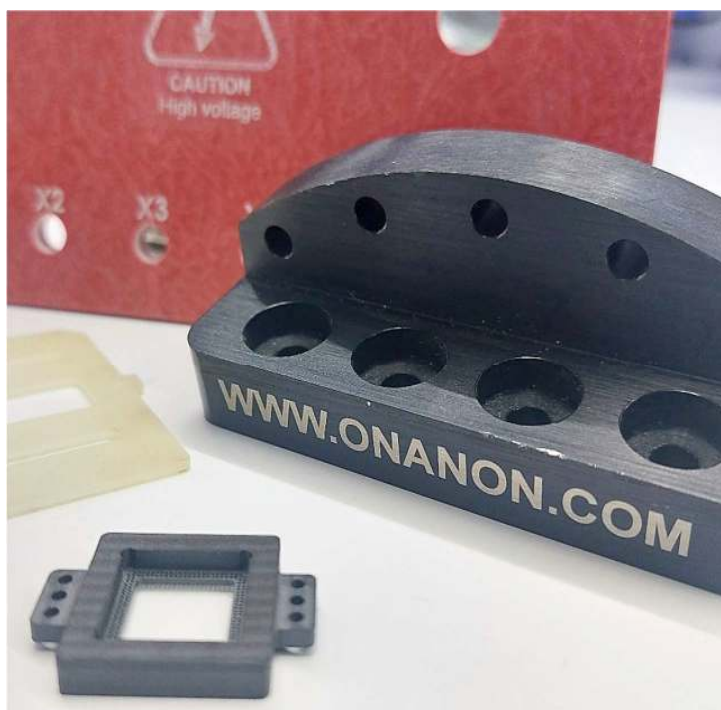
## NOTES: UNLESS OTHERWISE SPECIFIED

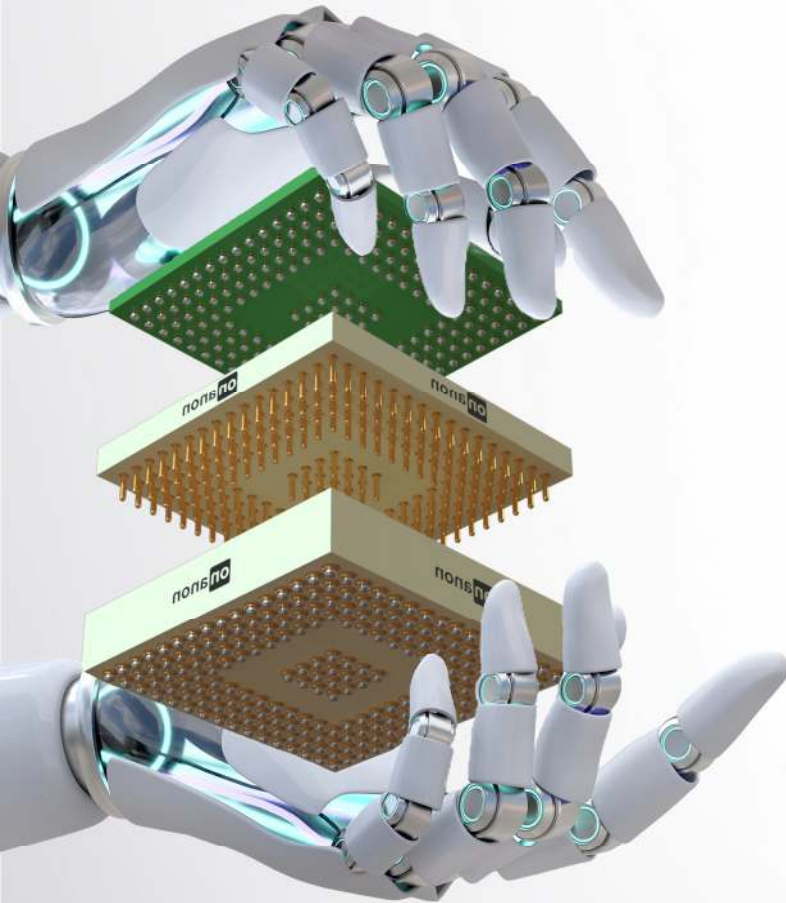
### CONTACTS MATERIAL \ FINISH

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|                                       |                                              |
|---------------------------------------|----------------------------------------------|
| ABS – Acrylonitrile Butadiene Styrene | MC® 907 Natural                              |
| Acetal                                | Meldin®                                      |
| Acetron GP                            | Micarta®                                     |
| Acetate                               | Mylar®                                       |
| Acrylic                               | Nylatron® GS                                 |
| Celazole                              | Nylatron GM Blue                             |
| Celcon® – Acetac Co-Polymer           | Nylatron GSM                                 |
| Cellulose Acetate                     | Nylon 101                                    |
| Cirlex®                               | Nylon 6/6                                    |
| Copper Clad Laminates                 | Orkot®                                       |
| CPVC – High Temperature PVC           | Phenolic                                     |
| Delrin®                               | Line Phenolic                                |
| Delrin® Acetal                        | Paper Phenolic                               |
| Delrin® AF Blend                      | PC 1000 Polysulfone                          |
| Duratron® 150                         | PET                                          |
| Duratron® XP                          | Plexiglas®                                   |
| Ertalyte® PET-P                       | Polycarbonate                                |
| Ertalyte® TX                          | Polyimide                                    |
| FEP – Fluorinated Ethylene Propylene  | Polyphthalamide                              |
| Fluoroglas®                           | Polypropylene                                |
| Fluorosint® 207 PTFE                  | Polyshell – 01 (Virgin PTFE)                 |
| Fluorosint® 500 PTFE                  | Polyshell – 02 (Premium PTFE Blue)           |
| FR-4 / IPC-4101                       | Polyshell – 03 (Graphite Filled PTFE)        |
| G10                                   | Polyshell – 04 (Carbon/Graphite Filled PTFE) |
| G11                                   | Polyshell – 05 (Carbon/Graphite Filled PTFE) |
| Haylar®                               | Polyshell – 06 (Glass/Moly Filled PTFE)      |
| HDPE (High Density Polyethylene)      | Polyshell – 07 (Glass/Moly Filled PTFE)      |
| Hydar®                                | Polyshell – 08 (UHMWPE)                      |
| Kapton®                               | Polyshell – 09 (Filled PTFE)                 |
| Kel-F® (Polychlorotrifluoroethylene)  | Polyshell – 10 (Filled PTFE)                 |
