

Features

- Shielded construction – low radiation
- Wide operating temperature range
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

- DC-DC converters
- Power supplies in automotive, consumer, industrial, and telecom electronics

SRR0745HA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 1 KHz / 1 V		DCR (Ω) Max.	I_{rms} (A) Typ.	I_{sat} (A) Typ.
	L (μH)	Tol. (%)			
SRR0745HA-100M	10.0	±20	0.052	2.10	2.50
SRR0745HA-120M	12.0	±20	0.062	2.00	2.30
SRR0745HA-150M	15.0	±20	0.075	1.90	2.10
SRR0745HA-180M	18.0	±20	0.090	1.80	1.95
SRR0745HA-220M	22.0	±20	0.096	1.65	1.75
SRR0745HA-270M	27.0	±20	0.130	1.45	1.62
SRR0745HA-330M	33.0	±20	0.150	1.35	1.45
SRR0745HA-390M	39.0	±20	0.190	1.17	1.30
SRR0745HA-470M	47.0	±20	0.210	1.05	1.20
SRR0745HA-560M	56.0	±20	0.240	0.95	1.10
SRR0745HA-680M	68.0	±20	0.300	0.86	0.96
SRR0745HA-820M	82.0	±20	0.400	0.78	0.90
SRR0745HA-101M	100.0	±20	0.450	0.70	0.78
SRR0745HA-121M	120.0	±20	0.550	0.60	0.70
SRR0745HA-151M	150.0	±20	0.760	0.48	0.58
SRR0745HA-181M	180.0	±20	0.820	0.46	0.54
SRR0745HA-221M	220.0	±20	0.950	0.42	0.50
SRR0745HA-271M	270.0	±20	1.200	0.38	0.46
SRR0745HA-331M	330.0	±20	1.500	0.34	0.40
SRR0745HA-391M	390.0	±20	1.850	0.32	0.36
SRR0745HA-471M	470.0	±20	2.200	0.29	0.34
SRR0745HA-561M	560.0	±20	2.600	0.26	0.30
SRR0745HA-681M	680.0	±20	2.800	0.24	0.28
SRR0745HA-821M	820.0	±20	3.500	0.22	0.26
SRR0745HA-102M	1000.0	±20	4.100	0.20	0.24

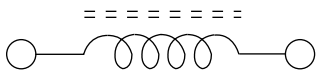
How to Order

SRR0745HA - 100M

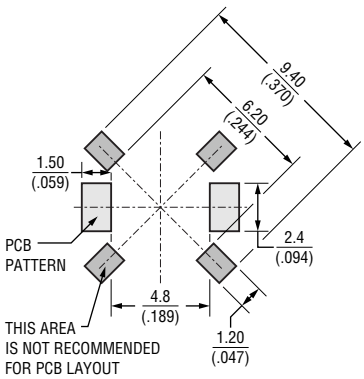
Model

Value Code (see table)

Electrical Schematic



Recommended Layout



Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

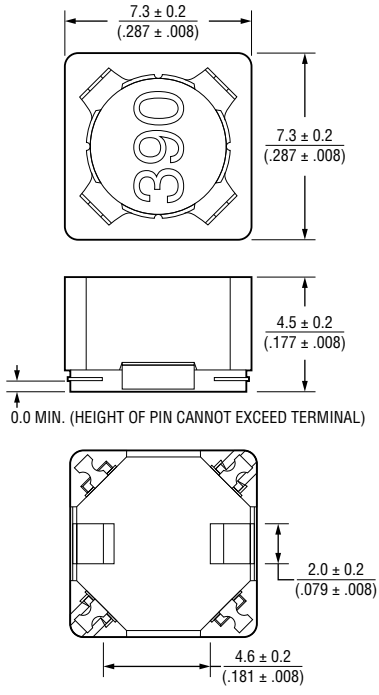
General Specifications

Operating Temperature ..... -55 °C to +150 °C
(Temperature rise included)
Storage Temperature ..... -55 °C to +150 °C
Temperature Rise ..... 40 °C typ. at rated I_{rms}
Inductance Drop ..... 25 % typ. at I_{sat}
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

Materials

Core ..... Ferrite DR & RI
Wire ..... Enameled copper
Terminal Finish ..... Sn/Ag/Cu
Packaging ..... 1000 pcs. per 13-inch reel

Product Dimensions



DIMENSIONS: MM / (INCHES)

WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

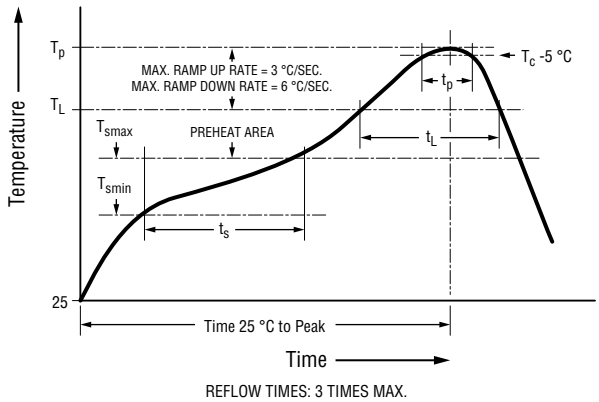
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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Soldering Profile

