

HORIZONTALLY ASSEMBLED POWER INDUCTOR



AVR-1F100808S

Request Samples



Check Inventory



10.8 x 8.2 x 8.5mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Ferrite Core
- Low DCR, High Efficiency
- High temperature current rating
- High saturation current rating

Applications

- Single and Multiphase DC-DC converters
- Voltage regulator modules (VRMs)
- Renewable energy, Power inverters, DC links
- Electric Vehicles (EVs)
- Telecom infrastructure, datacenters, servers and switches
- Industrial and robotics equipment
- Medium and high-power switch mode power supplies (SMPS)

Electrical Specifications @ 25°C

Part Number*	Inductance	Inductance Tolerance	DC Resistance	Saturation Current		Temperature Rise Current
	100KHz/1.0V		mΩ	Typ.		Typ.
Units	nH	%			A	
Symbol	L	L	DCR	Isat1@ 25°C	Isat2@ 100°C	Irms
AVR-1F100808SR12LT	120	15%	0.12 ± 7%	94	84	70
AVR-1F100808SR15LT	150			79	70	
AVR-1F100808SR17LT	170			68	58	
AVR-1F100808SR22LT	220			60	45	
AVR-1F100808SR30LT	300			39	33	
AVR-1F100808SR40LT	400			21	16	

* The “T” at the end of the part numbers refers to “Tape & Reel” packaging. For other options, please refer to the Part Identification section.

Test Conditions:

Isat1: DC current at which the inductance drops 20% from its nominal value at 25°C.

Isat2: DC current at which the inductance drops 20% from its nominal value at 100°C.

Irms: DC current that causes the temperature rise (ΔT , 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. 70 max.

AVR-1F100808S Series is RoHS Compliant and Pb free.



5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION Initial Release :
6/20/2024

ABRACON IS
ISO9001-2015
CERTIFIED



HORIZONTALLY ASSEMBLED POWER INDUCTOR

AVR-1F100808S

Request Samples



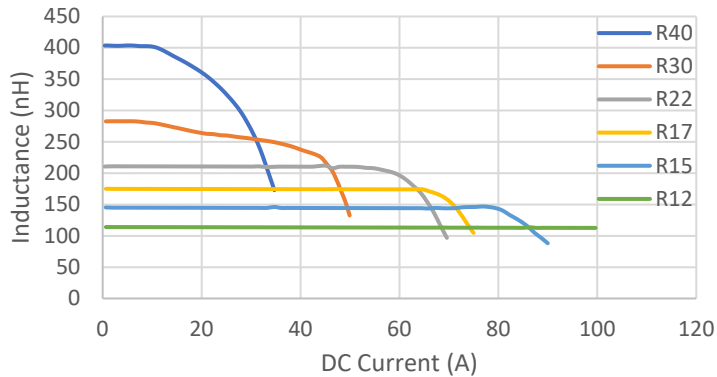
Check Inventory



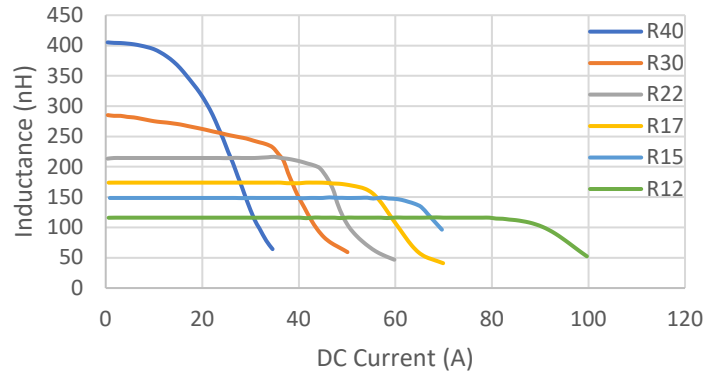
10.8 x 8.2 x 8.5mm
RoHS/RoHS II Compliant
MSL Level = 1

