

MINI MOLDED POWER INDUCTOR



AOTA-B252008S

Request Samples



Check Inventory



2.5 x 2.0 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	μH	%	MHz	$\text{m}\Omega$		A		A	
Symbol	L	M	SRF	DCR		Isat		Irms	
AOTA-B252008S1R0MT	1.0	20	56	39	46	4.8	4.3	3.8	3.5
AOTA-B252008S4R7MT	4.7	20	20	165	180	1.95	1.75	2.0	1.8
AOTA-B252008S100MT	10.0	20	14	507	570	1.4	1.20	1.05	0.95

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.

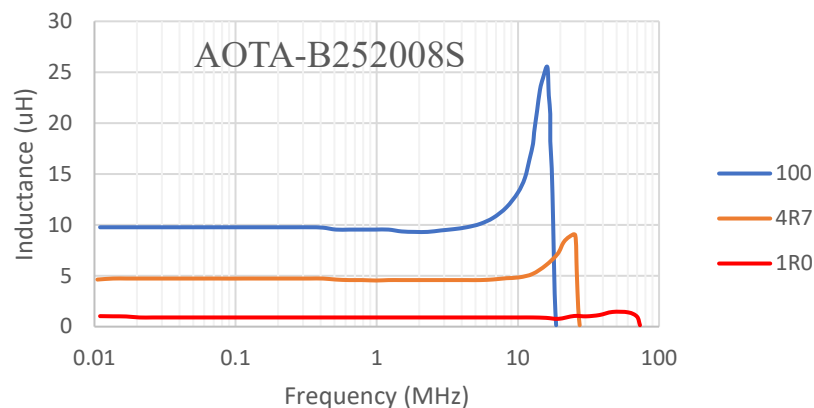
Operating Temperature: -40°C ~ +125°C (including self-temperature rise)

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

Working Voltage: 20V

AOTA-B252008S Series is **RoHS Compliant and Pb free.**

Performance Graphs



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Part Identification

AOTA-B252008S

Inductance Code

See Electrical Specification table

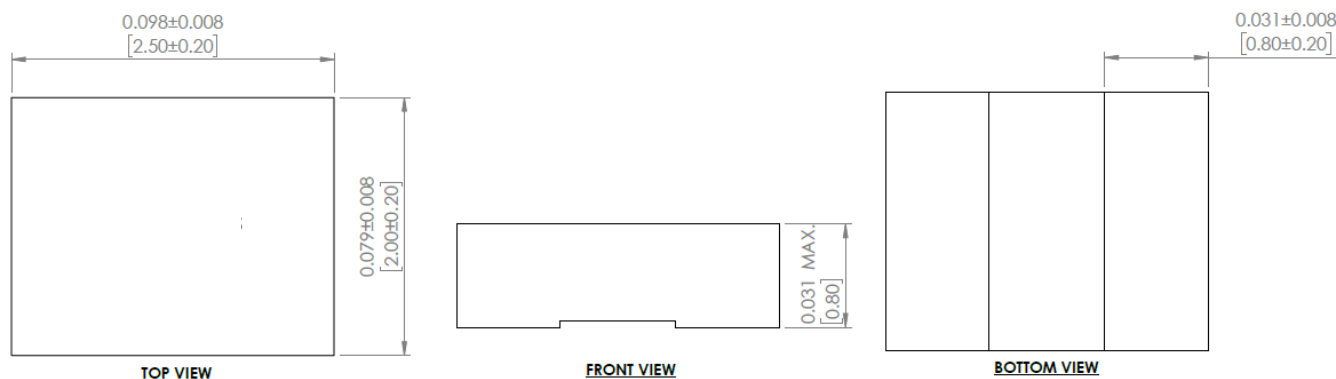
Tolerance

M = $\pm 20\%$

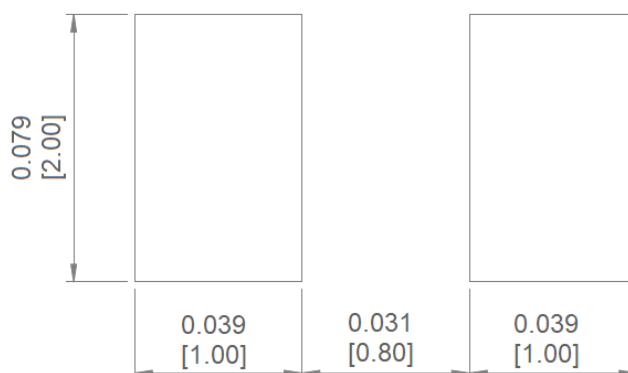
Packaging

T: Tape and Reel (See Packaging)