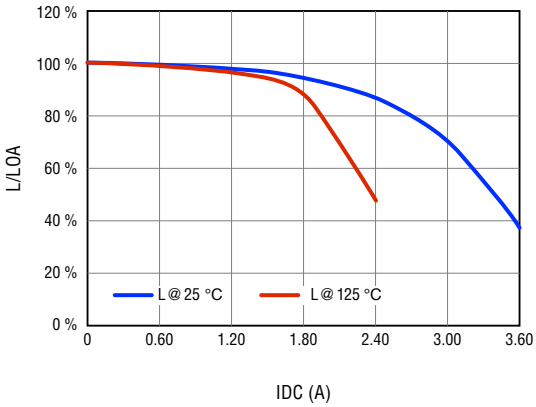


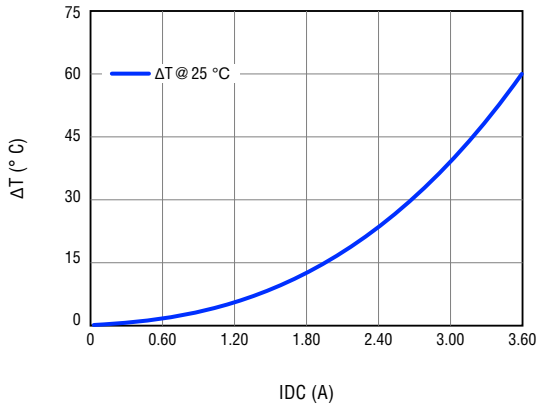
REFLOW TIMES: 3 TIMES MAX.

Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time(t_s) from T_{smin} to T_{smax}	 150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Peak package body temperature (T_p)	250 °C
Time (t_p) at T_c - 5 °C (T_p should be equal to or less than T_c)	< 30 seconds
Ramp-Down Rate (T_p to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