Performance Graphs

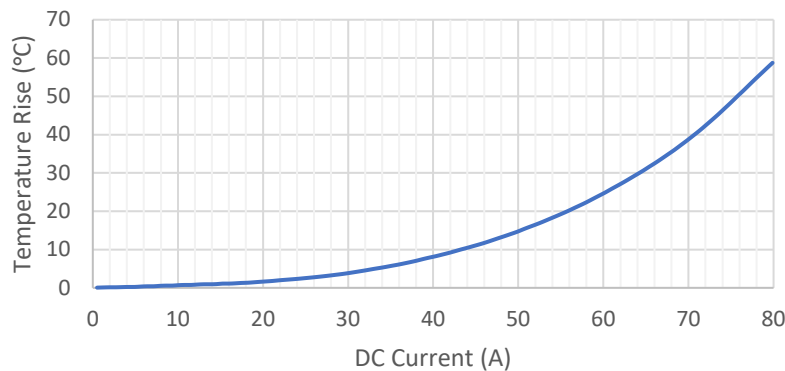
AVR-1F100808S Series Saturation Graphs @25°C



AVR-1F100808S Series Saturation Graphs @100°C

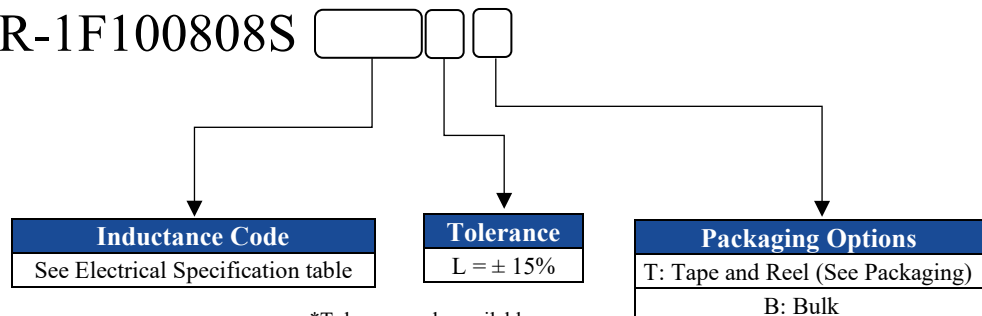


AVR-1F100808S Series Temperature Rise Graph



Part Identification

AVR-1F100808S



*Tolerance only available as indicated in electrical spec. table



5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION Initial Release :
6/20/2024

