# **MINI MOLDED POWER INDUCTOR**

Request Samples 🕥

Check Inventory

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

CERTIFIED

#### Features

- Shielded construction for minimized EMI.
- Low DCR (as low as  $32 \text{ m}\Omega$ ) for better efficiency

**AOTA-B201206S** 

- High current up to 4.8A handling capability
- Compact size that is suitable for high-density designs
- Excellent for high-frequency switching applications due to SRF of 50MHz or above.

### 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

Part Number	Inductance 1MHz/1.0V	Tolerance	Self- Resonant Frequency Min.	DC Res Typ	sistance Max		ation rent Max	Tempe Rise C Typ	
Units	μH	%	MHz	mΩ		A		A	
Symbol	L	Μ	SRF	DCR		Isat		Irms	
AOTA-B201206SR47MT	0.47	20%	96	32	34	4.8	4.5	4.3	4.0
AOTA-B201206S1R0MT	1.0	20%	53	78	86	2.7	2.5	2.7	2.4
AOTA-B201206S2R2MT	2.2	20%	50	173	200	1.8	1.6	1.8	1.5

### **Electrical Specifications**

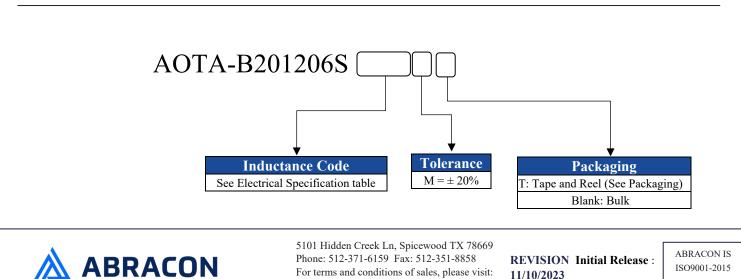
#### **Test Conditions**

**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.

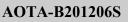
**Operating Temperature:** -40°C ~ +125°C (including self-temperature rise) **Storage Condition:** -40°C ~ +125°C (on board), -10°C ~ +40°C (with packaging) and R.H. 60 max. **AOTA-B201206S Series is RoHS Compliant and Pb free.** 

#### **Part Identification**



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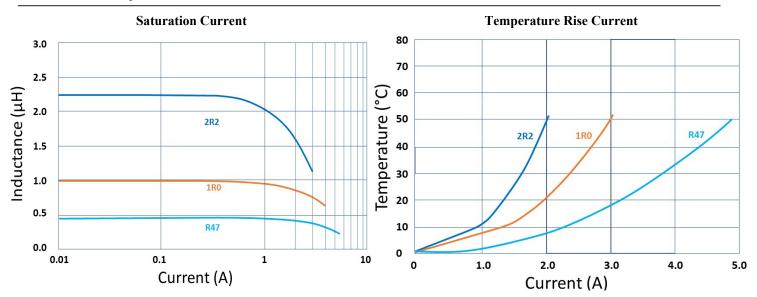


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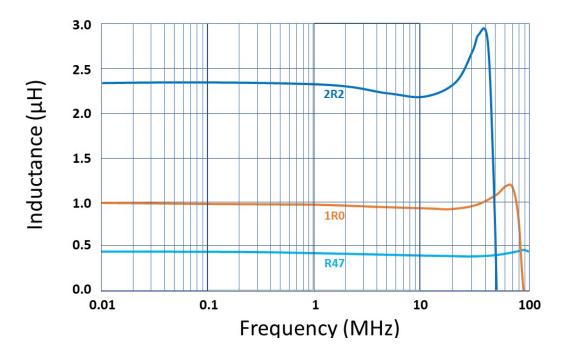
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#### **Performance Graphs**



