

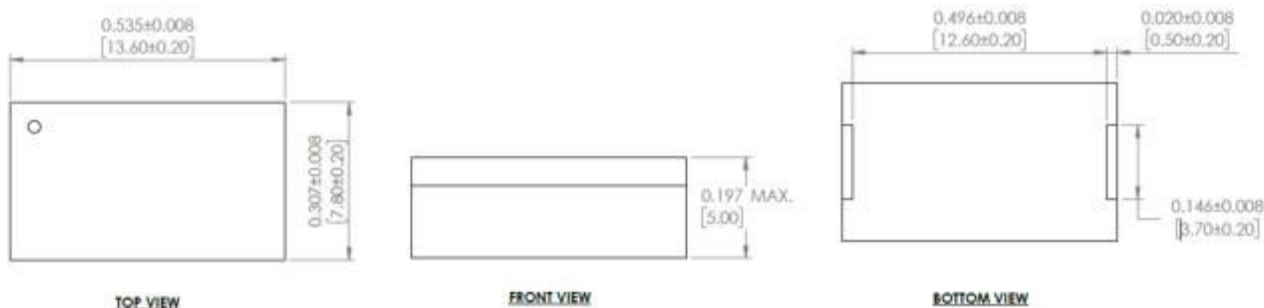
ECN/PCN No.: M1642

**For Manufacturer**

<b>Product Description:</b> Assembly Power Inductor	<b>Abracon Part Number / Part Series:</b> AVR-1F140805S	<input type="checkbox"/> Documentation only <input checked="" type="checkbox"/> Series <input checked="" type="checkbox"/> ECN <input type="checkbox"/> Part Number(s) <input type="checkbox"/> EOL
<b>Affected Revision:</b> Initial revision	<b>New Revision:</b> A	<b>Application:</b> <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety

Prior to Change:

**Mechanical Specifications**

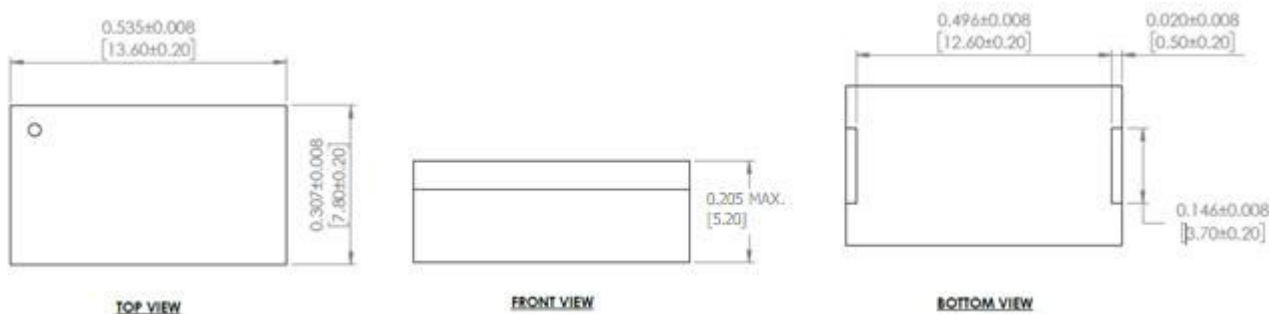


Dimensions: Inches [mm]

**Packaging**

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

After Change:



**Packaging**

**Tape & Reel: 800 pcs/reel**

<b>Cause/Reason for Change:</b> Production line recommends increasing package maximum height to 5.2mm. Pieces per reel has increased.		
<b>Change Plan</b>		
<b>Effective Date:</b> 7/8/2025	<b>Additional Remarks:</b>	
<b>Change Declaration:</b> There are no changes to electrical performance of the product. However, the height maximum of the package has increased from 5.0mm to 5.2mm. Package length and width has NOT changed.		
<b>Issued Date:</b> 7/8/2025	<b>Issued By:</b> Gerald Capwell	<b>Issued Department:</b> Engineering
<b>Approval:</b> Syed Raza Engineering VP	<b>Approval:</b> Reuben Quintanilla Quality Director	<b>Approval:</b> Ying Huang Purchasing Director
<b>For Abracon EOL only</b>		
<b>Last Time Buy (if applicable):</b>		<b>Alternate Part Number / Part Series:</b>
<b>Additional Approval:</b>	<b>Additional Approval:</b>	<b>Additional Approval:</b>
<b>Customer Approval (If Applicable)</b>		
<b>Qualification Status:</b> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>		
<b>Customer Part Number:</b>		<b>Customer Project:</b>
<b>Company Name:</b>	<b>Company Representative:</b>	<b>Representative Signature:</b>
<b>Customer Remarks:</b>		

<b>Brand</b>	<b>Affected PN</b>	<b>Discontinued/EOL PN</b>
Abracon	AVR-1F140805SR10K	
Abracon	AVR-1F140805SR22K	

Added PN	Series	ECO#
	AVR-1F140805S	M1642
	AVR-1F140805S	M1642

**Datasheet Link**

**ECN Notification Link**

<https://abracon.com/datasheets/AVR-1F140805S.pdf> <https://abracon.com/downloads/ECN-PCN/ECN-PCN-1F140805S.pdf>  
<https://abracon.com/datasheets/AVR-1F140805S.pdf> <https://abracon.com/downloads/ECN-PCN/ECN-PCN-1F140805S.pdf>

[CO-M1642-AVR-1F140805S-Notification.pdf](#)

[CO-M1642-AVR-1F140805S-Notification.pdf](#)