ABRACON IS
ISO9001-2015
CERTIFIED

HORIZONTALLY ASSEMBLED POWER INDUCTOR



AVR-1F100808S

Request Samples

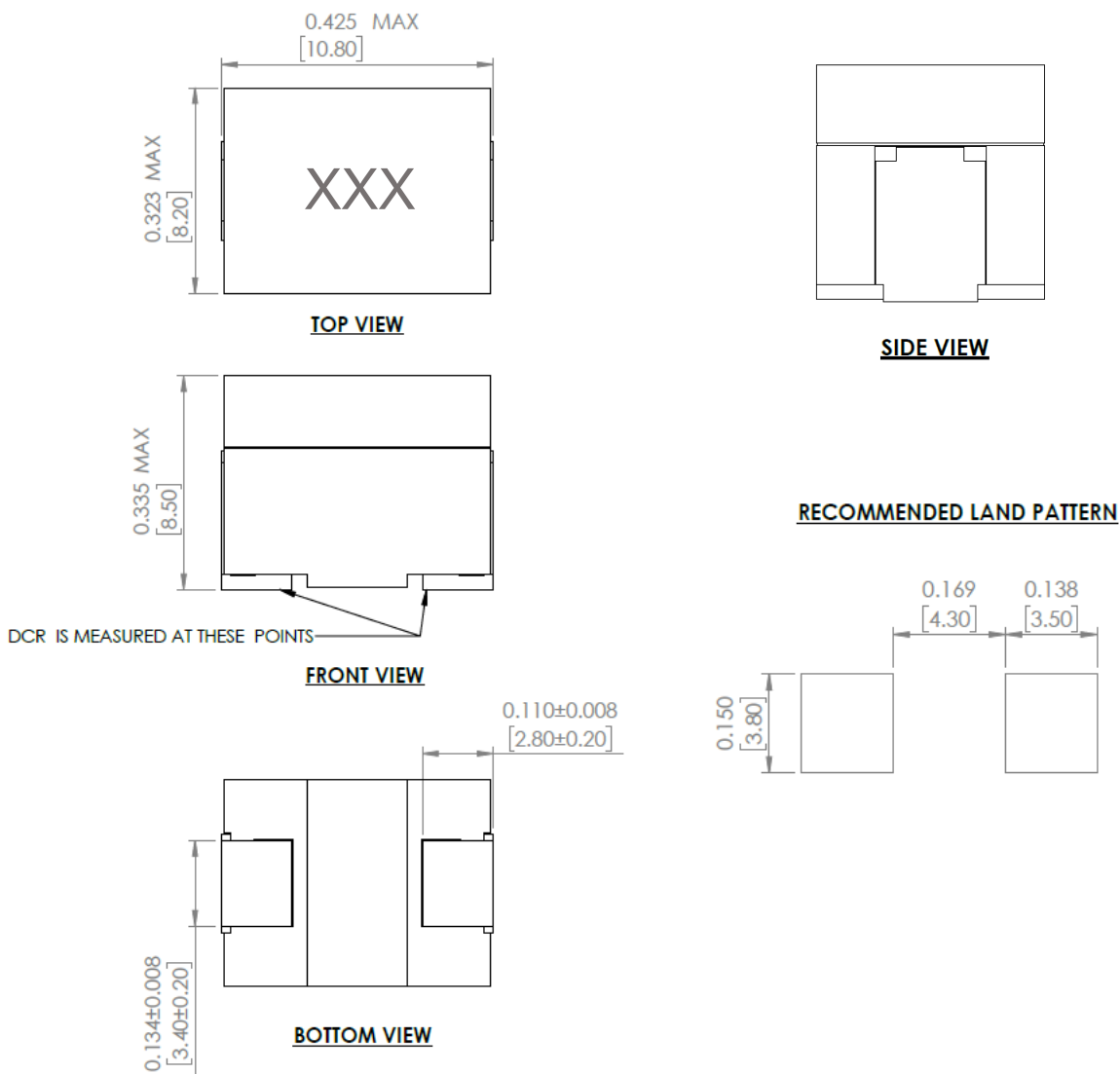


Check Inventory



10.8 x 8.2 x 8.5mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications



Markings: Inductance code.

Dimensions: Inches[mm]



5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION Initial Release :
6/20/2024

