

AEC-Q200 Automotive Mini Molded Power Inductor



AOTA-C201612Q

Request Samples



Check Inventory



2.0 x 1.6 x 1.2mm

RoHS/RoHS II Compliant

MSL Level = 1

Features

- PPAP ready and supported
- TS16949 certified production lines
- AEC-Q200 Grade qualified (-55°C ~ +125°C)
- Shielded construction
- Soft saturation
- Low DCR, High Efficiency
- High temperature current rating

Applications

- Body electronics and comfort system
- Infotainment and entertainment
- Electric vehicles
- Lighting
- Solar inverters and power
- Industrial and robotics
- Medium and high-power switch mode power supplies.

Electrical Specifications

Part Number*	Inductance	Tolerance	DC Resistance		Saturation Current		Temperature Rise Current	
	1MHz/1.0V		Typ.	Max.	Typ.	Max.	Typ.	Max.
Units	μH	%	mΩ		A		A	
Symbol	L	M	DCR		Isat		Irms	
AOTA-C201612Q3R3	3.3	20	135	165	2.7	2.3	2.4	2.0
AOTA-C201612Q4R7	4.7	20	160	185	2.2	2.0	2.0	1.8

*For full part numbers, please refer to the Part Identification section.

Test Conditions

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

Irms: DC current that causes the temperature rise (ΔT , approximate 40 °C) from 20°C ambient.

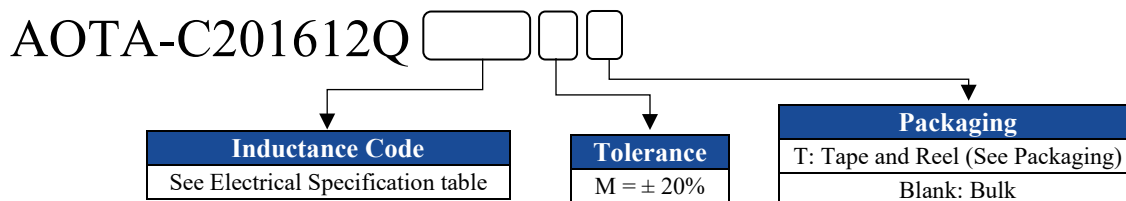
Operating Temperature: -55°C ~ +125°C (including self-temperature rise)

Storage Condition: -55°C ~ +125°C (on board), -10°C ~ +40°C (with packaging) and R.H. 70% max.

AOTA-C201612Q Series is **RoHS Compliant and Pb free**.

AOTA-C201612Q is AEC-Q200 Automotive qualified

Part Identification



12117 Bee Caves Rd Bldg-3, Ste 200
Bee Cave, TX 78738
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION: A 10-27-25

