

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 | |
|--------------------|------------|-----------|-------------------------|---------------|-----|--------------------|-----|--------------------------|-----|
| | | | | Min. | Typ | Max | Typ | Max | Typ |
| Units | µH | % | MHz | mΩ | | 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 (ΔT , 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

AOTA-B160808S



Inductance Code

See Electrical Specification table

Tolerance

M = ± 20%

Packaging

T: Tape and Reel (See Packaging)

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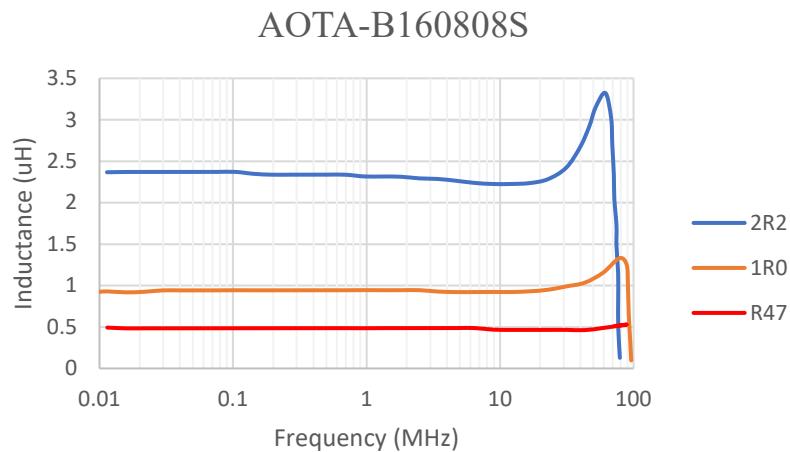


Check Inventory

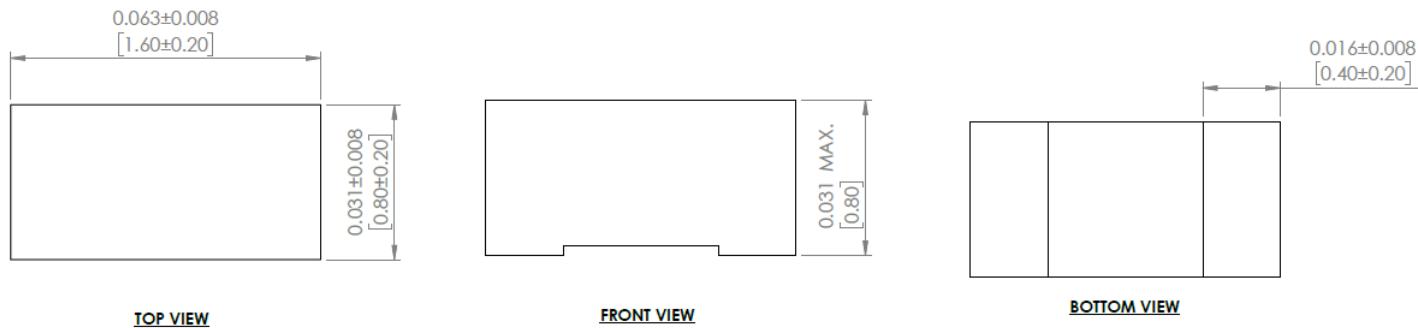


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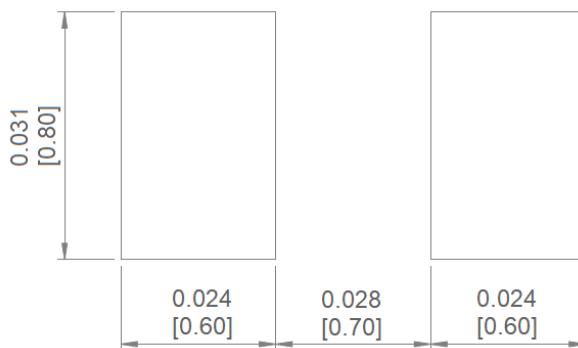
Performance Graphs



Mechanical Specifications



Recommended Land Pattern (Typ.)



Dimensions: Inch[mm]

 **ABRACON**

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For terms and conditions of sales, please visit:
www.abracon.com

