

AOTA-B252008S

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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 1MHz/1.0V	Tolerance	Self- Resonant Frequency Min.	_	OC tance Max	Satur Cur Typ	ration rent Max		erature urrent Max
Units	μН	%	MHz		Ω	A		A	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Symbol	L	M	SRF	DO	CR	Is	at	Iri	ms
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.

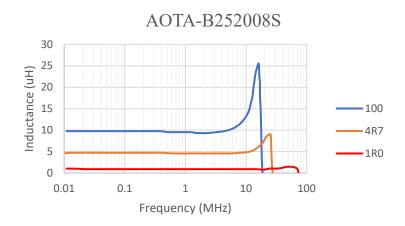
Irms: DC current that causes the temperature rise (ΔT, approximate 40 °C) from 25 °C ambient.

Operating Temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (including self-temperature rise)

Storage Condition: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (on board), $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ (with packaging) and R.H. 60 max.

AOTA-B252008S Series is RoHS Compliant and Pb free.

Performance Graphs





5101 Hidden Creek Ln, Spicewood TX 78669 Phone: 512-371-6159 Fax: 512-351-8858 For terms and conditions of sales, please visit: www.abracon.com

REVISION Initial Release: 6/30/2023

ABRACON IS ISO9001-2015 CERTIFIED



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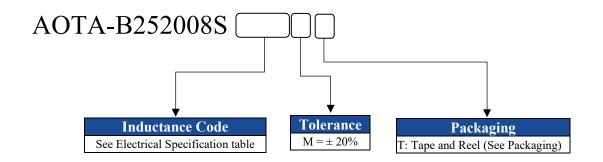


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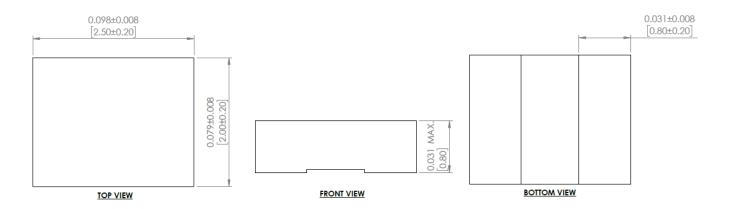


2.5 x 2.0 x 0.8 mm **RoHS/RoHS II Compliant** MSL Level = 1

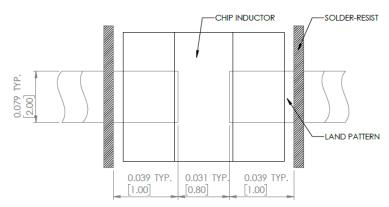
Part Identification



Mechanical Specifications



Recommended Land Pattern



Dimensions: Inch[mm]



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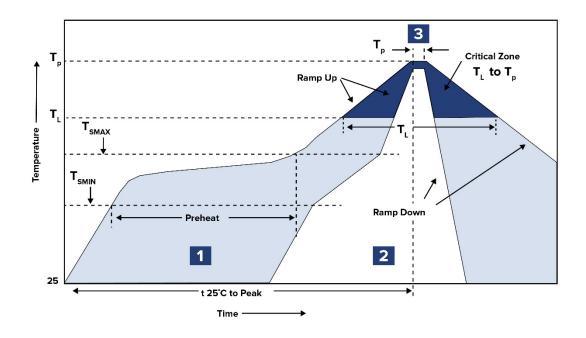


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Marking

No Marking

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$\begin{split} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 200^{\circ}C \end{split}$	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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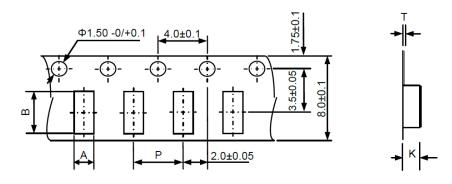
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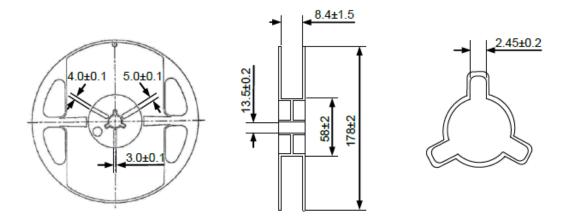
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Packaging

Tape & Reel: 3000 pcs/reel



4.5	В	P	K	T	
2.30±0.1	2.80±0.1	4.0±0.1	1.10 Max	0.3 Max	



Dimensions: mm

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