



**AVR-1F140805S**

Request Samples



Check Inventory



13.6 x 7.8 x 5.0 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
	0.1MHz/1.0V			@25°C	@100°C	Min.
Units	nH	%	mΩ ±15%	A		A
Symbol	L		DCR	Isat		Irms
AVR-1F140805SR10K	100	±10%	0.17	76	61	58
AVR-1F140805SR22K	220	±10%	0.17	45	40	58

### 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 20°C ambient

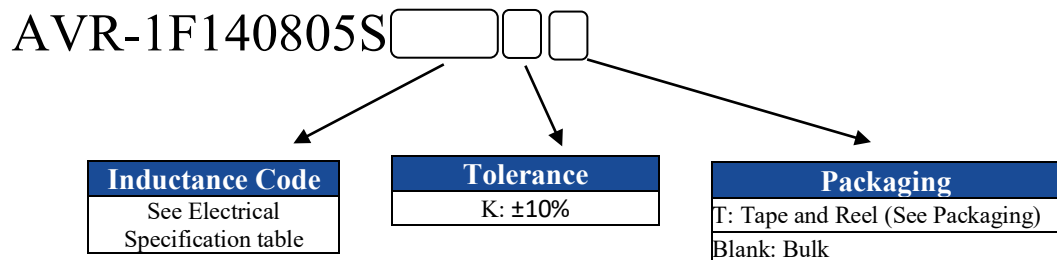
**Operating Temperature:** -40°C ~ +125°C (including self-temperature rise)

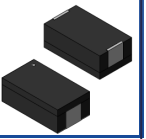
**Storage Condition:** -40°C ~ +85°C (with packaging) and R.H. <95% max

**Operating Voltage:** 40V (across inductor)

AVR-1F140805S Series is **RoHS Compliant and Pb free**

## Part Identification





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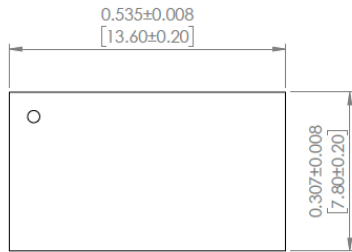


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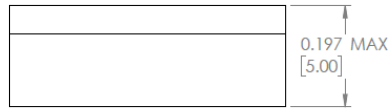


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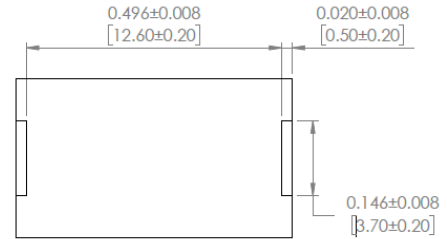
## Mechanical Specifications



TOP VIEW



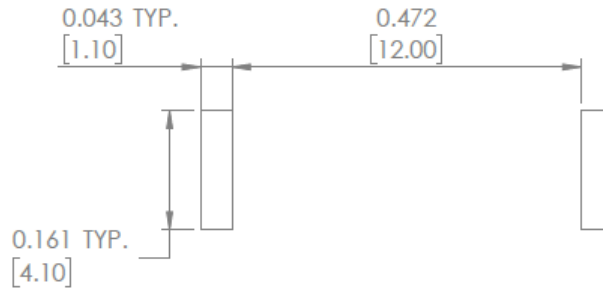
FRONT VIEW



BOTTOM VIEW

Dimensions: Inches [mm]

## Recommended Land Pattern



Dimensions: Inches [mm]



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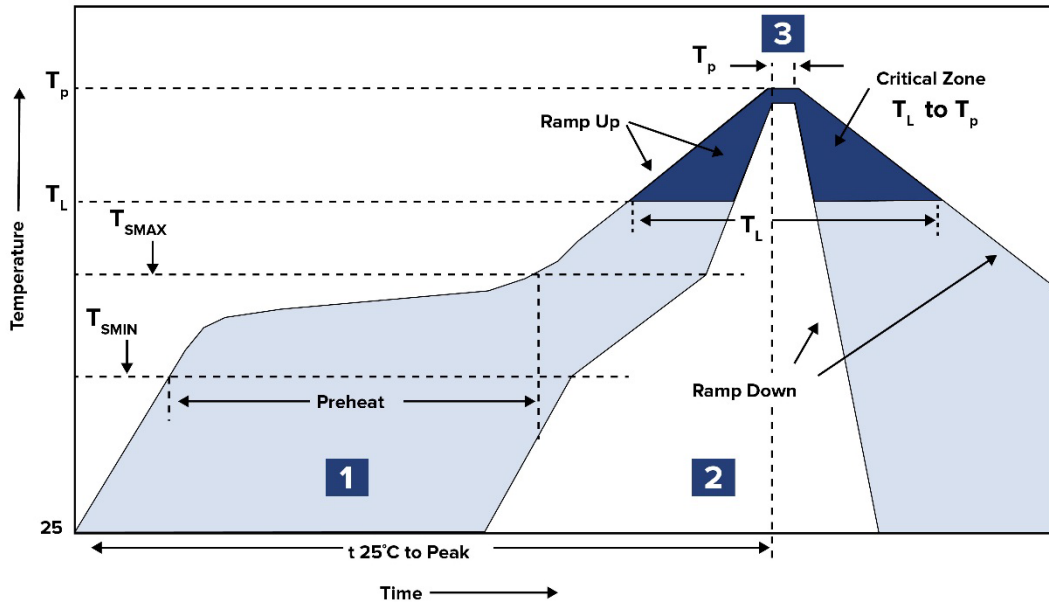


