

Assembly Power Inductors

**AVR-1M050305S**[Request Samples](#)[Check Inventory](#)

4.5 x 3.0 x 4.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Shielded construction
- Soft saturation
- High Power Density
- Low DCR, High Efficiency
- Perfect for multi-phased power circuitry.

Applications

- Desktop/ Server applications
- High current point-of-load (POL) converters
- Lighting
- Solar inverters and power
- Industrial and robotics
- Medium and high-power switch mode power supplies.

Electrical Specifications

Part Number	Inductance	Tolerance	DC Resistance	Saturation Current (Typ)	Temperature Rise Current
				@25°C	Min.
Units	nH	%	mΩ Max	A	A
Symbol	L		DCR	Isat	Irms
AVR-1M050305S47NL	47	±15%	0.33	80	35

Test Conditions

Isat: DC current at which the inductance drops 30% from its value without current.

Irms: DC current that causes the temperature rise (ΔT , approximate 40 °C) from 20°C ambient

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

Storage Condition: -40°C ~ +85°C (with packaging) and R.H. <95% max

Operating Voltage: 40V (across inductor)

AVR-1M050305S Series is RoHS Compliant and Pb free

Part Identification

AVR-1M050305S

Inductance Code
See Electrical Specification table

Tolerance
L: ±15%

Packaging
T: Tape and Reel (See Packaging)
Blank: Bulk

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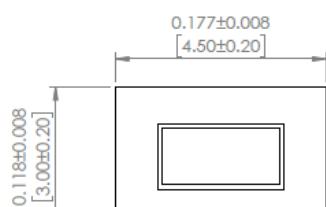
Check Inventory



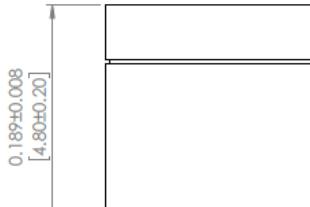
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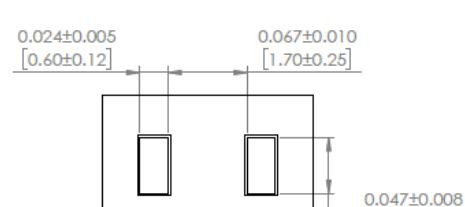
Mechanical Specifications



TOP VIEW



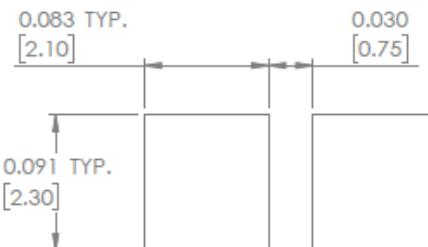
FRONT VIEW



BOTTOM VIEW

Dimensions: Inches [mm]

Recommended Land Pattern



Dimensions: Inches [mm]

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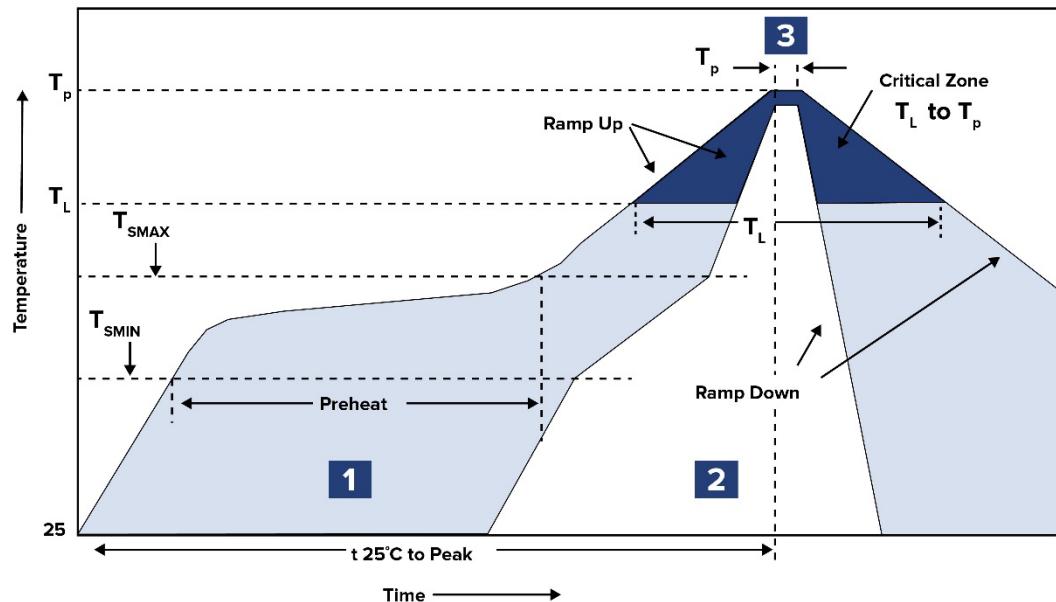