ABRACON IS
ISO9001-2015
CERTIFIED

AEC-Q200 Automotive Mini Molded Power Inductor



AOTA-C201612Q

Request Samples

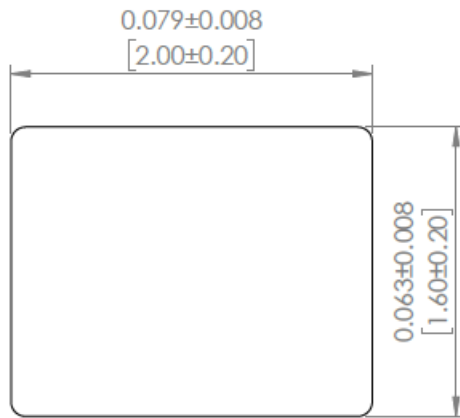


Check Inventory

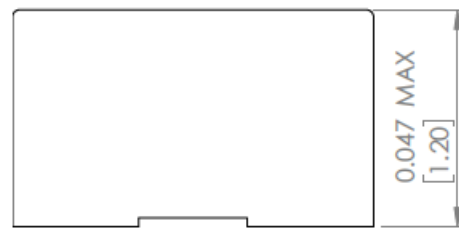


2.0 x 1.6 x 1.2mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications

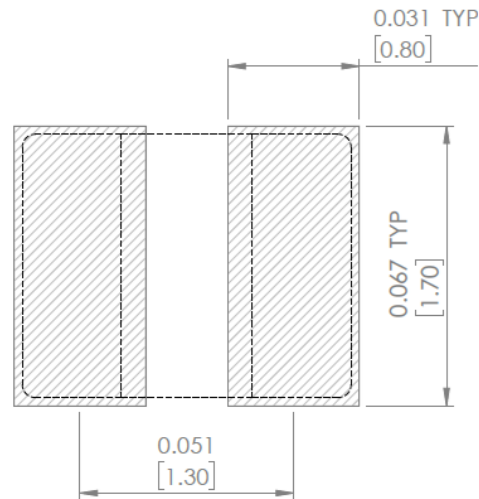
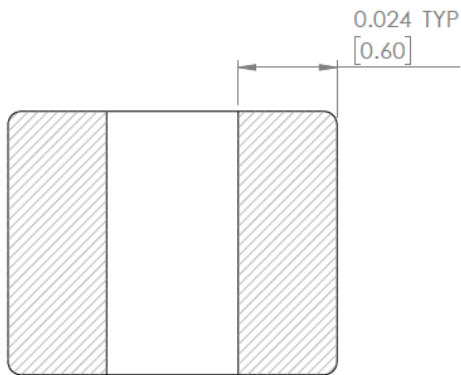


TOP VIEW



FRONT VIEW

Recommended Land Pattern



Dimensions: Inches[mm]



12117 Bee Caves Rd Bldg-3, Ste 200
Bee Cave, TX 78738
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION: A 10-27-25

ABRACON IS
ISO9001-2015
CERTIFIED

AEC-Q200 Automotive Mini Molded Power Inductor



AOTA-C201612Q

Request Samples

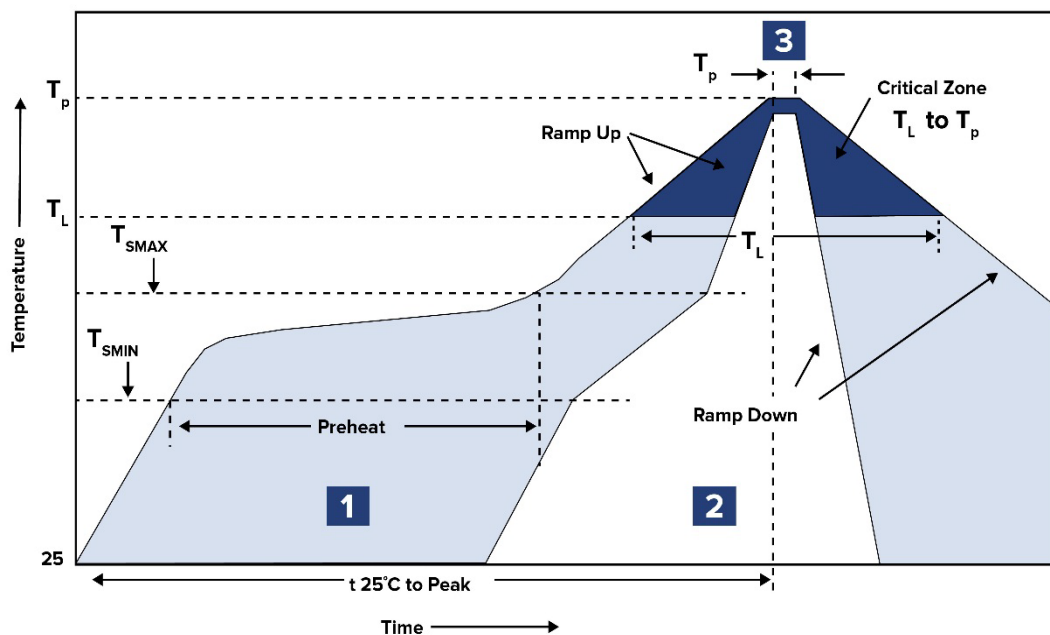


Check Inventory



2.0 x 1.6 x 1.2mm
RoHS/RoHS II Compliant
MSL Level = 1

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 170°C ~ 200°C	60 ~ 120 sec.
2	Reflow	T_L 230°C	40 sec. MAX
3	Peak heat	T_P 260°C	10 sec. MAX

Ref. solder paste: Sn/3.0Ag/0.5Cu

Ramp up rate: 3°C/s Max.

