

AOTA-B201610S

Request Samples



Check Inventory (>)



2.0 x 1.6 x 1.0 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	Tolerance	Self- Resonant Frequency	DC Resistance		Saturation Current		Temperature Rise Current	
	1MHz/1.0V		Min.	Тур	Max	Тур	Max	Тур	Max
Units	μН	%	MHz	m	Ω	A	_	A	1
Symbol	${f L}$	M	SRF	DO	CR	Isa	at	Irı	ns
AOTA-B201610SR24MT	0.24	M	120	11	15	7.80	7.00	5.60	5.00
AOTA-B201610SR33MT	0.33	M	110	18	21	7.60	6.80	5.30	4.80
AOTA-B201610SR47MT	0.47	M	72	18	21	6.20	5.60	5.50	4.80
AOTA-B201610SR68MT	0.68	M	68	30	35	5.40	4.80	3.90	3.50
AOTA-B201610S1R0MT	1.00	M	60	34	37	4.50	4.20	4.50	4.20
AOTA-B201610S1R5MT	1.50	M	40	64	74	3.50	3.20	3.20	2.80
AOTA-B201610S2R2MT	2.20	M	30	66	74	2.90	2.60	2.30	2.00
AOTA-B201610S4R7MT	4.70	M	26	213	235	1.90	1.60	1.50	1.30

Test Conditions

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

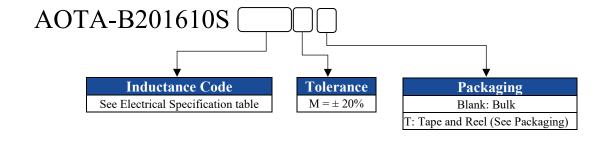
Irms: DC current that causes the temperature rise (ΔT, approximate 40 °C) from 25°C ambient.

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-B201610S Series is RoHS Compliant and Pb free.

Part Identification





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: 7/27/2023

ABRACON IS ISO9001-2015 CERTIFIED



AOTA-B201610S

Request Samples (>)



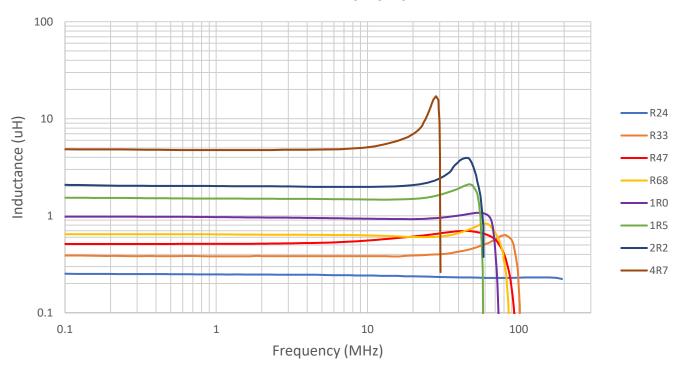
Check Inventory (>)



2.0 x 1.6 x 1.0 mm **RoHS/RoHS II Compliant** MSL Level = 1

Frequency Performance Graphs

AOTA-B201610S







AOTA-B201610S

Request Samples (>)

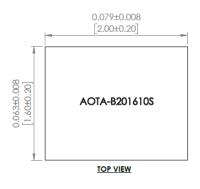


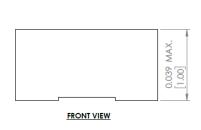
Check Inventory (>)

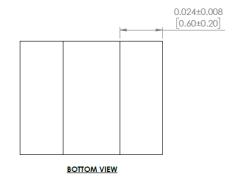


2.0 x 1.6 x 1.0 mm **RoHS/RoHS II Compliant** MSL Level = 1

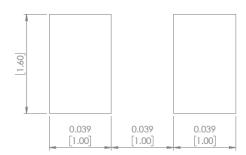
Mechanical Specifications







Recommended Land Pattern



Dimensions: Inch[mm]

Marking

No Marking





AOTA-B201610S

Request Samples (>)

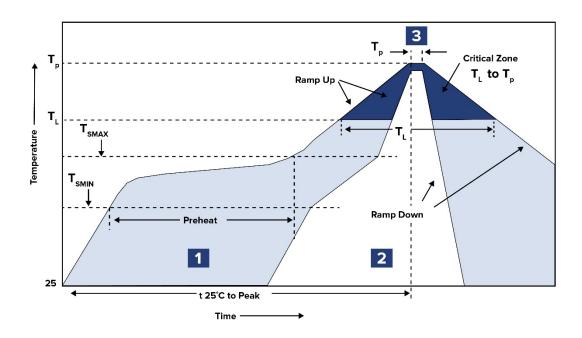


Check Inventory (>)



2.0 x 1.6 x 1.0 mm RoHS/RoHS II Compliant MSL Level = 1

Reflow Profile



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





AOTA-B201610S

Request Samples



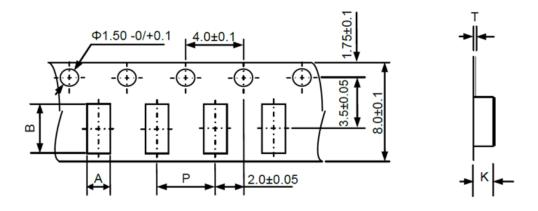
Check Inventory (>)



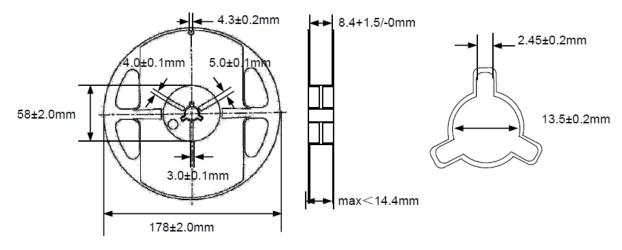
2.0 x 1.6 x 1.0 mm **RoHS/RoHS II Compliant** MSL Level = 1

Packaging

Tape & Reel: 3000 pcs/reel



	В		K	T
1.90±0.1	2.30±0.1	4.0±0.1	1.30 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.

