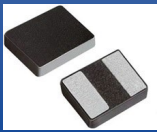


# MINI MOLDED POWER INDUCTOR



AOTA-B141206S

Request Samples



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1.4 x 1.2 x 0.6 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Features

- Shielded construction for minimized EMI.
- Low DCR (as low as 28mΩ) for better efficiency
- High current up to 5.7A handling capability
- Compact size that is suitable for high-density designs
- Excellent for high-frequency switching applications due to SRF over 115MHz.

## 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	mΩ		A		A	
Symbol	L	M	SRF	DCR		Isat		Irms	
AOTA-B141206SR33MT	0.33	20%	120	28	32	5.7	5.4	3.7	3.5
AOTA-B141206SR47MT	0.47	20%	115	36	41	3.3	3.0	3.2	2.9

## Test Conditions

**Isat:** DC current at which the inductance drops 30% from its nominal value.

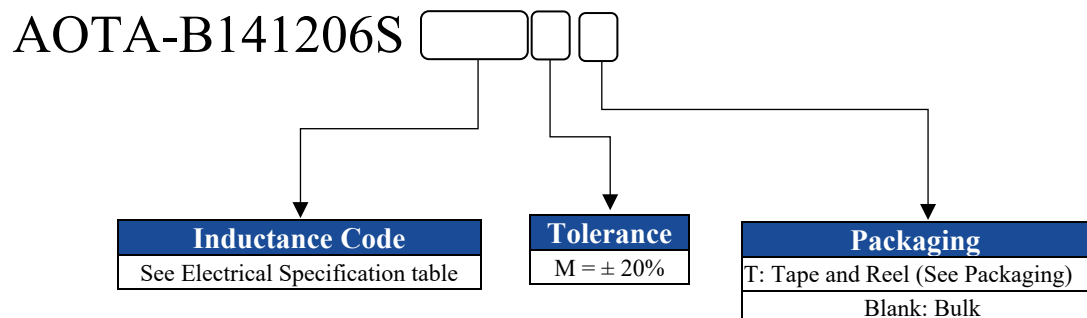
**Irms:** DC current that causes the temperature rise ( $\Delta T$ , approximate 40 °C) from 25°C ambient.

**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.

AOTA-B141206S Series is **RoHS Compliant and Pb free.**

## Part Identification



# MINI MOLDED POWER INDUCTOR



AOTA-B141206S

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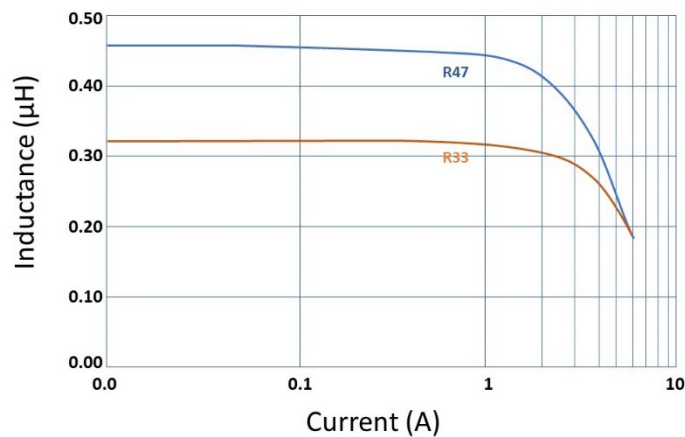
Check Inventory



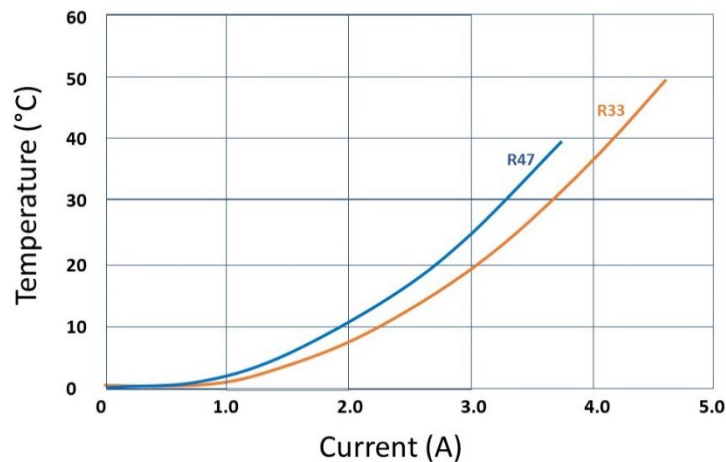
1.4 x 1.2 x 0.6 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Performance Graphs