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Reflow Profile



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 ~ 150 sec.
3	Peak heat	T_p 260°C	5 sec. MAX

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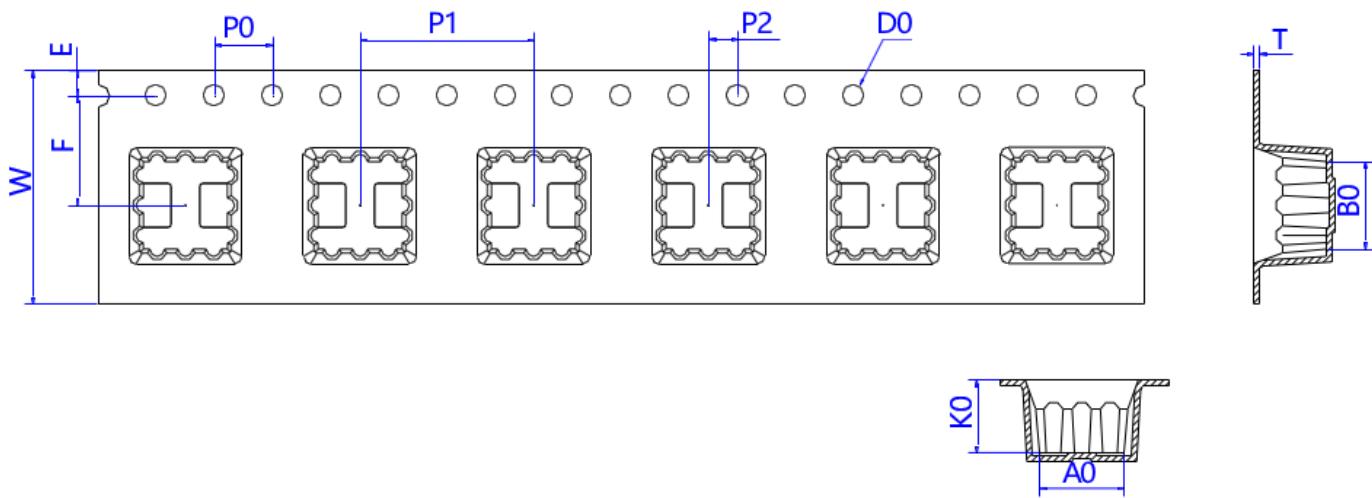


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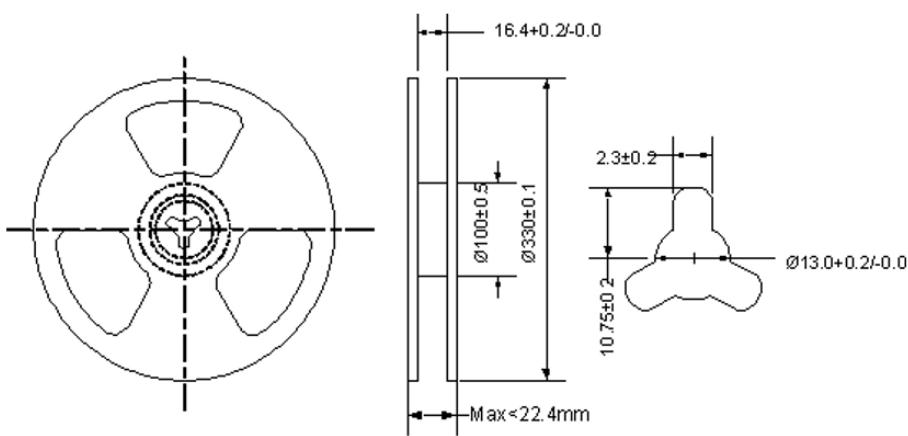
Packaging

Tape & Reel: 1,500 pcs/reel



Series	W	E	F	P ₀	P ₁	P ₂	D ₀	A ₀	B ₀	T	K ₀	
AVR-1M050305S	16.00 ±0.30	1.75 ±0.10	7.50 ±0.10	4.00 ±0.10	8.00 ±0.10	2.00 ±0.10	+0.10/-0.0	1.50 ±0.10	4.85 ±0.10	3.35 ±0.10	0.40 ±0.05	5.30 ±0.10

Dimensions: mm



Dimensions: mm

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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For terms and conditions of sales, please visit:
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