

AOTA-N201210S

Request Samples



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2.0 x 1.2 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	Тур	Max	Тур	Max
Units	μН	%	MHz	mΩ	A	\		A
Symbol	L	M/N	SRF	DCR	Isa	at	I	rms
AOTA-N201210S-R11M	0.11	30	264	10.0	11.0	10.0	7.00	6.50
AOTA-N201210S-R24M	0.24	20	136	16.0	6.70	6.20	5.70	5.20
AOTA-N201210S-R33M	0.33	20	100	22.0	7.00	6.50	5.20	4.80
AOTA-N201210S-R47M	0.47	20	96	22.0	5.10	4.60	5.20	4.80
AOTA-N201210S-R56M	0.56	20	85	36.0	4.60	4.20	3.80	3.40
AOTA-N201210S-R68M	0.68	20	70	46.0	4.50	4.00	3.60	3.20
AOTA-N201210S-1R0M	1.00	20	56	51.0	4.00	3.60	3.50	3.10
AOTA-N201210S-2R2M	2.20	20	36	112	2.40	2.10	2.20	1.90
AOTA-N201210S-3R3M	3.30	20	34	280	1.80	1.50	1.60	1.30
AOTA-N201210S-4R7M	4.70	20	28	330	1.50	1.30	1.20	1.00

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.

Woking Voltage: 20V

AOTA-N201208S Series is RoHS Compliant and Pb free.





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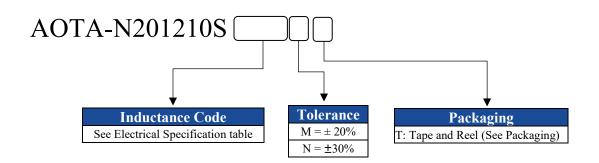


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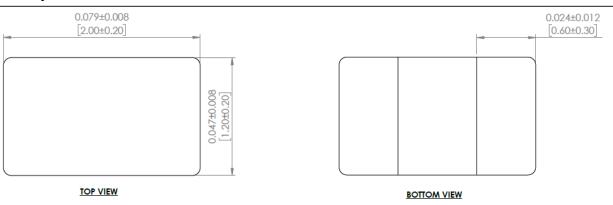


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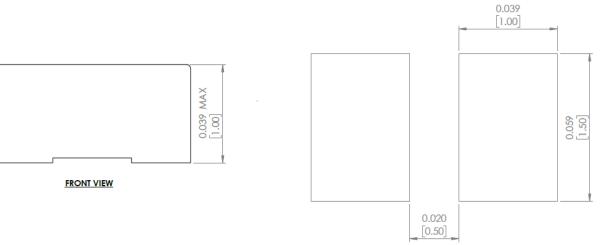
Part Identification



Mechanical Specifications



RECOMMENDED LAND PATTERN



Dimensions: Inch[mm]



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REVISION Initial Release: 8/15/2025

ABRACON IS ISO9001-2015 CERTIFIED



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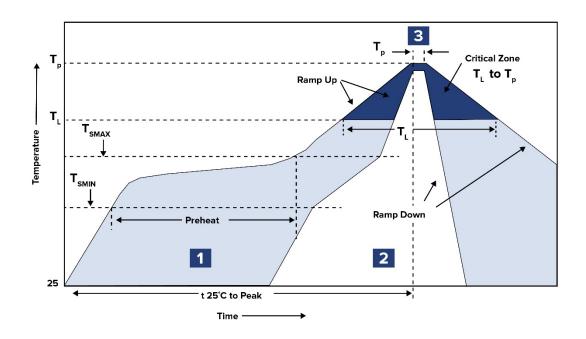


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Marking

No Marking

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$\begin{split} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 200^{\circ}C \end{split}$	$60 \sim 120 \text{ sec.}$
2	Reflow	T _L 217°C	60 ~ 90 sec.
3	Peak heat	T _P 260°C Max	10 sec. MAX





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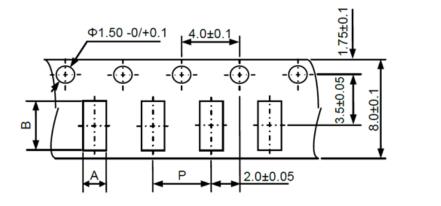
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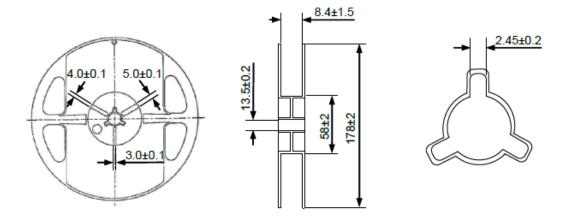
Packaging

Tape & Reel: 3000 pcs/reel





A	В	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.

