

#### AOTA-B160808S

Request Samples



Check Inventory (>)



1.6 x 0.8 x 0.8 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 1MHz/1.0V	Tolerance	Self- Resonant Frequency Min.	DC Resi	stance Max	Satur Curi Typ			erature urrent Max
Units	μH	%	MHz	m	2	A		A	1
Symbol	L	M	SRF	DC	R	Isa	at	Irı	ms
AOTA-B160808SR47MT	0.47	20	100	38	43	3.6	3.3	3.3	3.0
AOTA-B160808S1R0MT	1.0	20	60	95	110	2.3	2.1	2.0	1.8
AOTA-B160808S2R2MT	2.2	20	40	240	290	1.3	1.2	1.1	1.0

#### **Test Conditions**

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

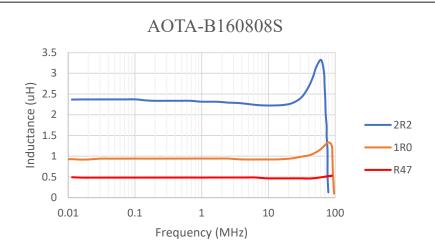
Irms: DC current that causes the temperature rise (ΔT, approximate 40 °C) from 25°C ambient.

**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.

AOTA-B160808S Series is RoHS Compliant and Pb free.

## **Performance Graphs**





5101 Hidden Creek Ln, Spicewood TX 78669 Phone: 512-371-6159 Fax: 512-351-8858 For terms and conditions of sales, please visit: www.abracon.com

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

ABRACON IS ISO9001-2015 CERTIFIED



#### **AOTA-B160808S**

Request Samples (>)

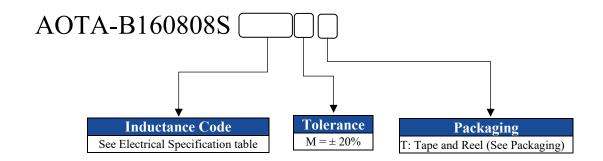


Check Inventory (>)

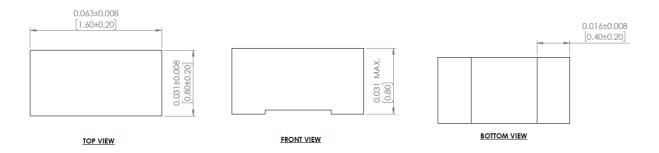


1.6 x 0.8 x 0.8 mm **RoHS/RoHS II Compliant** MSL Level = 1

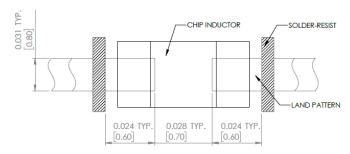
#### **Part Identification**



## **Mechanical Specifications**



#### **Recommended Land Pattern**



Dimensions: Inch[mm]

## Marking

No Marking



5101 Hidden Creek Ln, Spicewood TX 78669 Phone: 512-371-6159 Fax: 512-351-8858 For terms and conditions of sales, please visit: www.abracon.com

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

ABRACON IS ISO9001-2015 CERTIFIED



**AOTA-B160808S** 

Request Samples (>)

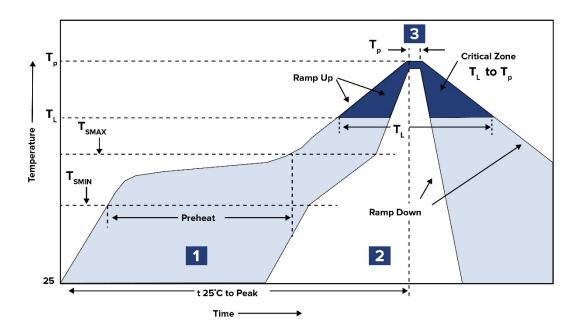


Check Inventory (>)



1.6 x 0.8 x 0.8 mm RoHS/RoHS II Compliant MSL Level = 1

#### **Reflow Profile**



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





#### **AOTA-B160808S**

Request Samples



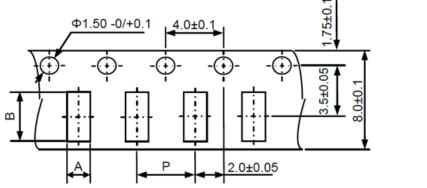
Check Inventory (>)



1.6 x 0.8 x 0.8 mm **RoHS/RoHS II Compliant** MSL Level = 1

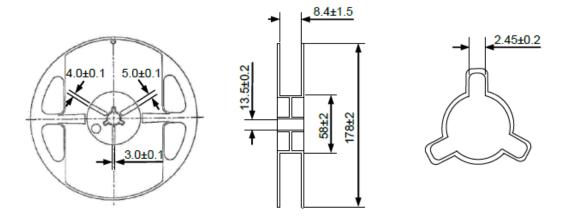
## **Packaging**

Tape & Reel: 3000 pcs/reel



_ <b>→</b>				
+	к -			

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 COTS - Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.