| Ketron® PEEK HPV                      | Polyshell – 11 (Premium PTFE White FDA)      |
| Ketron® PEEK 1000                     | Polyshell – 12 (Virgin PEEK)                 |
| Ketron® PEEK 30% Glass Filled         | Polyshell – 13 (Glass Filled PTFE)           |
| Ketron® PEEK CA30                     | Polystyrene                                  |
| Ketron® PEEK HT                       | Polysulfone                                  |
| Kydex®                                | Polyurethane                                 |
| Kynar®                                | PVC (Polyvinylchloride)                      |
| LCP                                   | Radel R                                      |
| LDPE (Low Density Polyethylene)       | Rexolite®                                    |
| Lexan®                                | Rulon® LR                                    |
| MC® 901 Blue                          |                                              |

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Rulon® J                            | Tuffak® – Polycarbonate               |
| Ryton® PPS 40% Glass Filled         | Turcite®                              |
| Ryton® PPS Bearing Guide            | Tygon®                                |
| Santoprene                          | UHMW – Ultra High Molecular Weight    |
| Semitron® ESD 225                   | Ultem 1000                            |
| Semitron® ESD 410C                  | Ultem 2300                            |
| Semitron® ESD 520 HR                | Vespel® SP-1                          |
| Silicone                            | Vespel® SP-21                         |
| Techtron® HPV                       | Vespel® SP -211                       |
| Techtron® PPC                       | Vespel® SP-22                         |
| Techtron CM PPS                     | Vespel® SP-3                          |
| Teflon®                             | Vespel® TP-2236                       |
| Teflon® Glass Filled                | Vespel® TP-2875                       |
| Teflon® Graphite Filled             | Vespel® TP-8311                       |
| Teflon® Bronze Filled               | Vespel® CR-6100                       |
| Teflon® Molybdenum Disulfide Filled | Vespel® CR-6200                       |
| Tefzel®                             | Vespel® CR-6300                       |
| Torlon® 4203                        | Vespel® CR-6500                       |
| Torlon® 4301                        | Vespel® CP-8000                       |
| Torlon® 4501                        | Vespel® CP-8001                       |
| Torlon® 4503                        | Vespel® CP-8002                       |
| Torlon® 5530                        | Vespel® ABS-5000                      |
| Tivar®                              | Zelux®                                |
|                                     | We are not limited to these materials |





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