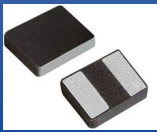


# MINI MOLDED POWER INDUCTOR



**AOTA-B141208S**

Request Samples



Check Inventory



1.4 x 1.2 x 0.8 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Features

- Shielded construction for minimized EMI.
- Low DCR (as low as 20mΩ) for better efficiency
- High current up to 7.0A handling capability.
- Compact size that is suitable for high-density designs
- Excellent high-frequency switching applications due to SRF up to 135MHz.

## 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-B141208SR24MT	0.24	20%	135	20	24	7.0	6.5	5.3	4.9
AOTA-B141208SR33MT	0.33	20%	130	23	27	5.6	5.2	4.2	4.0
AOTA-B141208SR47MT	0.47	20%	110	28	32	4.2	4.0	3.6	3.2

## 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.

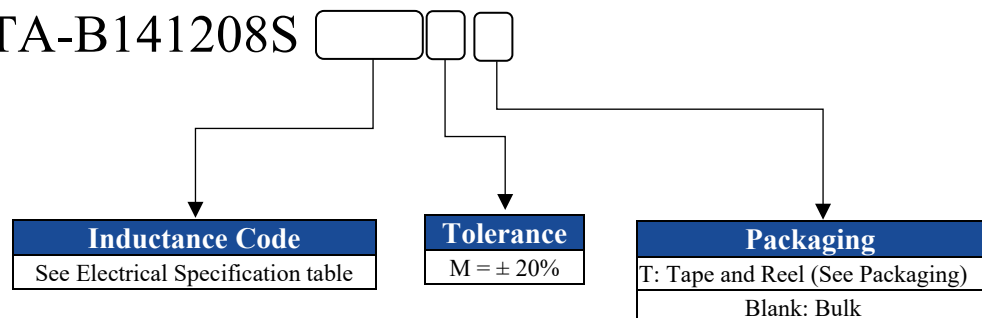
**Operating Temperature:** -40°C ~ +125°C (including self-temperature rise)

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

AOTA-B141208S Series is **RoHS Compliant and Pb free.**

## Part Identification

AOTA-B141208S

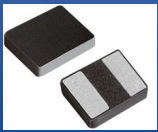


5101 Hidden Creek Ln, Spicewood TX 78669  
 Phone: 512-371-6159 Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

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

ABRACON IS  
 ISO9001-2015  
 CERTIFIED

# MINI MOLDED POWER INDUCTOR



**AOTA-B141208S**

Request Samples



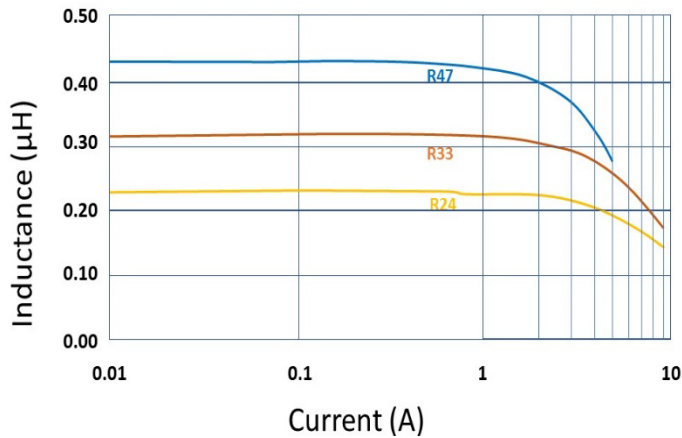
Check Inventory



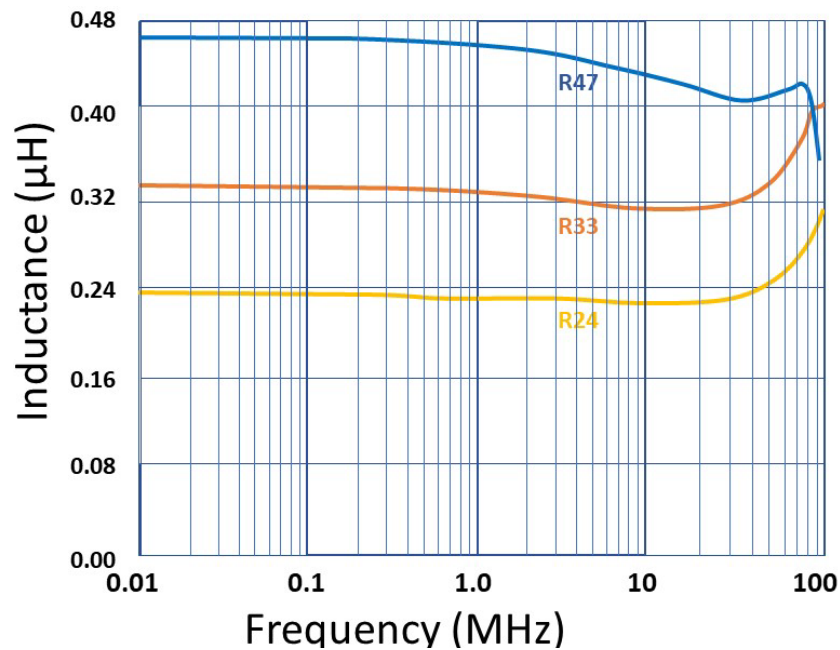
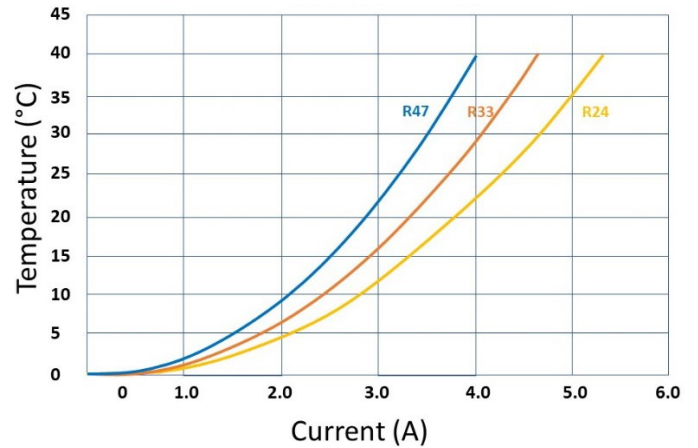
1.4 x 1.2 x 0.8 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Performance Graphs