### **Inductance Vs. Frequency**



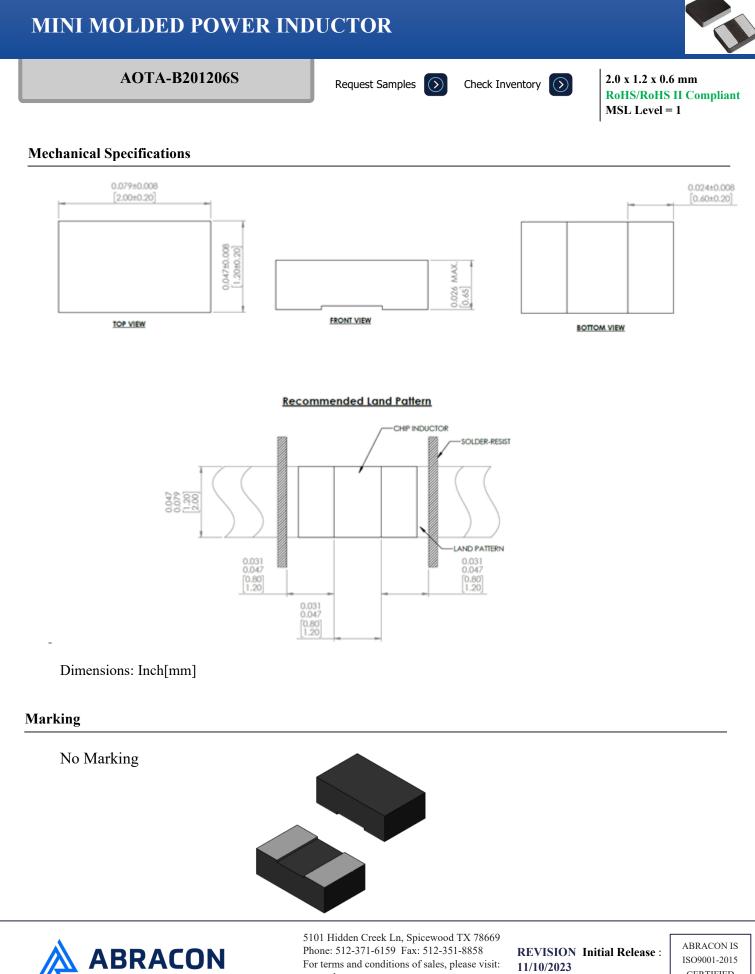


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**REVISION Initial Release :** 11/10/2023

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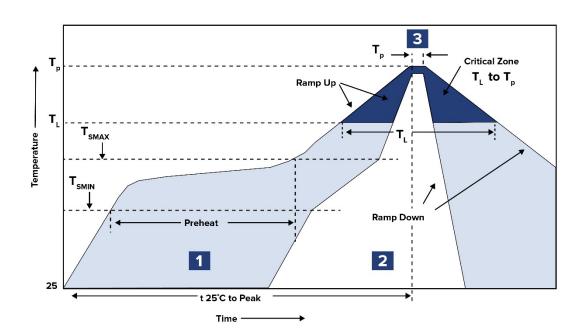
## AOTA-B201206S

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**Reflow Profile** 



Zone	Description	Temperature	Times
1	Preheat	$\begin{array}{l} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 200^{\circ}C \end{array}$	60 ~ 120 sec.
2	Reflow	T⊥ ≥217°C	$60 \sim 90$ sec.
3	Peak heat	T <sub>P</sub> 260°C Max	10 sec. MAX

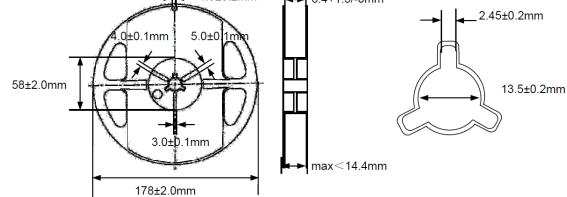


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### **MINI MOLDED POWER INDUCTOR AOTA-B201206S** 2.0 x 1.2 x 0.6 mm Check Inventory Request Samples () **RoHS/RoHS II Compliant** MSL Level = 1 Packaging Tape & Reel: 3000 pcs/reel 75±0. Ф1.50 -0/+0.1 4.0±0. 5±0.05 m P 0±0.05 B Р K Т A $1.50\pm0.1$ $2.30{\pm}0.1$ $4.0\pm0.1$ 1.0 Max 0.3 Max - 4.3±0.2mm 8.4+1.5/-0mm



Dimensions: mm

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