Ramp down rate: 6°C/s Max.

AEC-Q200 Automotive Mini Molded Power Inductor



AOTA-C201612Q

Request Samples



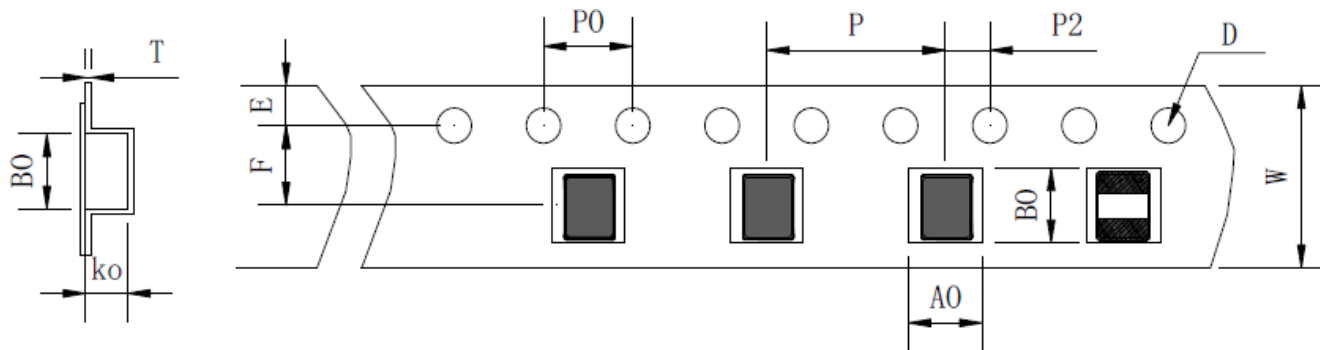
Check Inventory



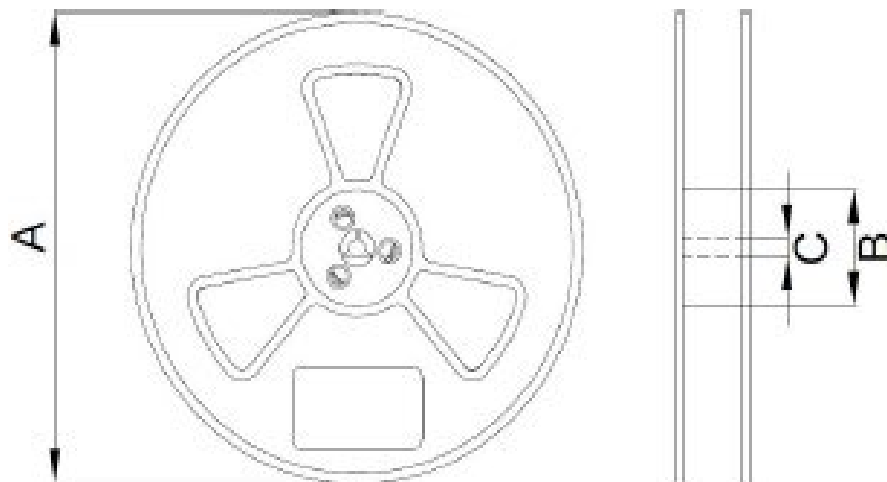
2.0 x 1.6 x 1.2mm
RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 3000 pcs/reel



W	A0	B0	K0	D	F	E	P	P0	P2	T
8.0 ±0.2	1.95 ±0.1	2.35 ±0.1	1.4 ±0.1	1.5 ±0.1	3.5 ±0.1	1.75 ±0.1	4.0 ±0.1	4.0 ±0.1	2.0 ±0.1	0.25 ±0.05



Item	Dimensions
A	178 ±1.0
B	60 ±1.0
C	13 ±0.5

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.



12117 Bee Caves Rd Bldg-3, Ste 200
 Bee Cave, TX 78738
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

REVISION: A 10-27-25

ABRACON IS
 ISO9001-2015
 CERTIFIED