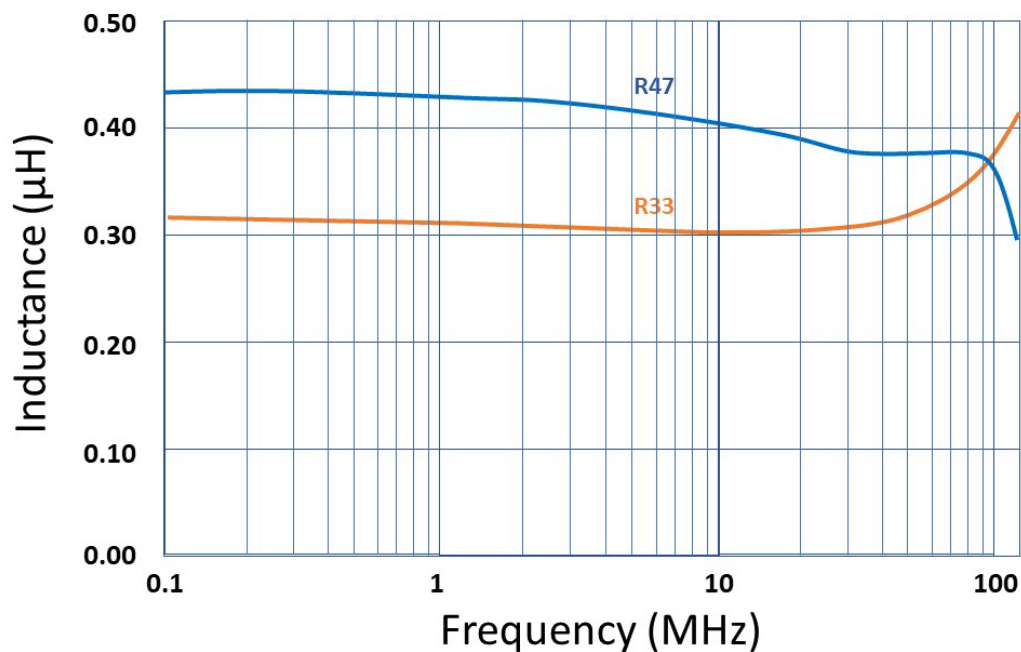
### Saturation Current



### Temperature Rise Current



### Inductance vs. Frequency



# MINI MOLDED POWER INDUCTOR



AOTA-B141206S

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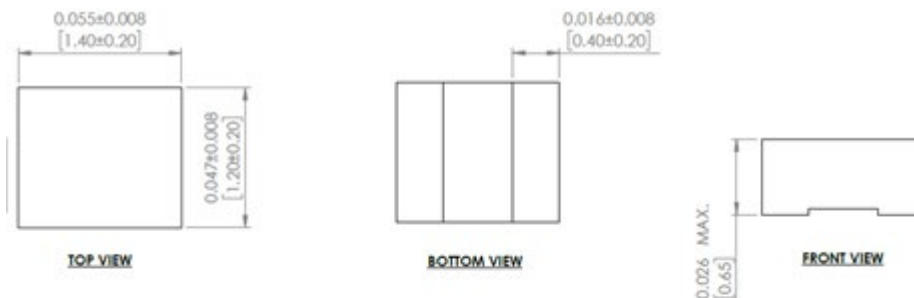


Check Inventory

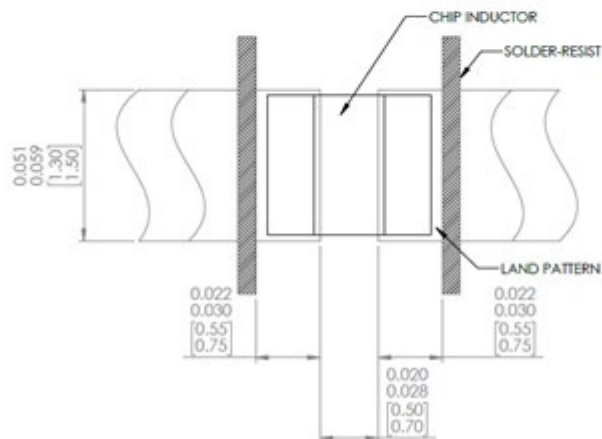


1.4 x 1.2 x 0.6 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Mechanical Specifications



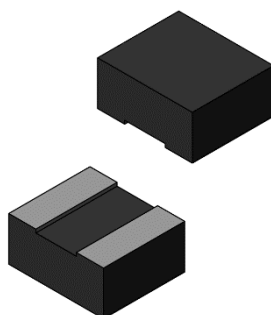
## Recommended Land Pattern



Dimensions: [mm] inches

## Marking

No Marking



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# MINI MOLDED POWER INDUCTOR