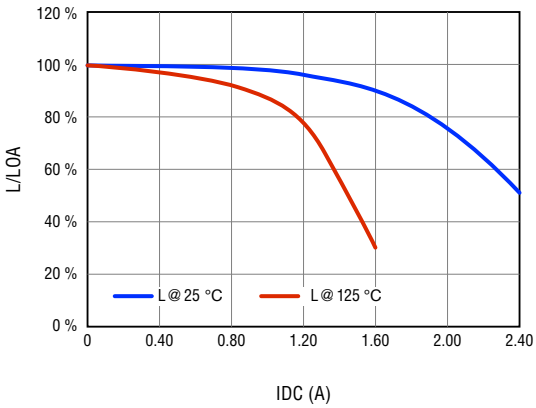
Typical Current Characteristics

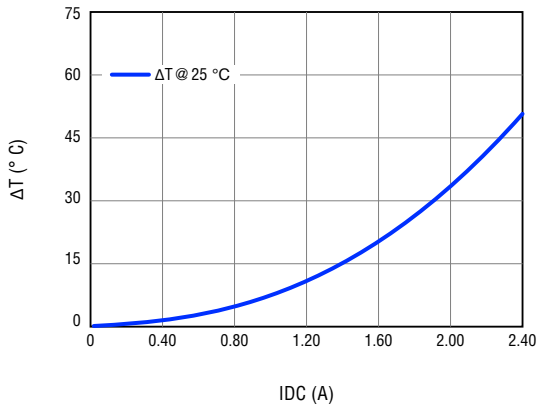
SRR0745HA-100M





SRR0745HA-220M



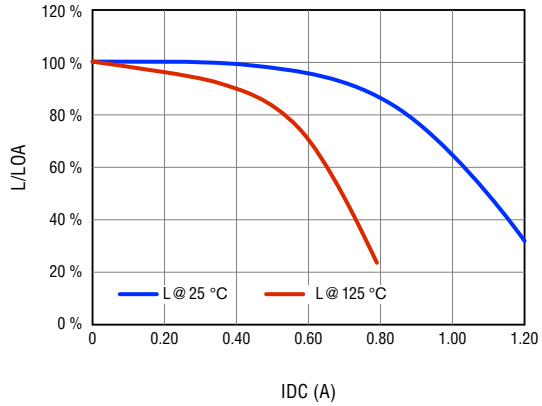


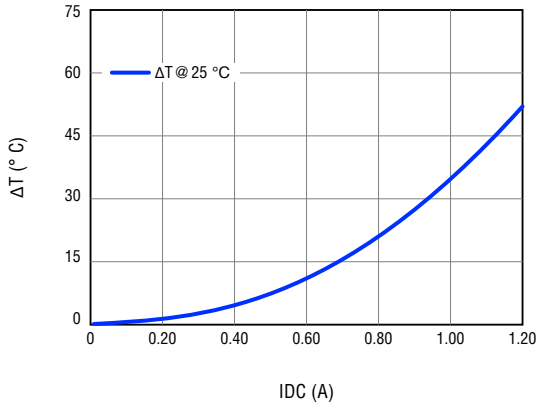
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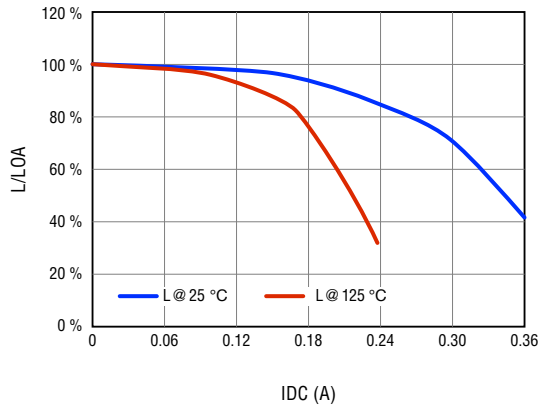
Typical Current Characteristics (continued)

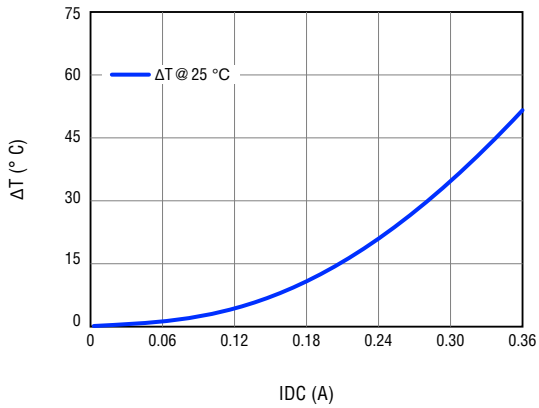
SRR0745HA-101M





SRR0745HA-102M

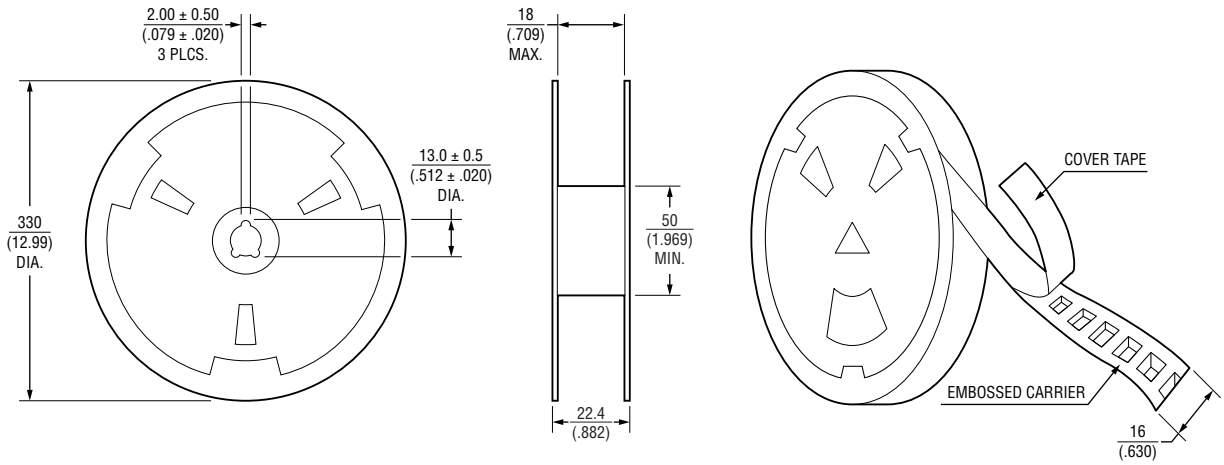




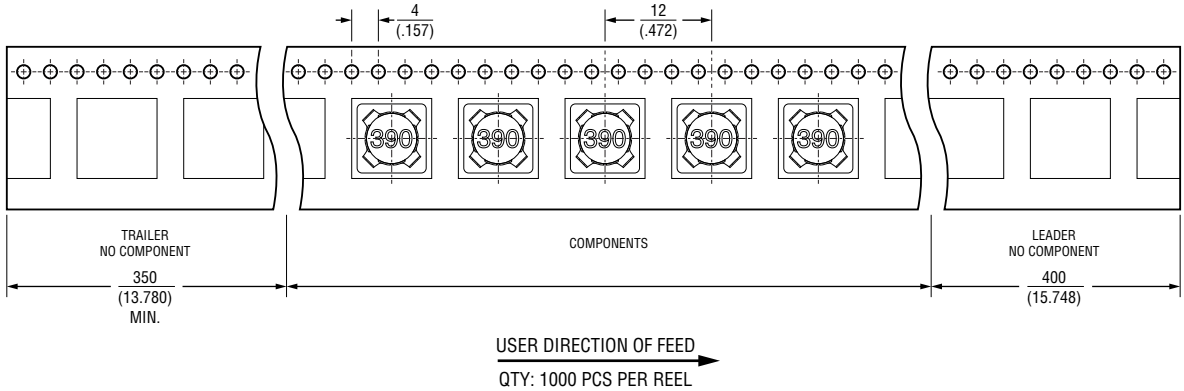
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Packaging Specifications



DIMENSIONS: MM (INCHES)



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