REVISION Initial Release :
7/23/2025

ABRACON IS
ISO9001-2015
CERTIFIED

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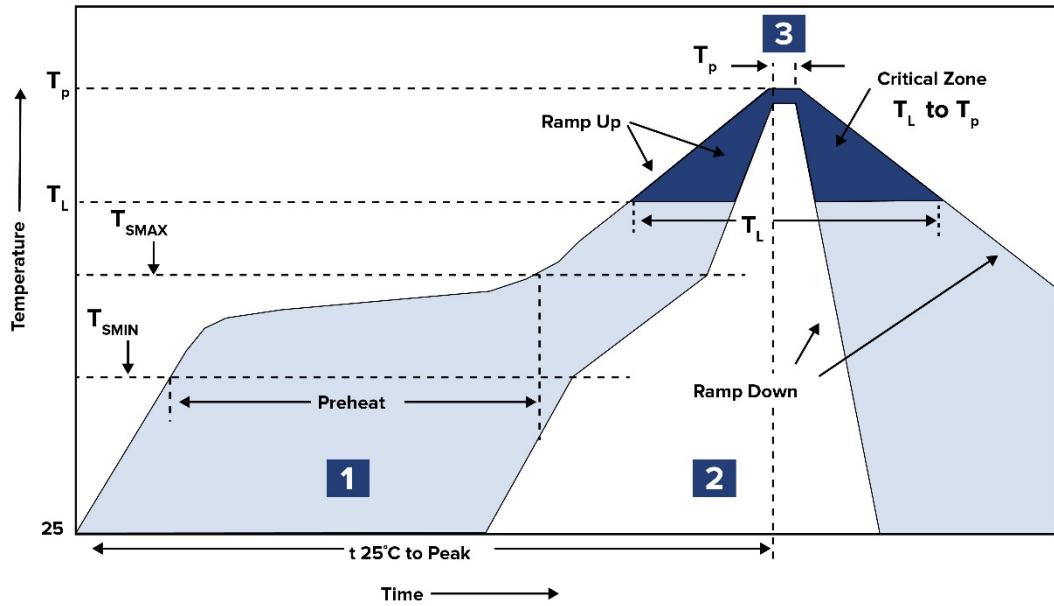


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Marking

No Marking

Reflow Profile



| Zone | Description | Temperature | Times |
|------|-------------|------------------------------------------------------------------------------------------|---------------|
| 1 | Preheat | $T_{S\text{MIN}} \sim T_{S\text{MAX}}$ $150^{\circ}\text{C} \sim 200^{\circ}\text{C}$ | 60 ~ 120 sec. |
| 2 | Reflow | T_L 217°C | 60 ~ 90 sec. |
| 3 | Peak heat | T_p 260°C Max | 10 sec. MAX |

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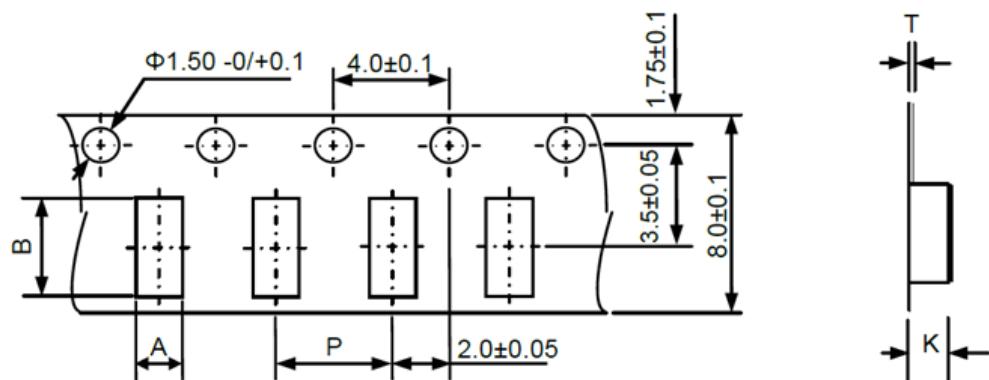
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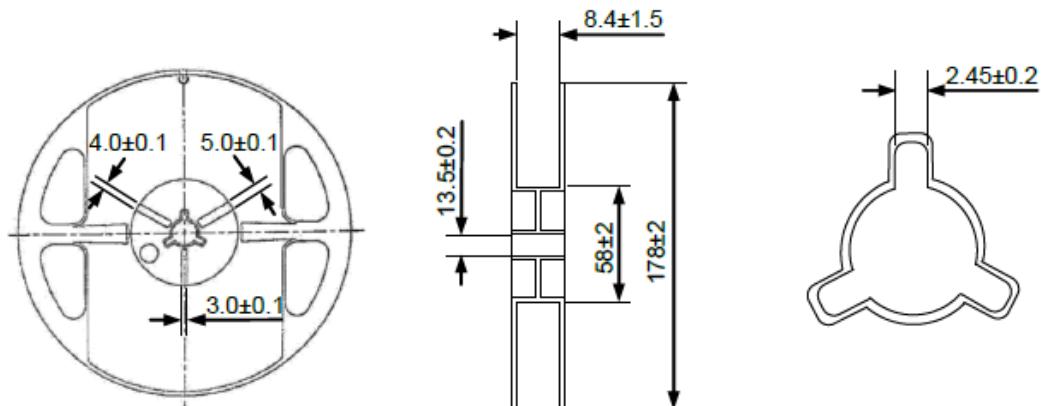
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Packaging

Tape & Reel: 3000 pcs/reel



| A | B | P | K | T |
|----------|----------|---------|----------|----------|
| 1.10±0.1 | 1.90±0.1 | 4.0±0.1 | 2.0±0.05 | 1.75±0.1 |



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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