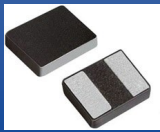


# MINI MOLDED POWER INDUCTOR



**AOTA-B160808S**

Request Samples



Check Inventory



1.6 x 0.8 x 0.8 mm  
**RoHS/RoHS II Compliant**  
MSL Level = 1

## Features

- Shielded construction for minimized EMI emissions
- Low DCR for better efficiency
- High current handling capability
- Compact size that is suitable for high-density designs
- Fit for high-frequency switching applications due to high SRF

## Applications

- Consumer electronics and portable devices
- Power electronics such as DC-DC converters, inverters and voltage regulators
- Industrial applications, robotics, signal conditioning, instrumentation and control systems
- IoT devices, smart home, automation systems and wireless sensing

## Electrical Specifications

| Part Number        | Inductance    | Tolerance | Self-Resonant Frequency | DC Resistance    |     | Saturation Current |     | Temperature Rise Current |     |
|--------------------|---------------|-----------|-------------------------|------------------|-----|--------------------|-----|--------------------------|-----|
|                    | 1MHz/1.0V     |           | Min.                    | Typ              | Max | Typ                | Max | Typ                      | Max |
| Units              | $\mu\text{H}$ | %         | MHz                     | $\text{m}\Omega$ |     | A                  |     | A                        |     |
| Symbol             | L             | M         | SRF                     | DCR              |     | Isat               |     | Irms                     |     |
| AOTA-B160808SR47MT | 0.47          | 20        | 100                     | 38               | 43  | 3.6                | 3.3 | 3.3                      | 3.0 |
| AOTA-B160808S1R0MT | 1.0           | 20        | 60                      | 95               | 110 | 2.3                | 2.1 | 2.0                      | 1.8 |
| AOTA-B160808S2R2MT | 2.2           | 20        | 40                      | 240              | 290 | 1.3                | 1.2 | 1.1                      | 1.0 |

### Test Conditions

**Isat:** DC current at which the inductance drops 30% from its nominal value.

**Irms:** DC current that causes the temperature rise ( $\Delta T$ , approximate 40 °C) from 25°C ambient.

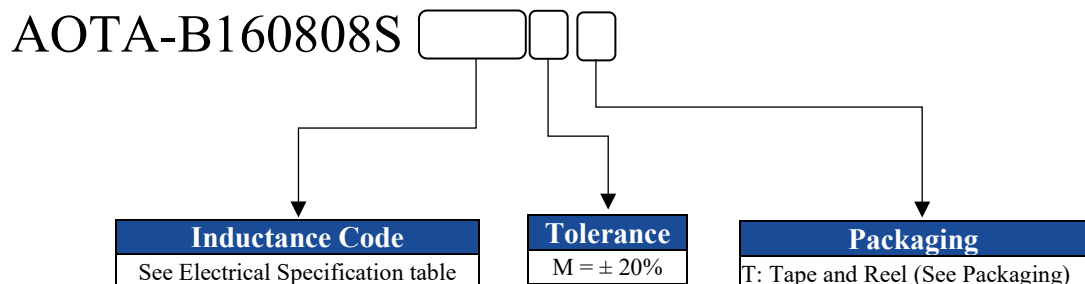
**Operating Temperature:** -40°C ~ +125°C (including self-temperature rise)

**Storage Condition:** -40°C ~ +125°C (on board), -10°C ~ +40°C (with packaging) and R.H. 60 max.

**Working Voltage:** 20V

AOTA-B160808S Series is **RoHS Compliant and Pb free**.

## Part Identification



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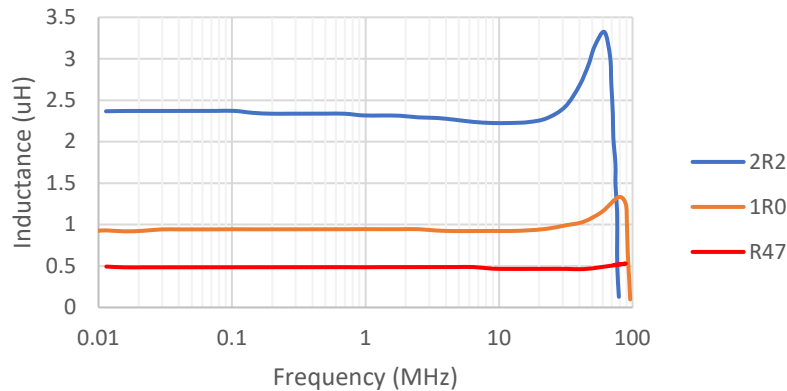
Check Inventory



