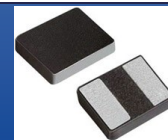


MINI MOLDED POWER INDUCTOR (3.3μH)



AOTA-B201610S3R3-101-T

2.0 x 1.6 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

- Approved for use with Raspberry Pi's RP235x range of microcontroller products.
- 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.

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	mΩ		A		A	
Symbol	L	M	SRF	DCR		Isat		Irms	
AOTA-B201610S3R3-101-T	3.3	M	21	115	140	2.8	2.4	2.3	2.1

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)

Operating Voltage: 20V

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

AOTA-B201610S3R3-101-T is RoHS Compliant and Pb free.

Part Number Identification

AOTA-B201610S3R3-101-T (no orderable options)

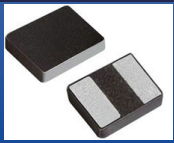


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REVISION A : 9/13/2024

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MINI MOLDED POWER INDUCTOR (3.3 μ H)

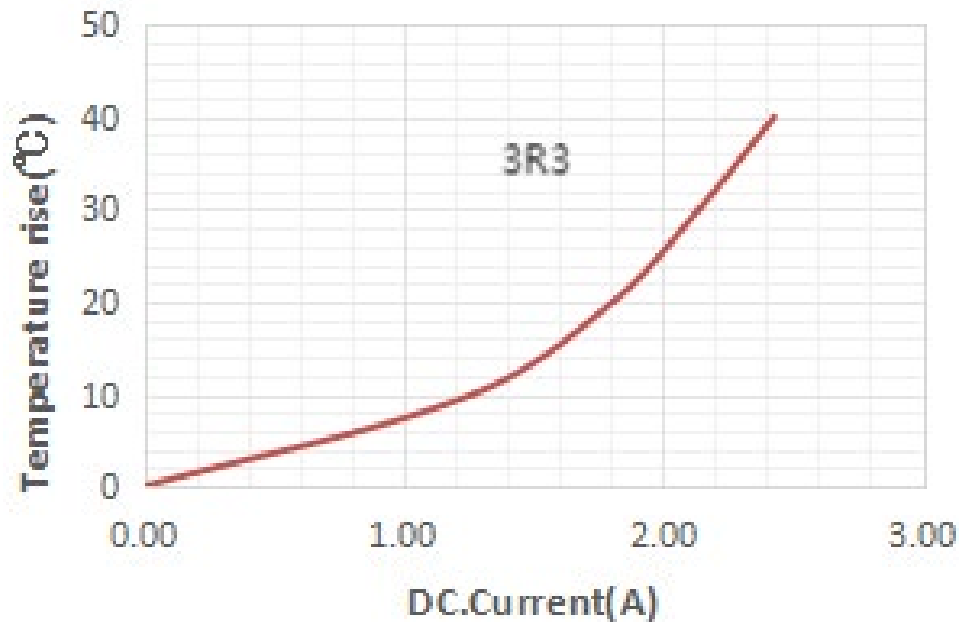


AOTA-B201610S3R3-101-T

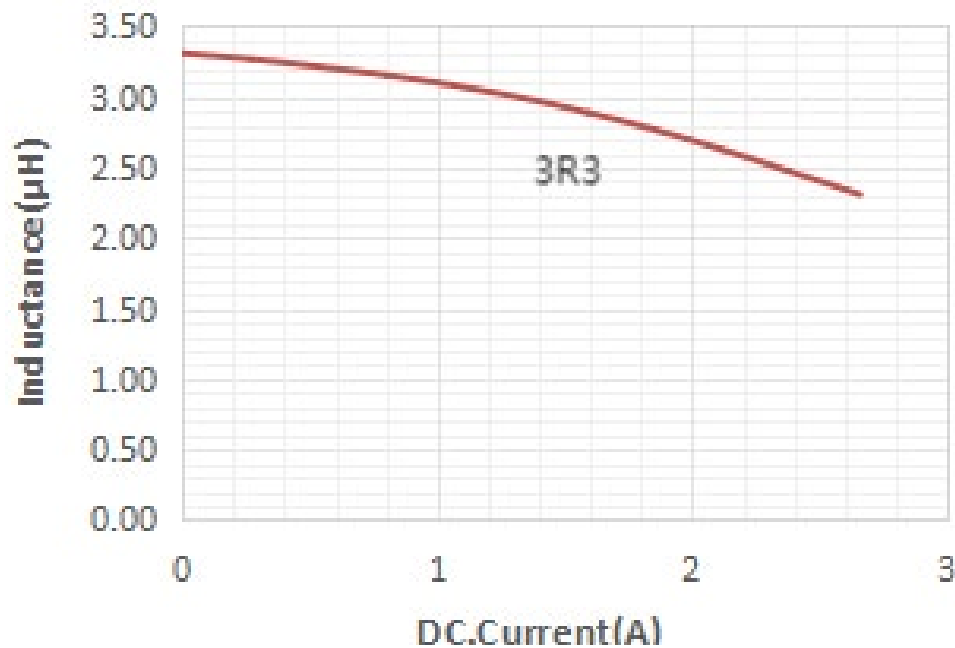
2.0 x 1.6 x 1.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Performance Graphs

Temperature Rise Current (Irms)



Saturation Current (Isat)



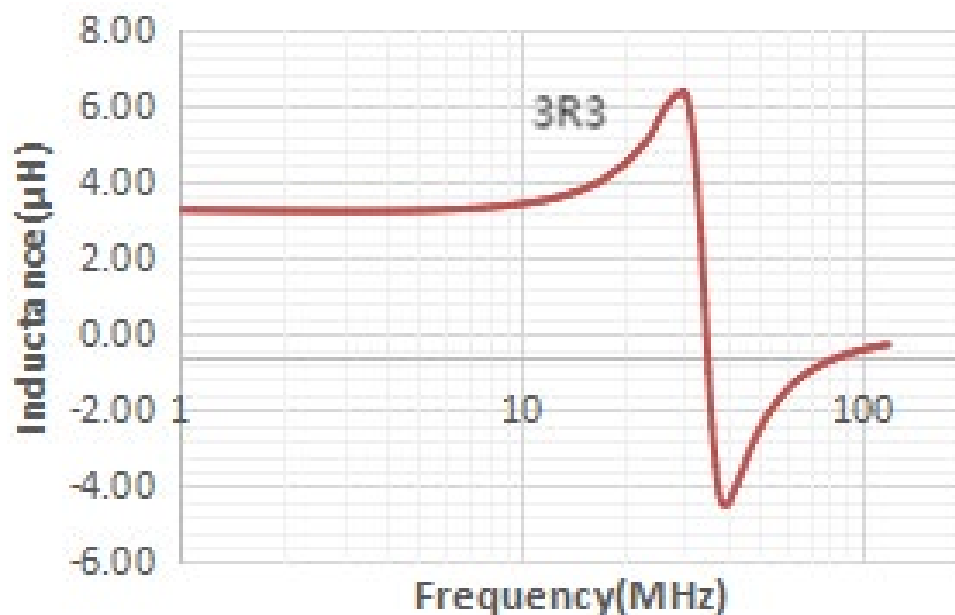
MINI MOLDED POWER INDUCTOR (3.3 μ H)



AOTA-B201610S3R3-101-T

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MSL Level = 1

Inductance vs. Frequency (SRF)



MINI MOLDED POWER INDUCTOR (3.3μH)



