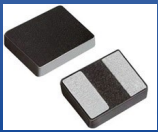


# MINI MOLDED POWER INDUCTOR



AOTA-B252010S

Request Samples



Check Inventory



2.5 x 2.0 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
- 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

## 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	$\mu\text{H}$	%	MHz	$\text{m}\Omega$		A		A	
Symbol	L	M	SRF	DCR		Isat		Irms	
AOTA-B252010SR33MT	0.33	20	95	13	16	8.5	7.5	5.5	5.0
AOTA-B252010SR47MT	0.47	20	81	16	20	7.0	6.5	6.1	5.7
AOTA-B252010SR68MT	0.68	20	63	24	29	6.6	5.8	5.2	4.5
AOTA-B252010S1R0MT	1.0	20	53	27	30	5.4	5.0	4.7	4.5
AOTA-B252010S1R5MT	1.5	20	35	37	42	4.0	3.7	4.1	3.6
AOTA-B252010S2R2MT	2.2	20	27	57	65	3.5	3.2	2.6	2.3
AOTA-B252010S3R3MT	3.3	20	22	95	110	2.9	2.6	2.2	1.9
AOTA-B252010S4R7MT	4.7	20	19	124	136	2.2	1.9	1.7	1.6
AOTA-B252010S100MT	10.0	20	14	360	420	1.7	1.5	1.4	1.2

## 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°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-B252010S Series is **RoHS Compliant and Pb free**

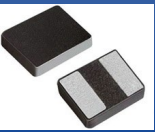


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**AOTA-B252010S**

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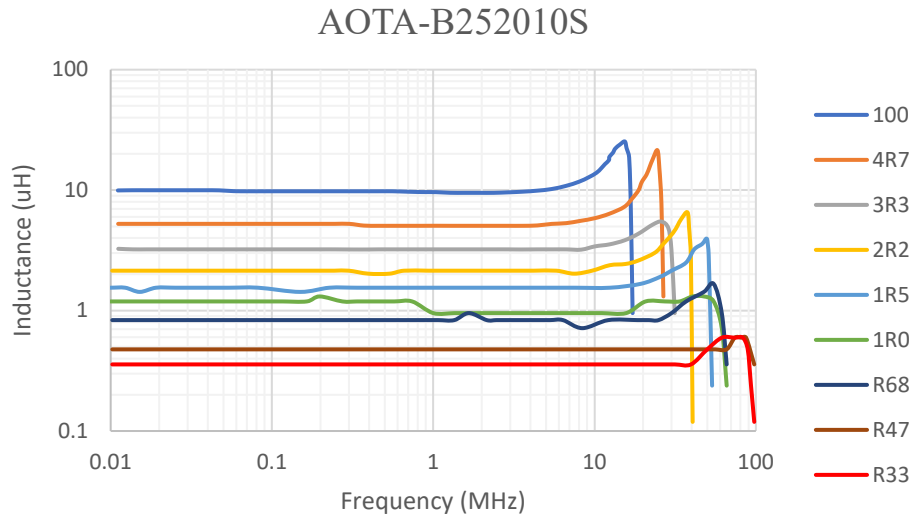


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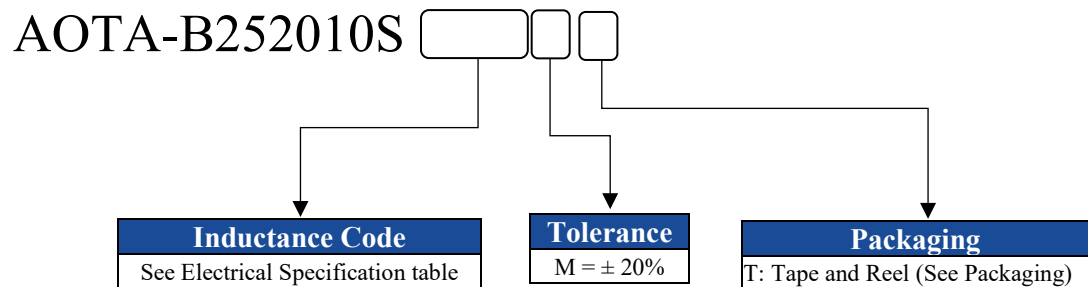


2.5 x 2.0 x 1.0 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Performance Graphs



## Part Identification



# MINI MOLDED POWER INDUCTOR



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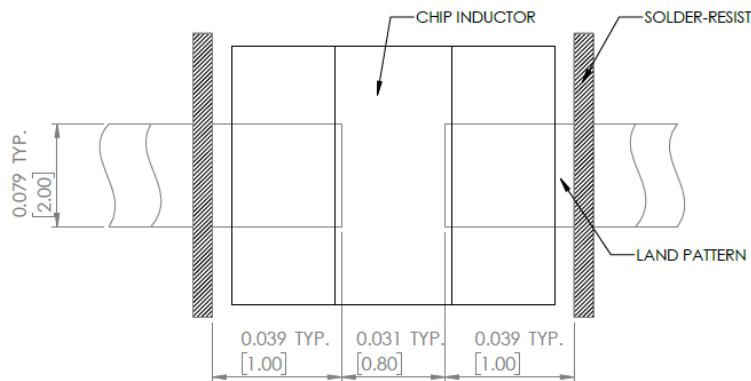