**AVR-1F140805S**

Request Samples



Check Inventory



13.6 x 7.8 x 5.2 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

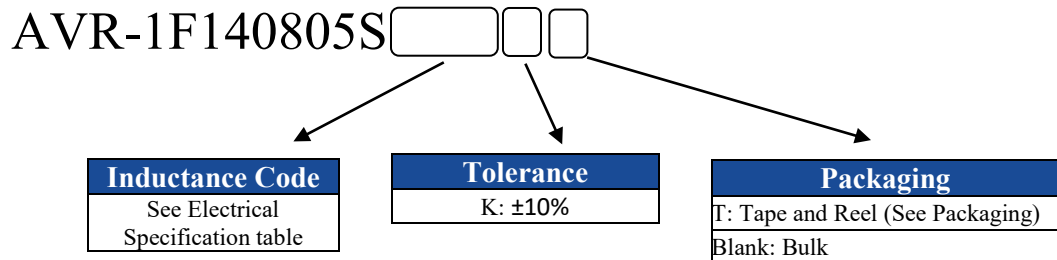
**Operating Temperature:** -40°C ~ +125°C (including self-temperature rise)

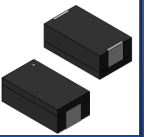
**Storage Condition:** -40°C ~ +85°C (with packaging) and R.H. <95% max

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

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

## Part Identification





**AVR-1F140805S**

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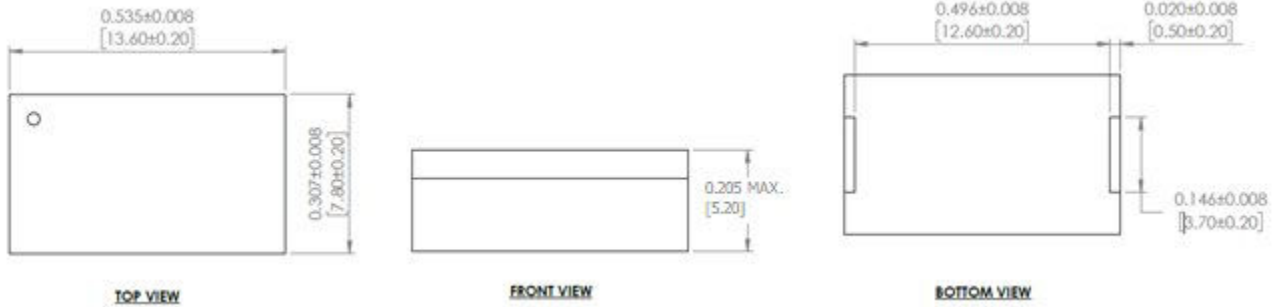


Check Inventory



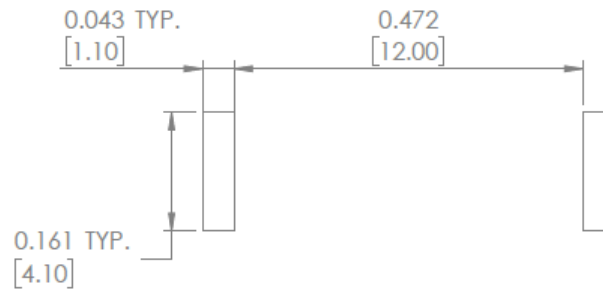
13.6 x 7.8 x 5.2 mm  
RoHS/RoHS II Compliant  
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## Mechanical Specifications

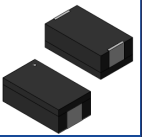


Dimensions: Inches [mm]

## Recommended Land Pattern



Dimensions: Inches [mm]



**AVR-1F140805S**

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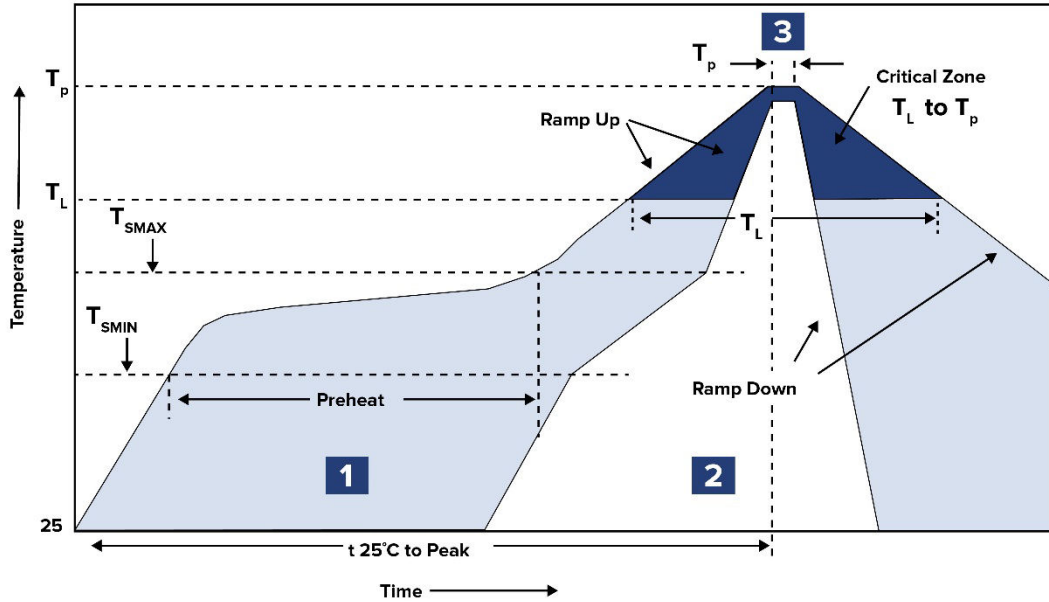


Check Inventory



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