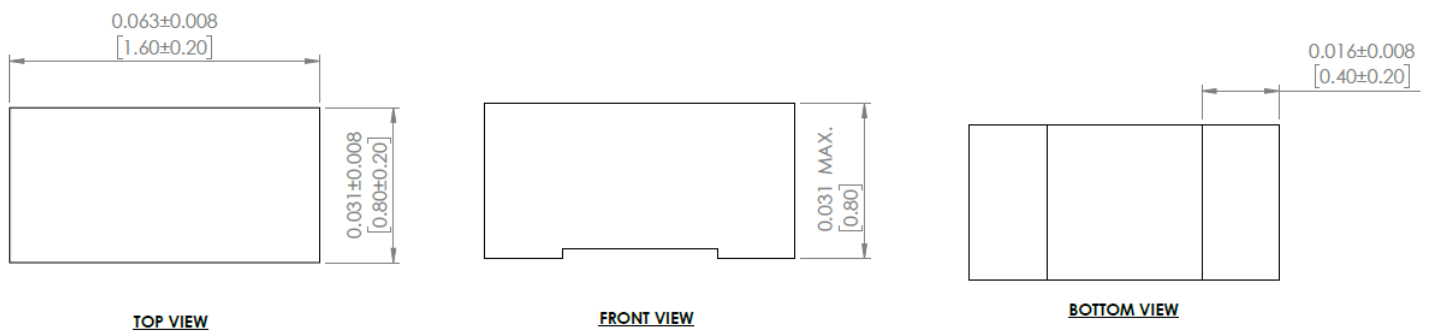
1.6 x 0.8 x 0.8 mm  
**RoHS/RoHS II Compliant**  
MSL Level = 1

## Performance Graphs

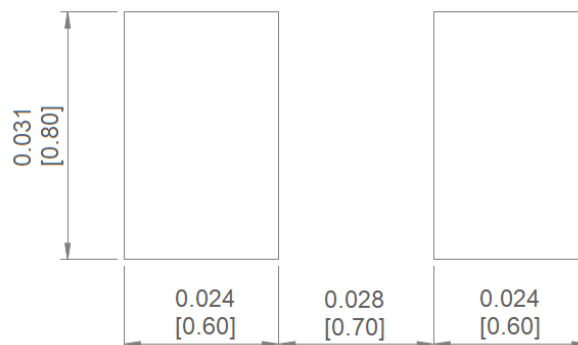
AOTA-B160808S



## Mechanical Specifications



## Recommended Land Pattern (Typ.)



Dimensions: Inch[mm]



5101 Hidden Creek Ln, Spicewood TX 78669  
Phone: 512-371-6159 Fax: 512-351-8858  
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**REVISION** Initial Release :  
7/23/2025

ABRACON IS  
ISO9001-2015  
CERTIFIED

# MINI MOLDED POWER INDUCTOR



AOTA-B160808S

Request Samples



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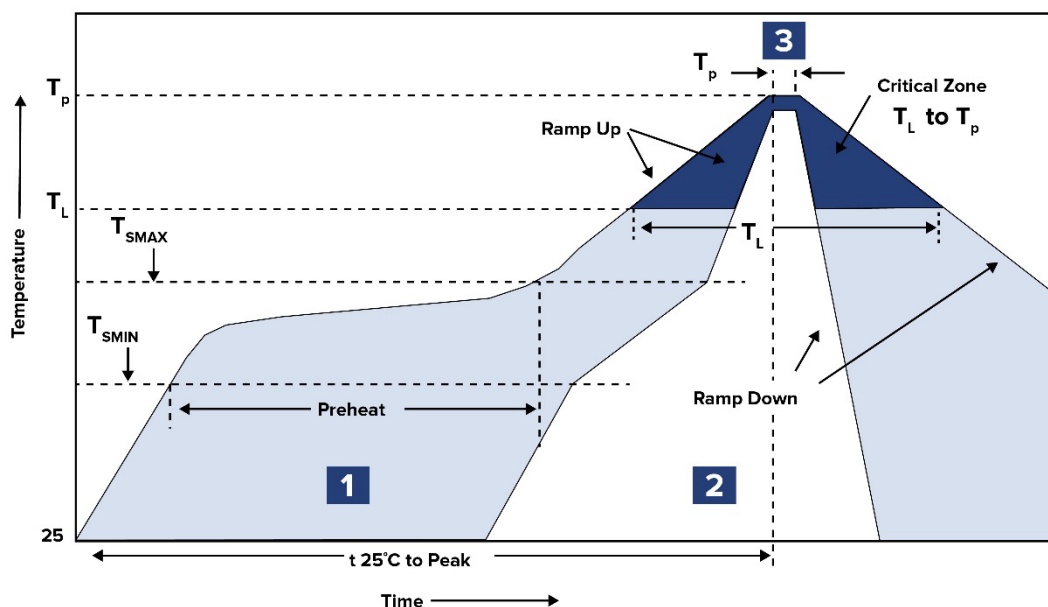


