

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

- 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**

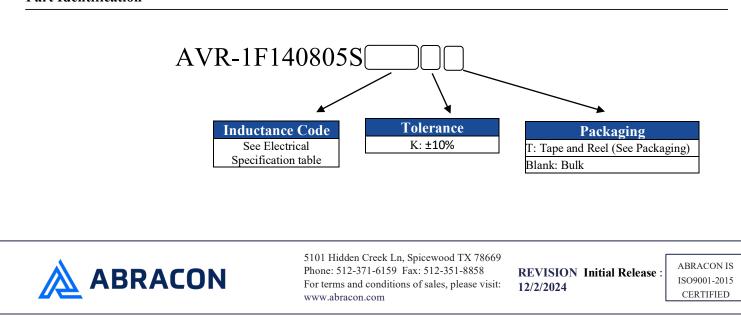
Part Number	Inductance	Tolerance	erance DC Resistance		ration nt (Typ)	Temperature Rise Current
	0.1MHz/1.0V			@25°C	@100°C	Min.
Units	nH	%	${ m m}\Omega$ ±15%	Α		Α
Symbol	L		DCR	Is	sat	Irms
AVR-1F140805SR10K	100	±10%	0.17	76	61	58
AVR-1F140805SR22K	220	±10%	0.17	45	40	58

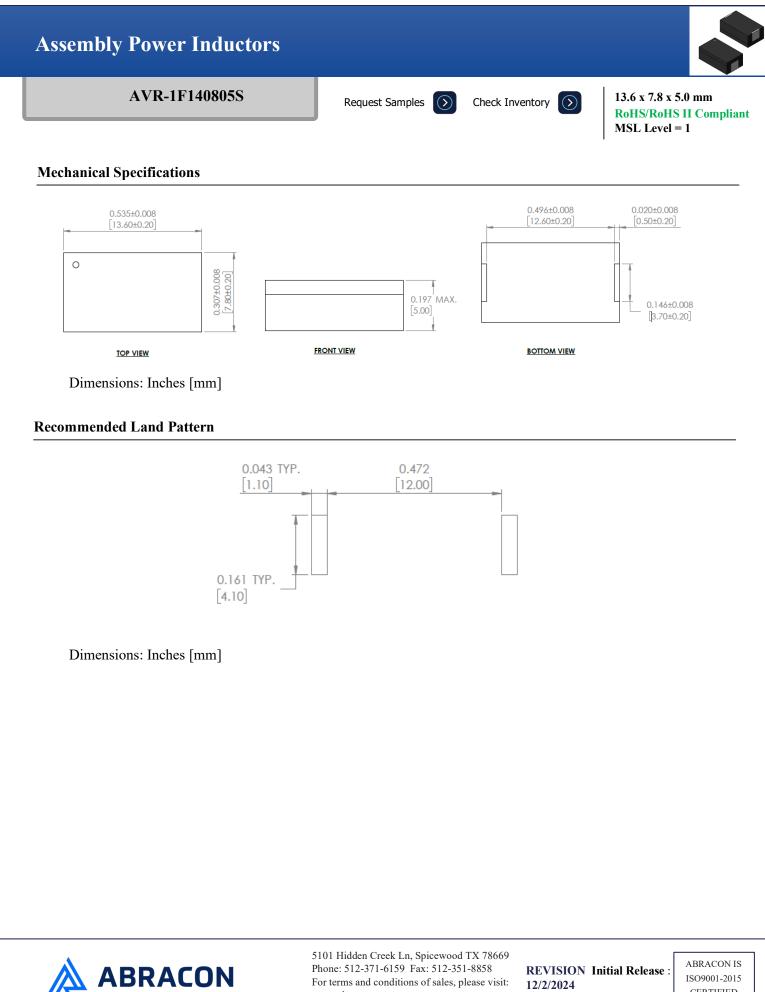
## **Test Conditions**

**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**





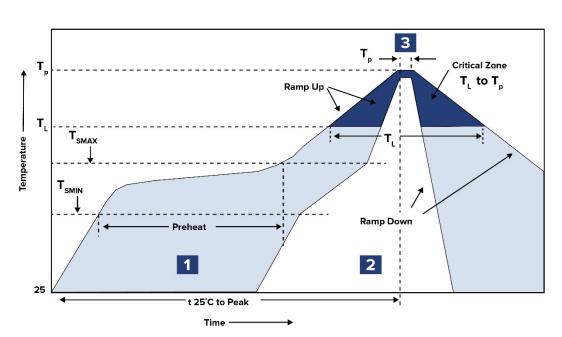
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**Reflow Profile** 



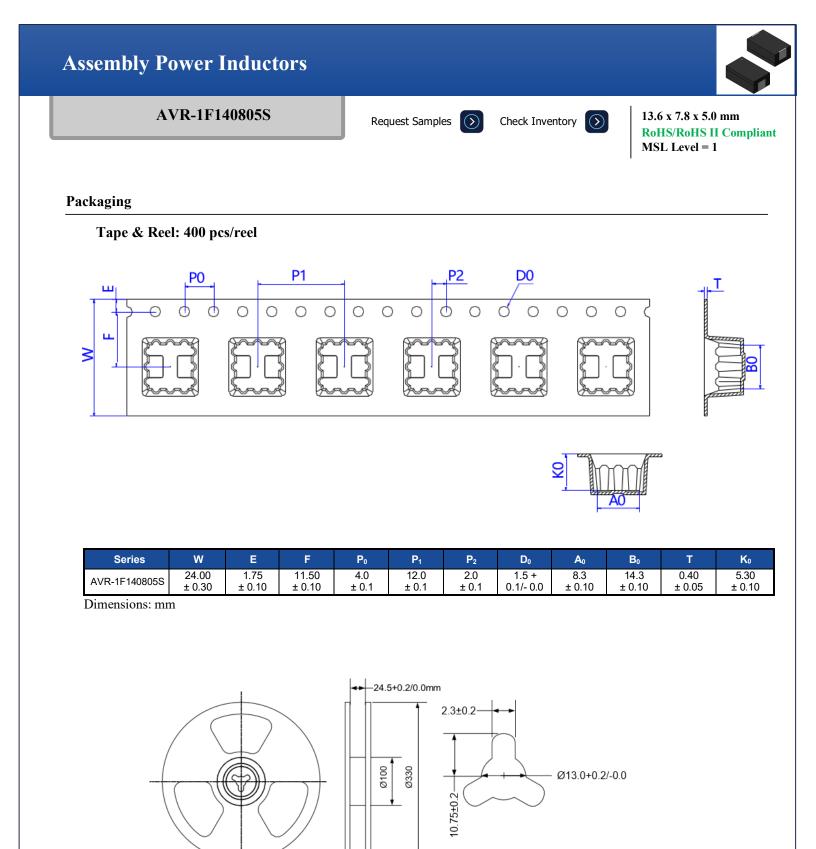
Zone	Description	Temperature	Times
1	Preheat	$\begin{array}{l} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 200^{\circ}C \end{array}$	$60 \sim 120$ sec.
2	Reflow	T <sub>L</sub> 217°C	$60 \sim 150$ sec.
3	Peak heat	Т <sub>Р</sub> 260°С	5 sec. MAX



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