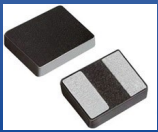
**Saturation Current**



**Temperature Rise Current**



# MINI MOLDED POWER INDUCTOR



AOTA-B141208S

Request Samples

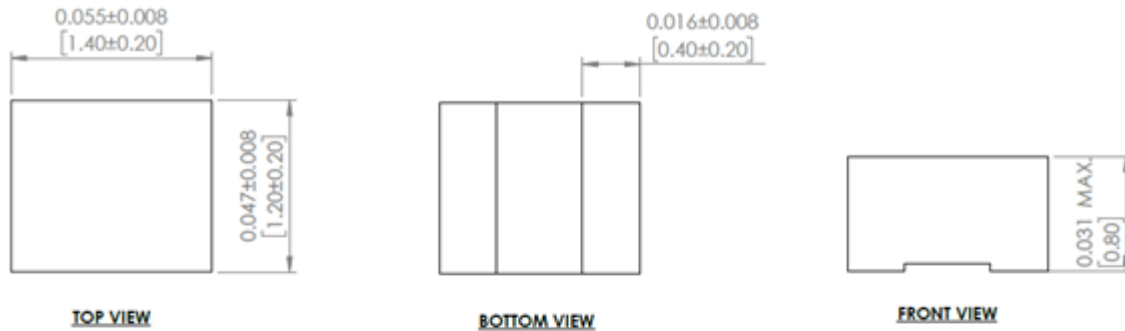


Check Inventory

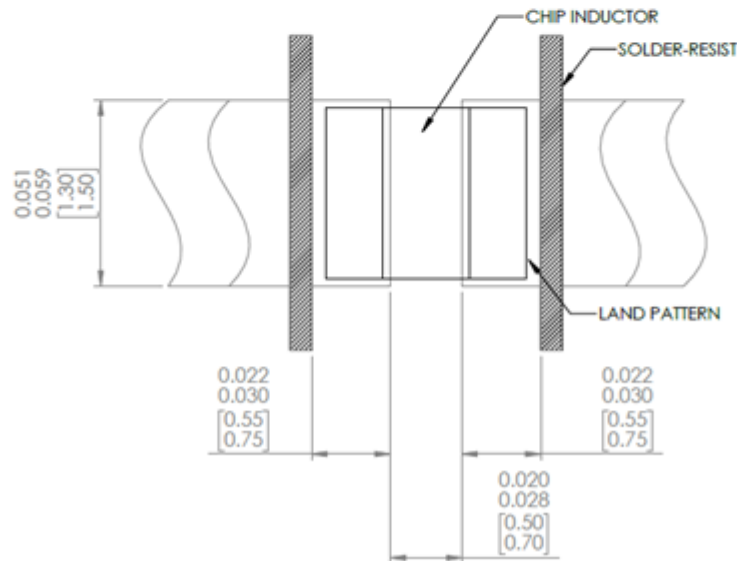


1.4 x 1.2 x 0.8 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Mechanical Specifications



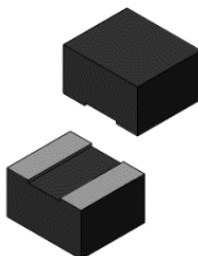
## Recommended Land Pattern



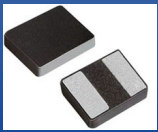
Dimensions: Inch[mm]

