

Features

- Shielded construction
- Inductance range: 1 to 47 µH
- Heating current up to 5.1 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRR4818A Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz/0.1 V		SRF (MHz) Typ.	DCR (mΩ)		I rms[1] (A) Typ.	I rms[2] (A) Typ.	I sat (A) Typ.
	L (µH)	Tol. (%)		Typ.	Max.			
SRR4818A-1R0Y	1.0	± 30	140	19.2	25.0	4.00	5.10	3.60
SRR4818A-1R5Y	1.5	± 30	105	25.2	35.0	3.75	4.70	3.00
SRR4818A-2R2Y	2.2	± 30	90	33.7	45.0	2.70	3.50	2.43
SRR4818A-3R3Y	3.3	± 30	70	42.8	55.0	2.50	3.10	2.10
SRR4818A-3R9Y	3.9	± 30	65	54.5	70.0	2.20	2.70	1.90
SRR4818A-4R7Y	4.7	± 30	55	59.4	80.0	2.00	2.60	1.50
SRR4818A-5R6Y	5.6	± 30	50	74.3	90.0	1.75	2.30	1.35
SRR4818A-6R8Y	6.8	± 30	45	82.1	100.0	1.65	2.20	1.25
SRR4818A-8R2Y	8.2	± 30	43	97.7	130.0	1.55	1.90	1.15
SRR4818A-100M	10	± 20	40	109.8	140.0	1.45	1.80	1.05
SRR4818A-120M	12	± 20	37	132.2	170.0	1.30	1.60	0.95
SRR4818A-150M	15	± 20	30	176.7	220.0	1.25	1.50	0.87
SRR4818A-180M	18	± 20	28	214.8	280.0	1.10	1.40	0.79
SRR4818A-220M	22	± 20	25	280.3	360.0	1.00	1.25	0.72
SRR4818A-270M	27	± 20	22	317.6	400.0	0.90	1.15	0.63
SRR4818A-330M	33	± 20	20	399.1	500.0	0.70	0.90	0.56
SRR4818A-390M	39	± 20	17	439.3	540.0	0.63	0.80	0.53
SRR4818A-470M	47	± 20	16	504.1	630.0	0.60	0.75	0.47

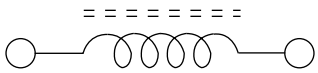
How to Order

SRR4818A - 1R0Y

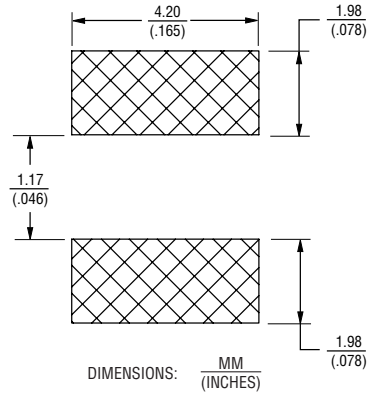
Model

Value Code (see table)

Electrical Schematic



Recommended Layout



Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

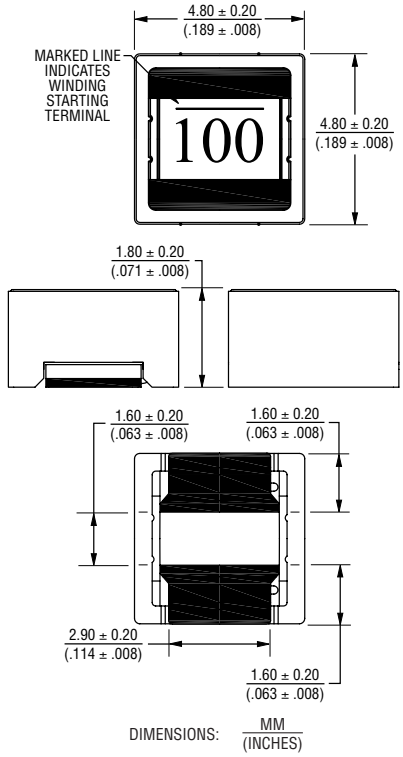
General Specifications

Operating Temp..... -40 °C to +150 °C
(Temperature rise included)
Storage Temperature ... -40 °C to +150 °C
Temperature Rise
..... 20 °C typ. at rated Irms[1]
40 °C typ. at rated Irms[2]
Rated Current
..... Inductance drops 35 % at Isat
Moisture Sensitivity Level 1
ESD Classification (HBM)..... N/A

Materials

Core..... Ferrite
Wire .....Enameled copper
Terminal Finish ..... SnAgCu
Packaging..... 800 pcs. per 7-inch reel

Product Dimensions



Americas: Tel: +1 951-781-5500
Email: americus@bourns.com
Mexico: Tel: +52-614-478-0400
Email: mexicus@bourns.com
Asia: Tel: +886-2-2562-4117
Email: asiacus@bourns.com
EMEA: Tel: +36 88 885 877
Email: eurocus@bourns.com
www.bourns.com