1.6 x 0.8 x 0.8 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Marking

No Marking

## Reflow Profile



| Zone | Description | Temperature                               | Times         |
|------|-------------|---|---------------|
| 1    | Preheat     | $T_{SMIN} \sim T_{SMAX}$<br>150°C ~ 200°C | 60 ~ 120 sec. |
| 2    | Reflow      | $T_L$<br>217°C                            | 60 ~ 90 sec.  |
| 3    | Peak heat   | $T_P$<br>260°C Max                        | 10 sec. MAX   |

# MINI MOLDED POWER INDUCTOR



**AOTA-B160808S**

Request Samples



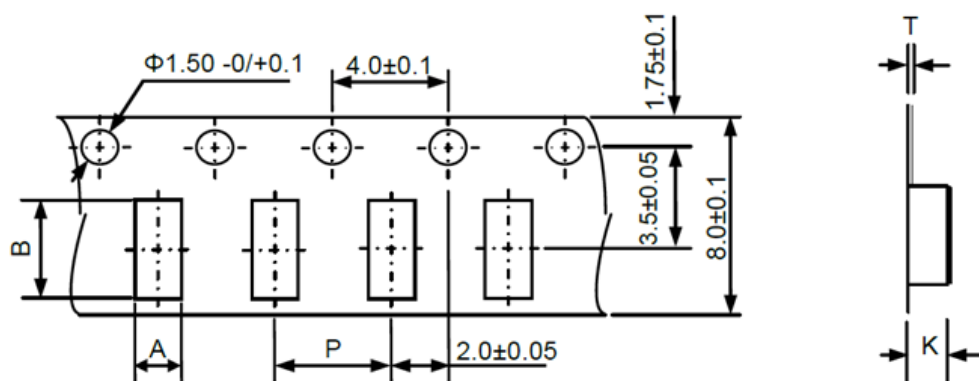
Check Inventory



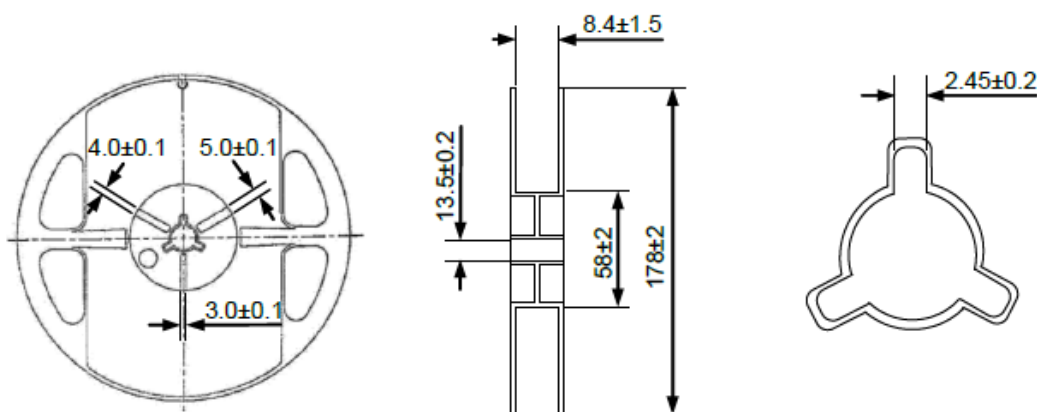
**1.6 x 0.8 x 0.8 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Packaging

**Tape & Reel: 3000 pcs/reel**



| A        | B        | P       | K        | T       |
|----------|----------|---------|----------|---------|
| 1.10±0.1 | 1.90±0.1 | 4.0±0.1 | 1.10 Max | 0.3 Max |



Dimensions: mm

**ATTENTION:** Abracon LLC's products are Commercial-Off-The-Shelf (COTS), which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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