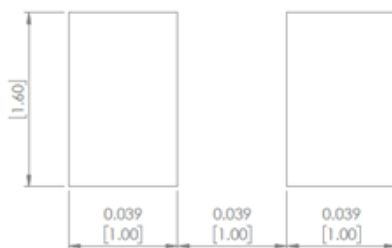
AOTA-B201610S3R3-101-T

2.0 x 1.6 x 1.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications



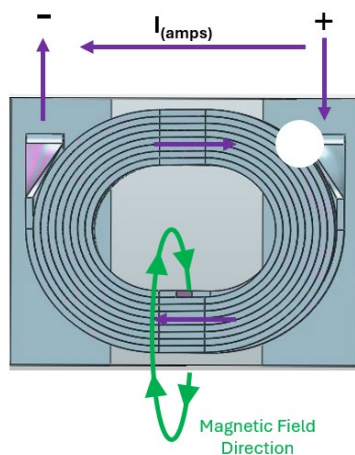
Recommended Land Pattern



Dimensions: Inch[mm]

Marking (White Ink polarity dot)

Internal structure is shown for illustration of polarity and winding direction.



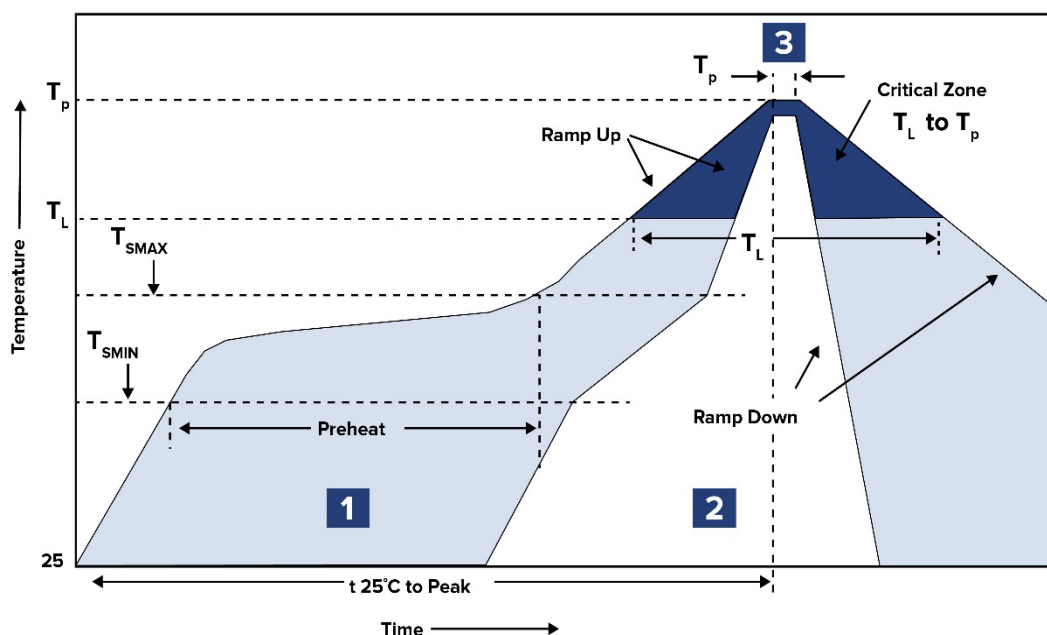
MINI MOLDED POWER INDUCTOR (3.3μH)



AOTA-B201610S3R3-101-T

2.0 x 1.6 x 1.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

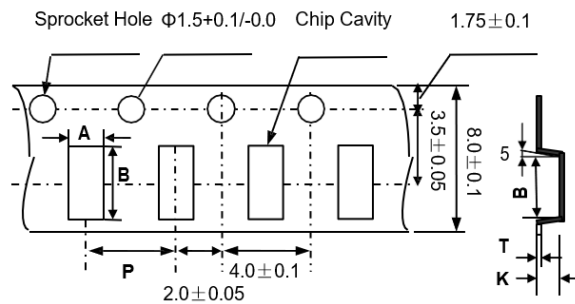
Reflow Profile



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

2.0 x 1.6 x 1.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Tape & Reel: 3000 pcs/reel



A	B	P	K	T
1.90±0.1	2.30±0.1	4.0±0.1	1.30 Max	0.3 Max



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