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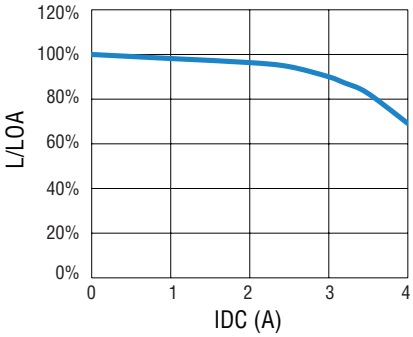
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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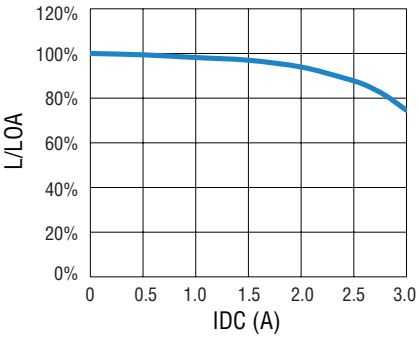
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Inductance vs. IDC

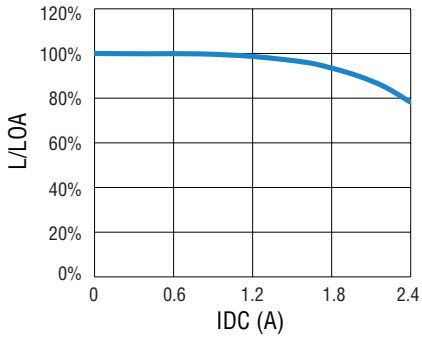
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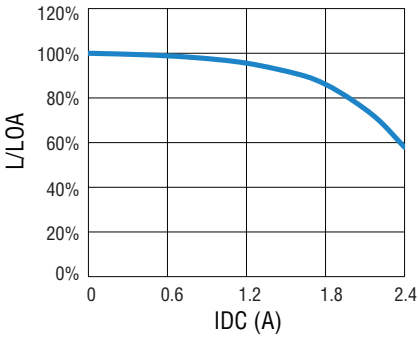
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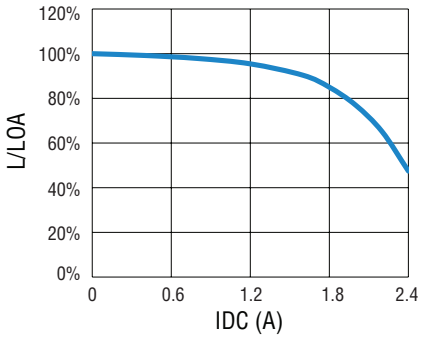
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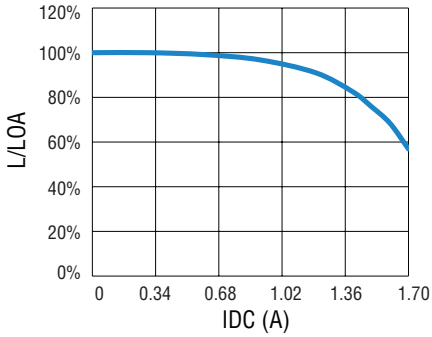
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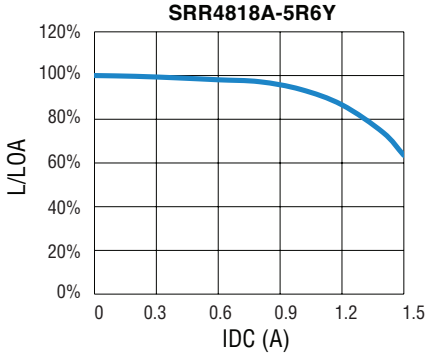
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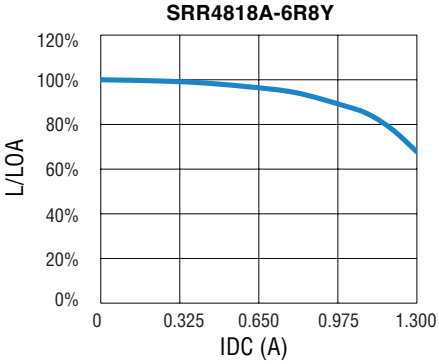
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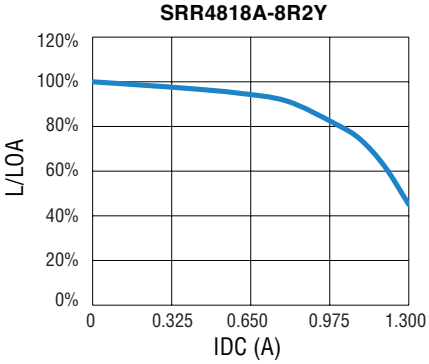
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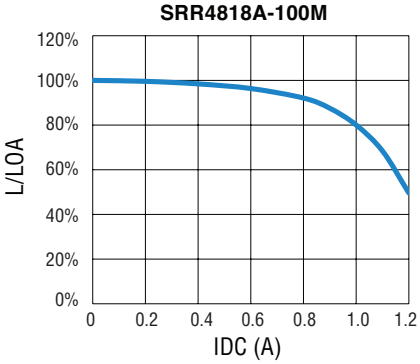
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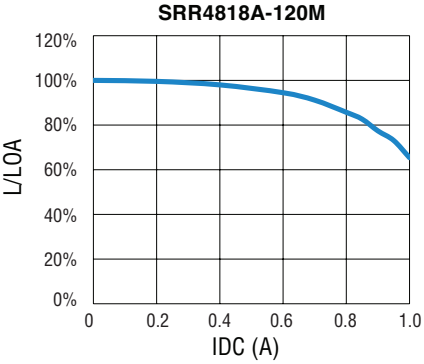
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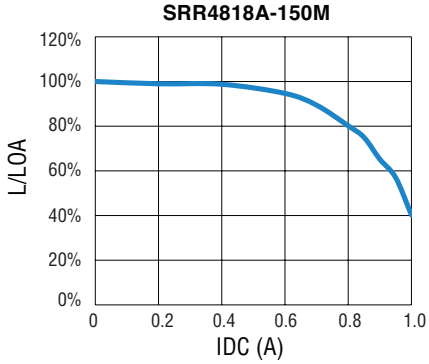
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SRR4818A-120M



