# **MINI MOLDED POWER INDUCTOR**

Request Samples  $(\mathbf{b})$  Check Inventory  $\left( \right)$  2.0 x 1.6 x 0.8 mm **RoHS/RoHS II Compliant** MSL Level = 1

### Features

Shielded construction for minimized EMI emissions.

**AOTA-B201608S** 

- Low DCR for better efficiency
- High current handling capability •
- Combat 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 converters, inverters, and voltage regulators
- Industrial applications, robotics, signal conditioning, instrumentation, and control systems
- IoT devices, smart home, automation systems, wireless sensing

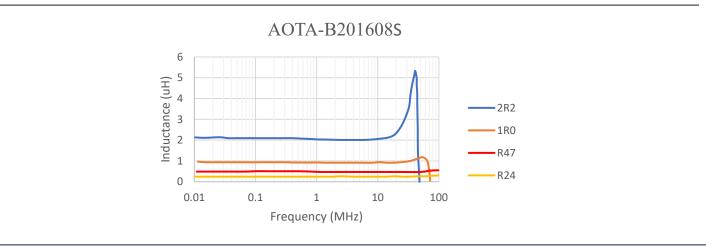
Part Number	Inductance	Tolerance	Self- Resonant Frequency	DC Resistance		Saturation Current		Temperature Rise Current	
	1MHz/1.0V		Min.	Тур.	Max	Тур.	Max	Typ.	Max
Units	μH	%	MHz	m	Ω	ŀ	1	A	7
Symbol	L	Μ	SRF	DC	C <b>R</b>	Is	at	Irr	ns
AOTA-B201608SR24MT	0.24	20	120	18	22	8.2	7.5	6.2	5.5
AOTA-B201608SR47MT	0.47	20	104	21	24	5.5	5.0	4.1	3.6
AOTA-B201608S1R0MT	1.0	20	57	45	52	4.5	4.1	4.2	3.7
AOTA-B201608S2R2MT	2.2	20	40	134	148	2.6	2.3	2.0	1.8

**Electrical Specifications** 

### **Test Conditions**

Isat: DC current at which the inductance drops 30% from its value without current. **Irms:** DC current that causes the temperature rise ( $\Delta T$ , approximate 40 °C) from 25°C ambient **Operating Temperature:**  $-40^{\circ}C \sim +125^{\circ}C$  (including self-temperature rise) Storage Condition:  $-40^{\circ}C \sim +125^{\circ}C$  (on board),  $-10^{\circ}C \sim +40^{\circ}C$  (with packaging) and R.H. 60 max **AOTA-B201608S Series is RoHS Compliant and Pb free** 

### **Performance Graphs**





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**REVISION** Initial Release : 6/30/2023

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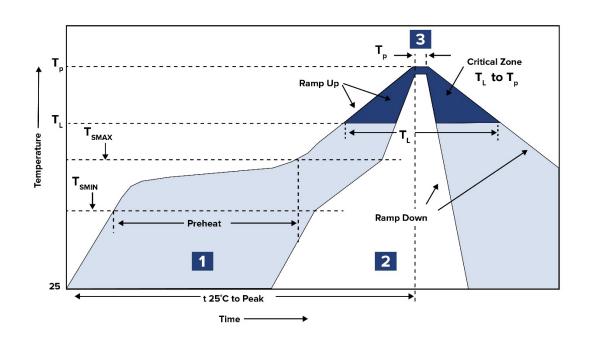
## **MINI MOLDED POWER INDUCTOR AOTA-B201608S** 2.0 x 1.6 x 0.8 mm Request Samples 🕥 Check Inventory **RoHS/RoHS II Compliant** MSL Level = 1 **Part Identification** AOTA-B201608S Tolerance **Inductance Code** Packaging $M=\pm~20\%$ See Electrical Specification table T: Tape and Reel (See Packaging) **Mechanical Specifications** 0.024±0.008 0.079±0.008 0.60±0.20 2.00±0.20 0.063±0.008 [1.60±0.20] MAX. 0.031 FRONT VIEW BOTTOM VIEW TOP VIEW Recommended Land Pattern CHIP INDUCTOR SOLDER-RESIST L L 0.063 9 LAND PATTERN 0.031 TYP. 0.031 TYP. 0.028 TYP. [0.80] [0.70] [0.80] Dimensions: Inch[mm] 5101 Hidden Creek Ln, Spicewood TX 78669 ABRACON IS **ABRACON** Phone: 512-371-6159 Fax: 512-351-8858 **REVISION** Initial Release : ISO9001-2015 For terms and conditions of sales, please visit: 6/30/2023 CERTIFIED

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# AOTA-B201608S Request Samples Image: Check Inventory 2.0 x 1.6 x 0.8 mm Marking Marking

**Reflow Profile** 

No Marking



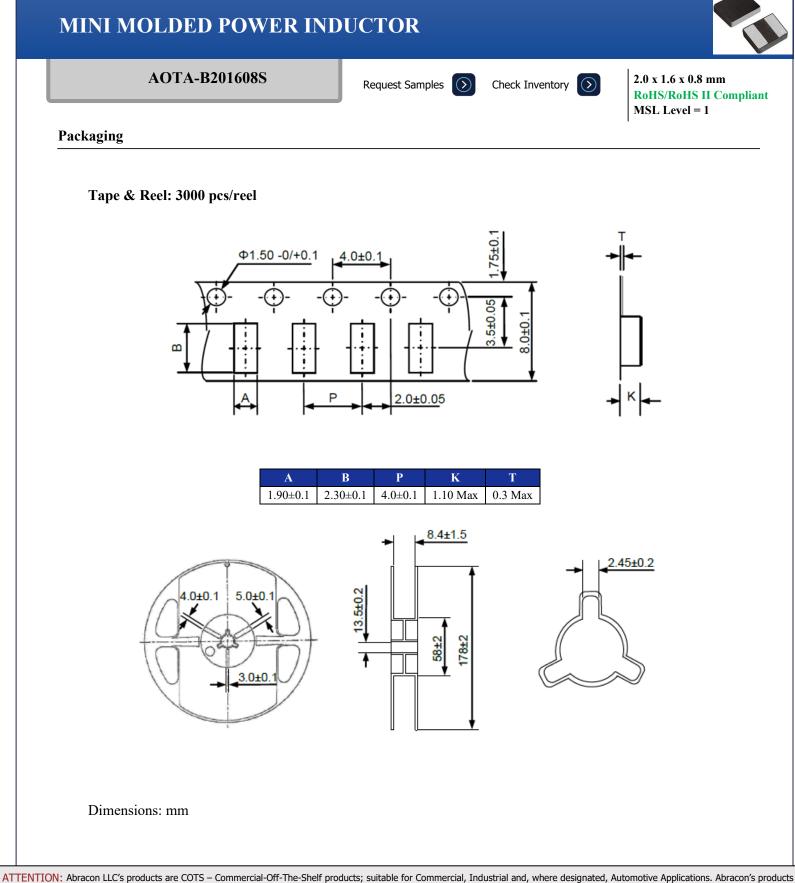
Zone	Description	Temperature	Times
1	Preheat	$\begin{array}{l} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 200^{\circ}C \end{array}$	$60 \sim 120$ sec.
2	Reflow	Т <sub>L</sub> 217°С	$60 \sim 90$ sec.
3	Peak heat	T <sub>P</sub> 260°C Max	10 sec. MAX



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