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

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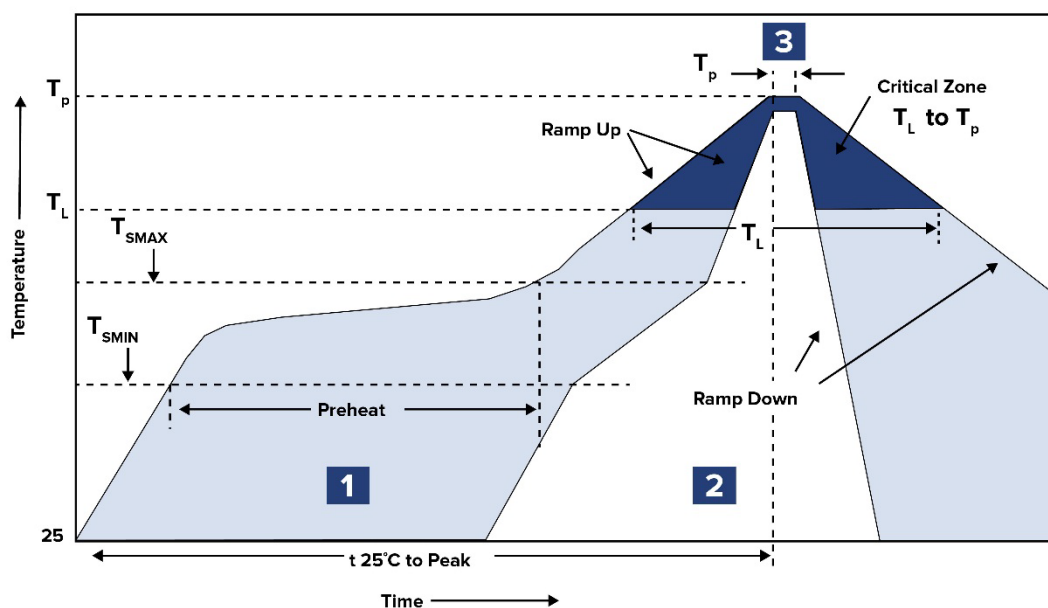


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Marking

No Marking

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°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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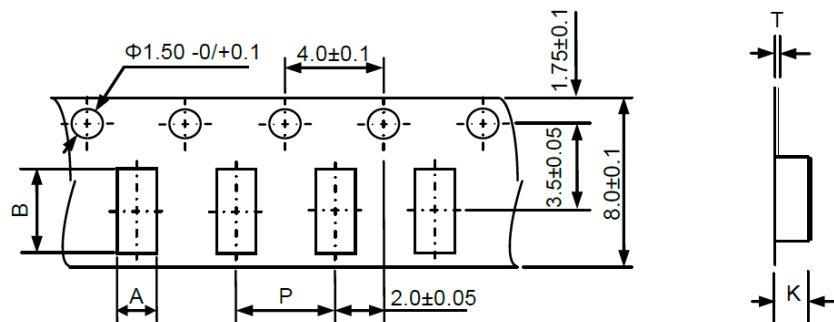
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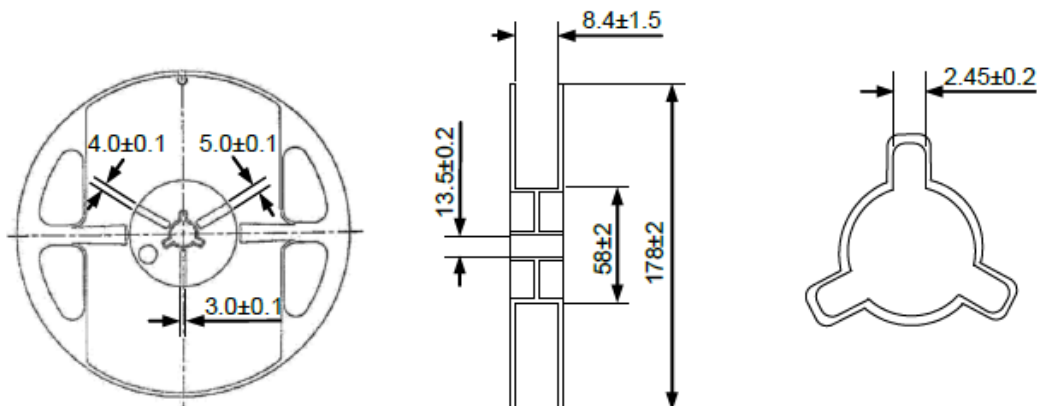
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Packaging

Tape & Reel: 3000 pcs/reel



A	B	P	K	T
2.30±0.1	2.80±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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