ABRACON IS
ISO9001-2015
CERTIFIED



HORIZONTALLY ASSEMBLED POWER INDUCTOR

AVR-1F100808S

Request Samples



Check Inventory

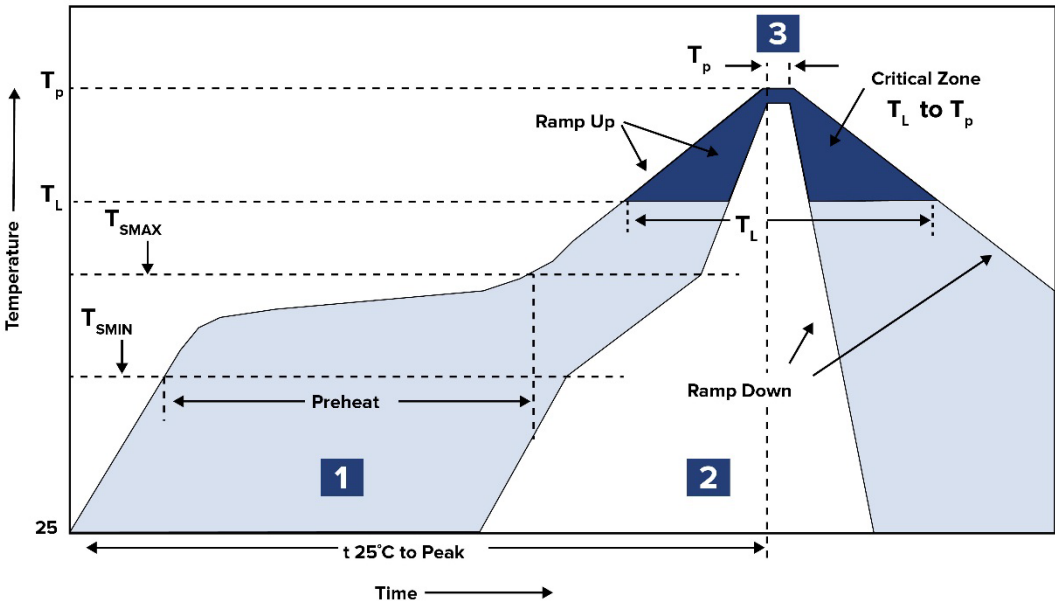


10.8 x 8.2 x 8.5mm

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 230°C	30 ~ 60 sec.
3	Peak heat	T_P 245°C ± 5°C	5 ± 0.5 sec.

Ref. Solder paste: Sn/3.0Ag/0.5Cu

Ramp up rate: 3°C/s Max.

Ramp down rate: 6°C/s Max.



HORIZONTALLY ASSEMBLED POWER INDUCTOR

AVR-1F100808S

Request Samples



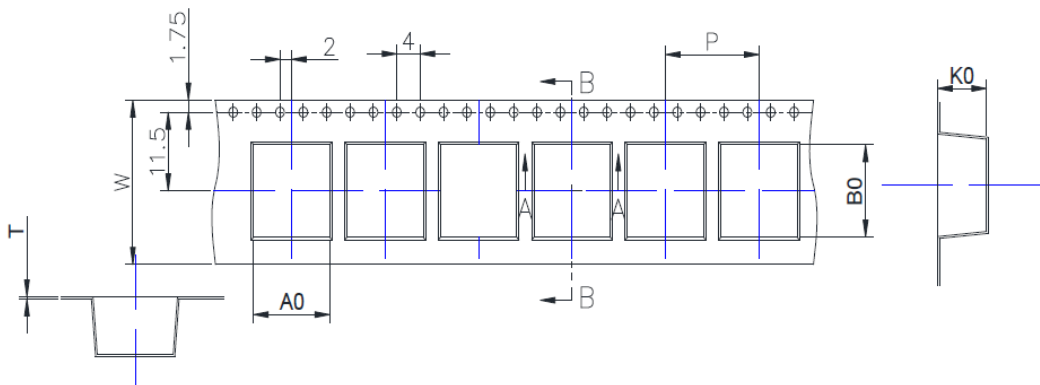
Check Inventory



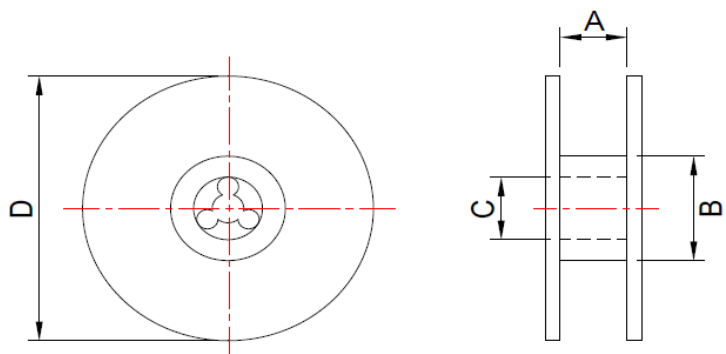
10.8 x 8.2 x 8.5mm
RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 600 pcs/reel



Ao	Bo	Ko	P	T	W
8.2 ± 0.1	10.2 ± 0.1	8.2 ± 0.1	12.0 ± 0.1	0.4 ± 0.05	24.0 ± 0.3



A	B	C	D
24.0 ± 0.5	100 ± 2.0	13.5 ± 0.5	330 Ref.

Dimensions: mm

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION Initial Release :
6/20/2024

ABRACON IS
ISO9001-2015
CERTIFIED

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ABRACON:](#)

[AVR-1F100808SR12LT](#) [AVR-1F100808SR15LT](#) [AVR-1F100808SR30LT](#) [AVR-1F100808SR17LT](#) [AVR-1F100808SR40LT](#) [AVR-1F100808SR22LT](#)