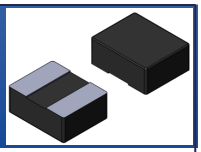
MINI MOLDED POWER INDUCTOR



AOTA-N252010S

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2.5 x 2.0 x 1.0 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.	Max	Typ	Max	Typ	Max
Units	µH	%	MHz	mΩ	A		A	
Symbol	L	M/N	SRF	DCR	Isat		Irms	
AOTA-N252010S-R10M	0.10	30	240	9.00	14.0	12.0	10.0	9.00
AOTA-N252010S-R24M	0.24	20	130	12.0	9.00	8.50	7.20	6.70
AOTA-N252010S-R33M	0.33	20	90	13.0	7.60	7.20	6.90	6.60
AOTA-N252010S-R47M	0.47	20	72	16.0	7.70	7.00	6.50	6.00
AOTA-N252010S-R68M	0.68	20	60	24.0	6.20	5.70	5.80	5.20
AOTA-N252010S-1R0M	1.00	20	45	30.0	5.50	5.00	5.50	5.00
AOTA-N252010S-1R5M	1.50	20	33	42.0	4.30	3.90	4.00	3.60
AOTA-N252010S-2R2M	2.20	20	29	60.0	3.40	3.00	3.10	2.80
AOTA-N252010S-3R3M	3.30	20	26	100	2.80	2.50	2.50	2.20
AOTA-N252010S-4R7M	4.70	20	20	136	2.60	2.10	2.30	2.00
AOTA-N252010S-6R8M	6.80	20	16	274	2.10	1.80	1.70	1.40
AOTA-N252010S-100M	10.0	20	14	450	1.60	1.40	1.45	1.25

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.
Woking Voltage: 20V
AOTA-N252010S Series is RoHS Compliant and Pb free.

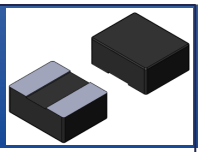
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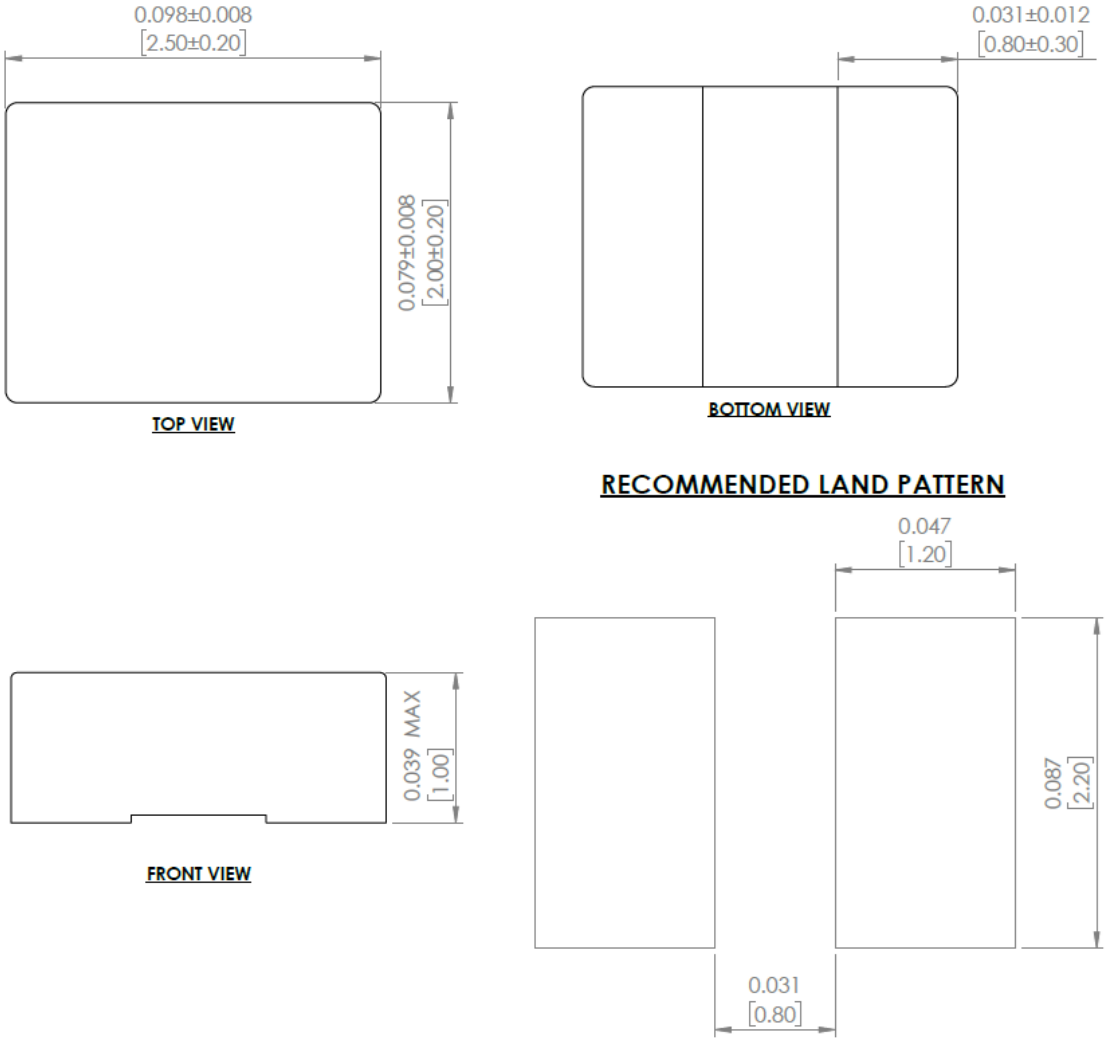
2.5 x 2.0 x 1.0 mm
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MSL Level = 1