**2.5 x 2.0 x 1.0 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Mechanical Specifications



## Recommended Land Pattern



Dimensions: Inch[mm]

## Marking

No Marking

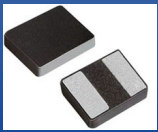


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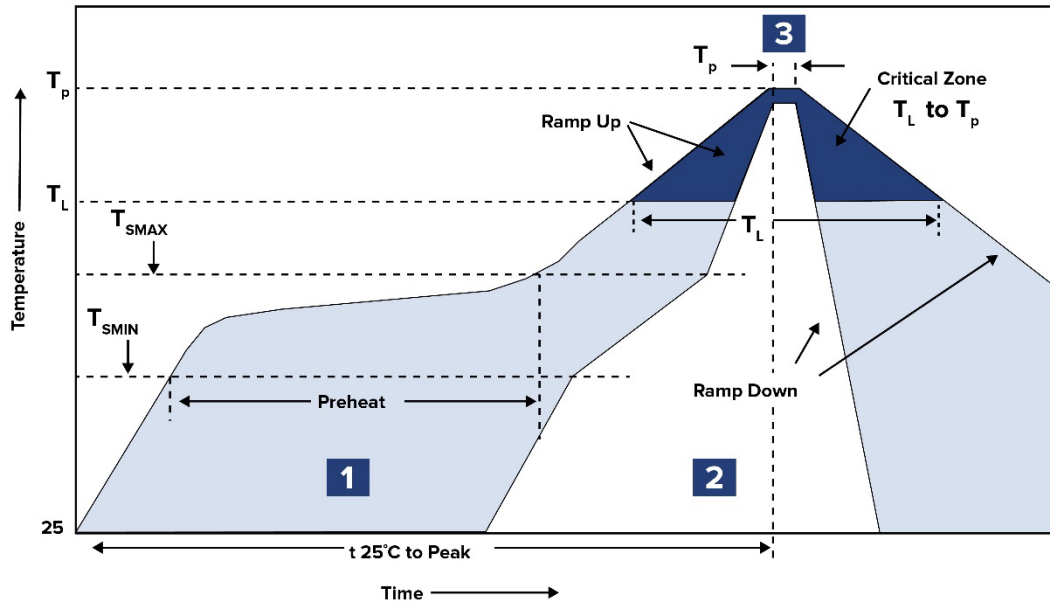


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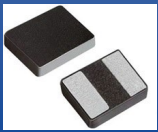
2.5 x 2.0 x 1.0 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Reflow Profile



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

# MINI MOLDED POWER INDUCTOR



**AOTA-B252010S**

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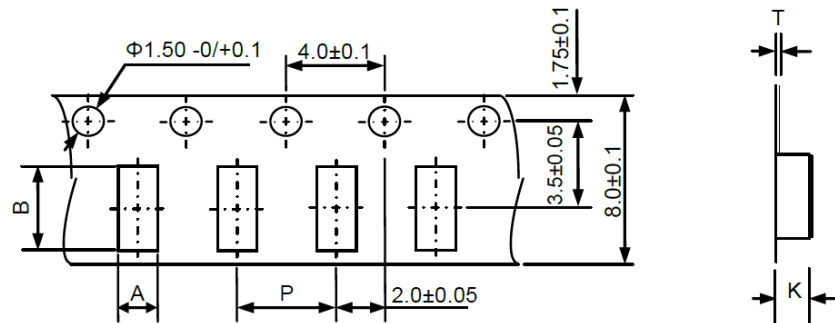
Check Inventory



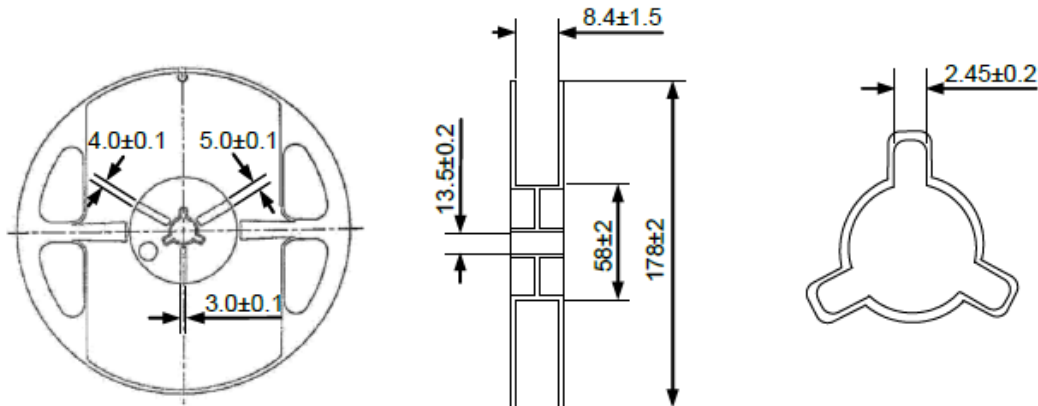
2.5 x 2.0 x 1.0 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Packaging

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



A	B	P	K	T
2.30±0.1	2.80±0.1	4.0±0.1	1.30 Max	0.3 Max



Dimensions: mm

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