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## Reflow Profile



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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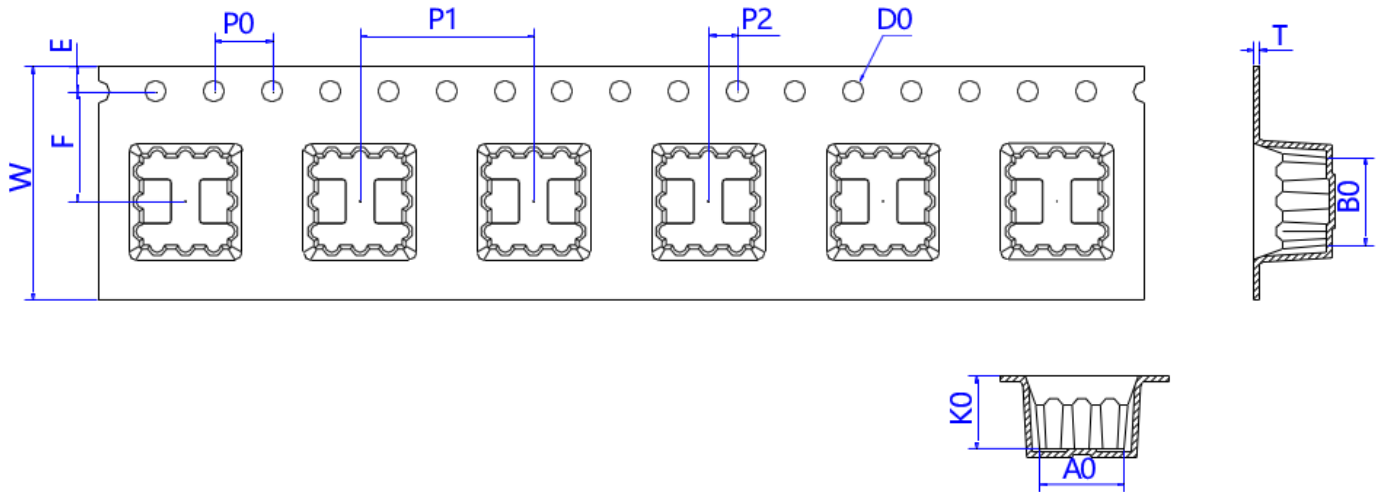
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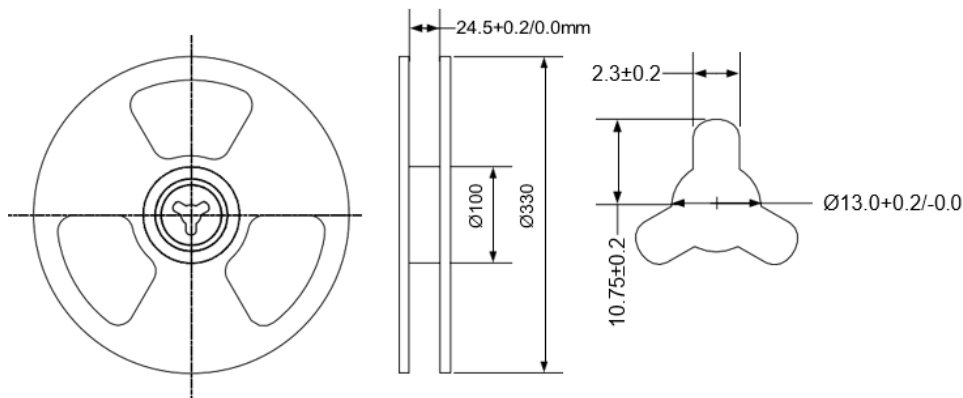
## Packaging

**Tape & Reel: 400 pcs/reel**



Series	W	E	F	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	D <sub>0</sub>	A <sub>0</sub>	B <sub>0</sub>	T	K <sub>0</sub>
AVR-1F140805S	24.00 ± 0.30	1.75 ± 0.10	11.50 ± 0.10	4.0 ± 0.1	12.0 ± 0.1	2.0 ± 0.1	1.5 + 0.1/- 0.0	8.3 ± 0.10	14.3 ± 0.10	0.40 ± 0.05	5.30 ± 0.10

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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 CERTIFIED