Part Identification

AOTA-N252010S □ □ □

Inductance Code	Tolerance	Packaging
See Electrical Specification table	M = ± 20% N = ± 30%	T: Tape and Reel (See Packaging)

Mechanical Specifications



Dimensions: Inch[mm]

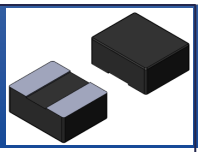
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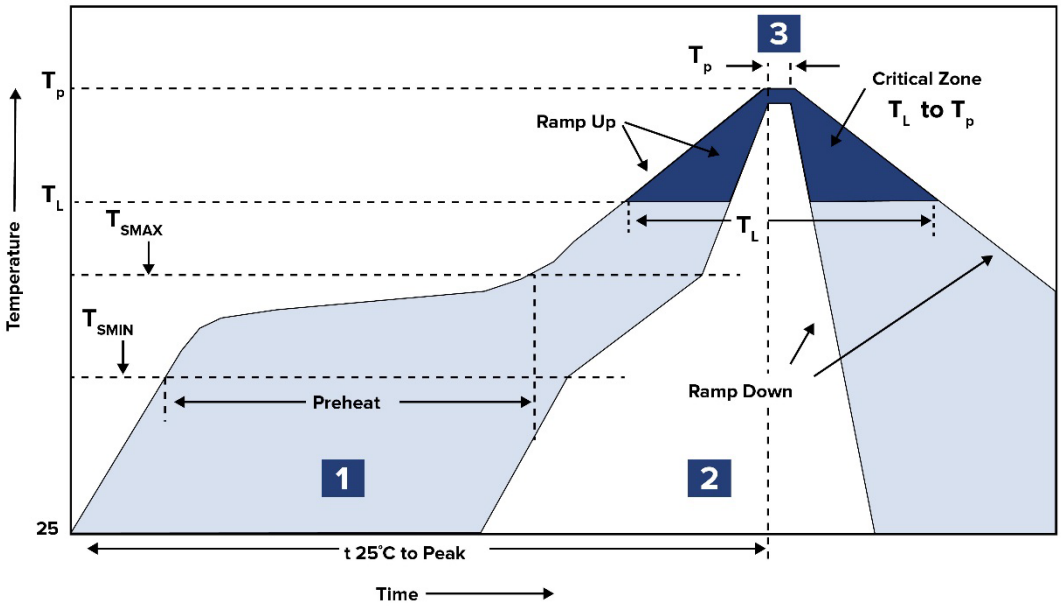
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2.5 x 2.0 x 1.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Marking

No Marking

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ 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

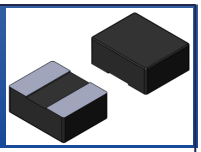
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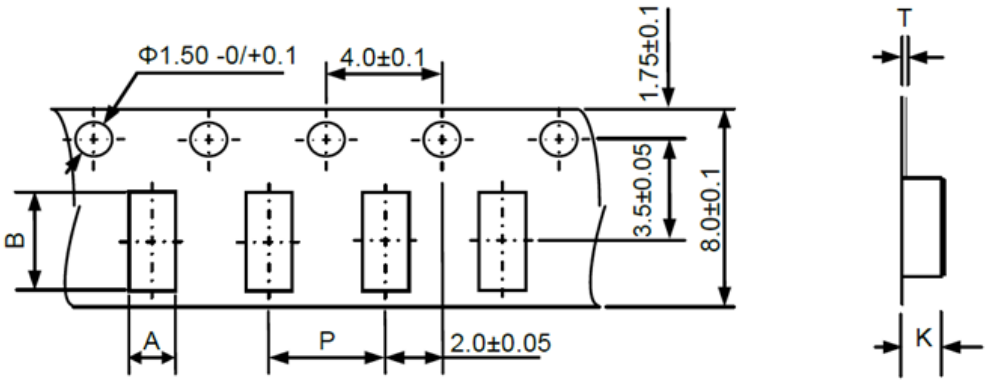
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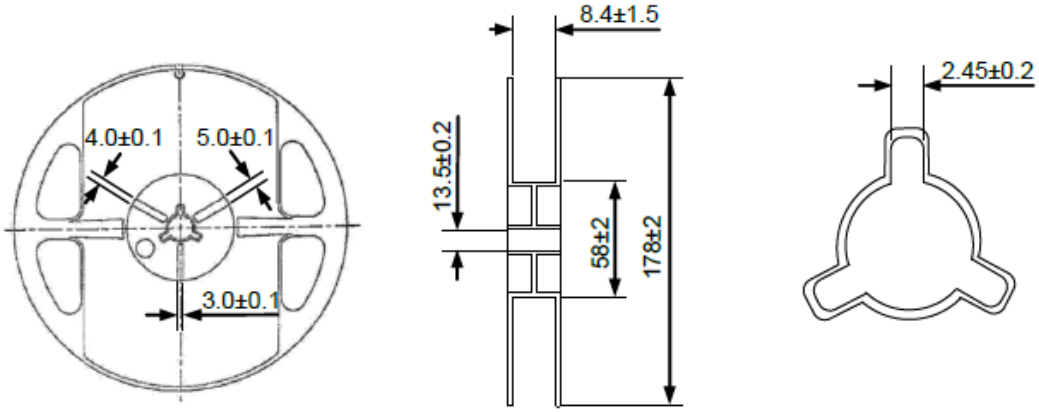
2.5 x 2.0 x 1.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

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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