## Marking

No Marking



# MINI MOLDED POWER INDUCTOR



AOTA-B141208S

Request Samples

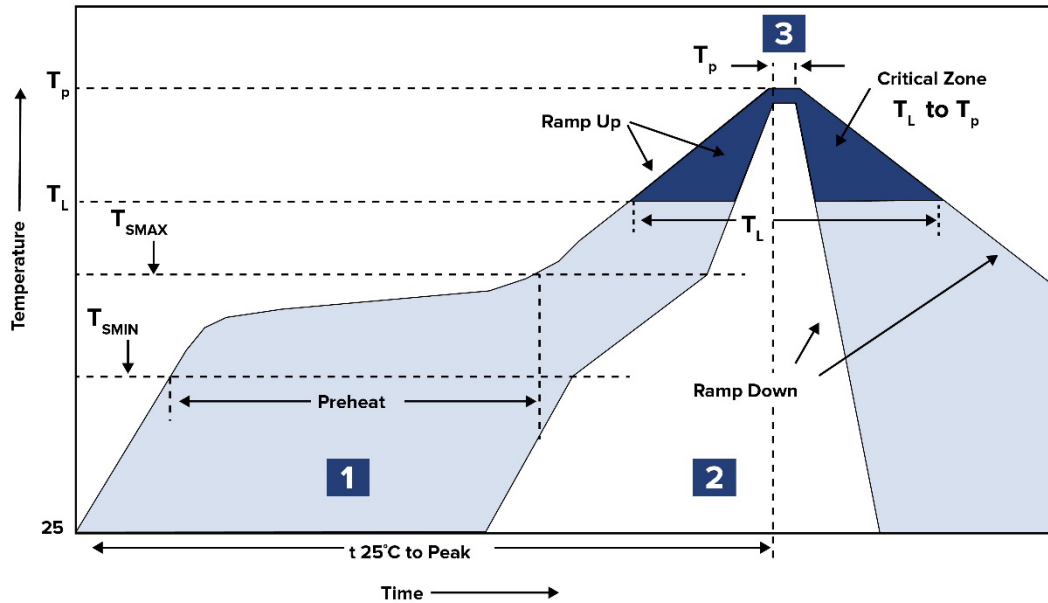


Check Inventory



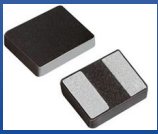
1.4 x 1.2 x 0.8 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	$T_L$ $\geq 217^\circ\text{C}$	60 ~ 90 sec.
3	Peak heat	$T_P$ 260°C Max	10 sec. MAX

# MINI MOLDED POWER INDUCTOR



**AOTA-B141208S**

Request Samples



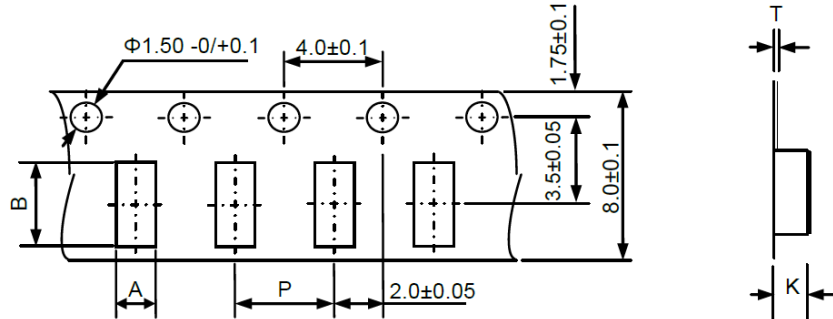
Check Inventory



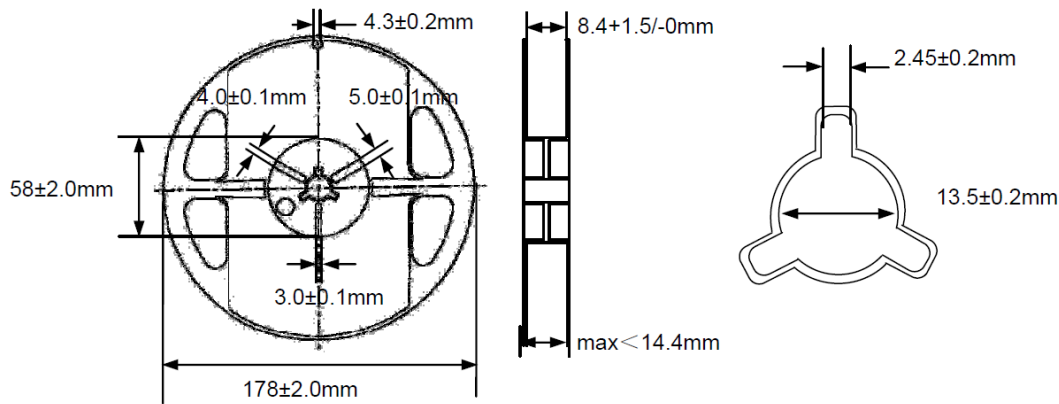
**1.4 x 1.2 x 0.8 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Packaging

**Tape & Reel: 3000 pcs/reel**



A	B	P	K	T
1.50±0.1	1.70±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.



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](http://www.abracon.com)

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

ABRACON IS  
 ISO9001-2015  
 CERTIFIED