AOTA-B141206S

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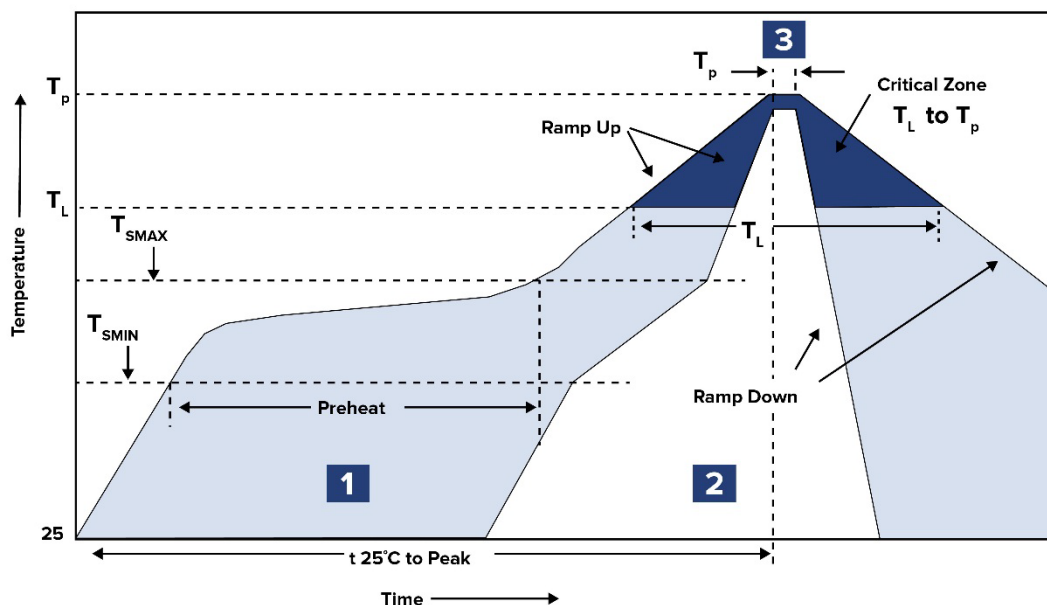


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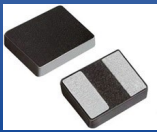
1.4 x 1.2 x 0.6 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## 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

# MINI MOLDED POWER INDUCTOR



AOTA-B141206S

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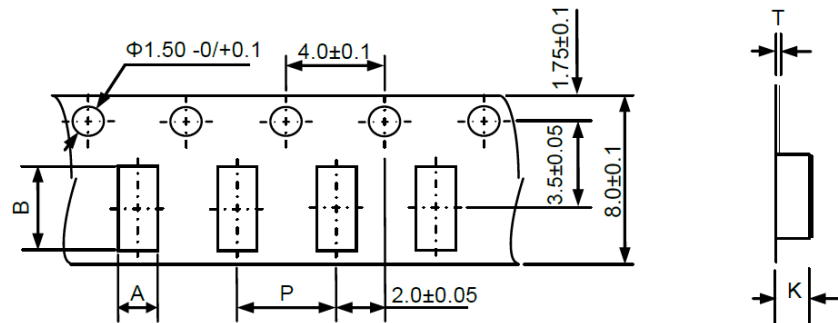
Check Inventory



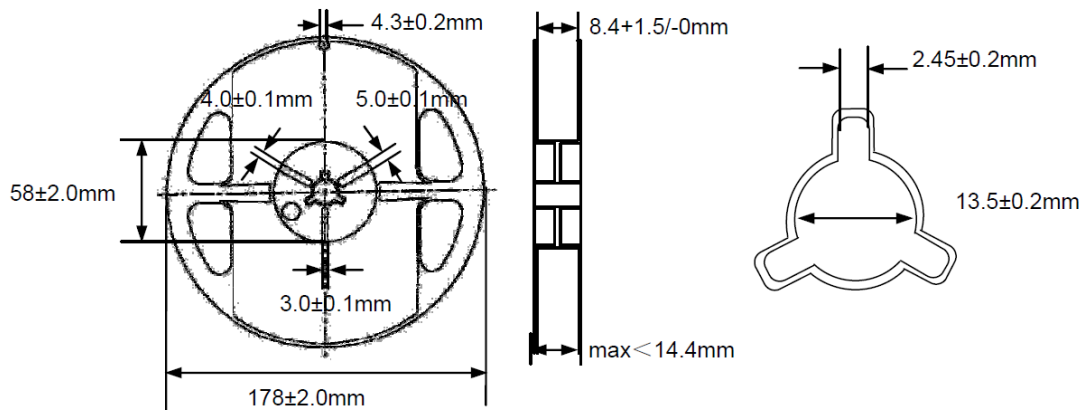
1.4 x 1.2 x 0.6 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Packaging

Tape & Reel: 3000 pcs/reel



A	B	P	K	T
$1.50 \pm 0.1$	$1.70 \pm 0.1$	$4.0 \pm 0.1$	1.0 Max	0.3 Max



Dimensions: mm

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