SRR4818A-150M

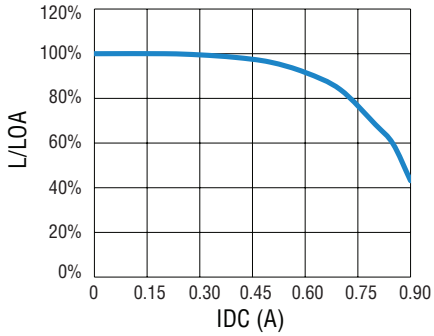


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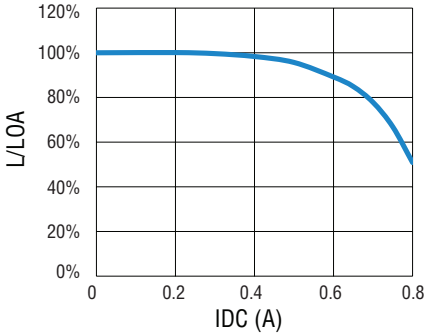
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Inductance vs. IDC (Continued)

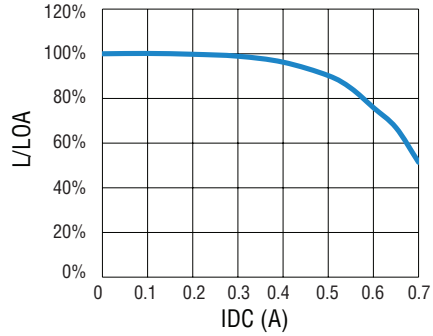
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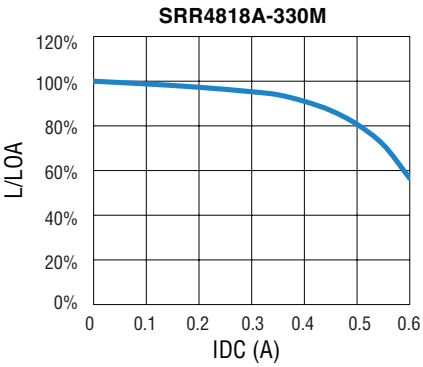
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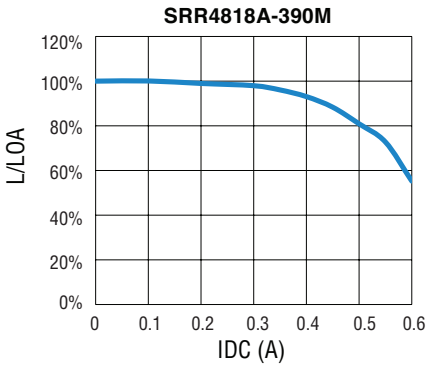
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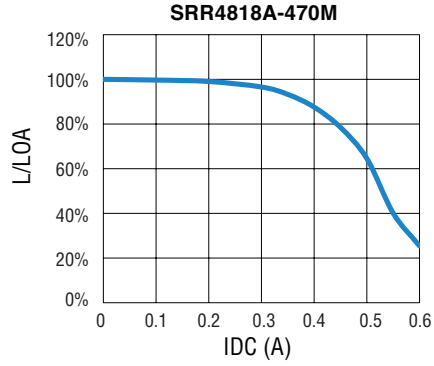
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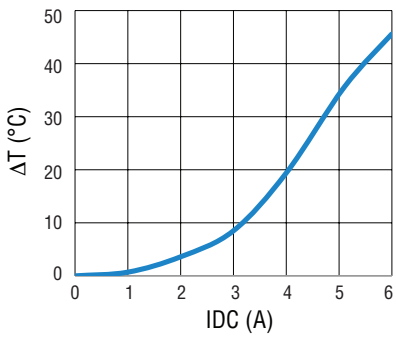


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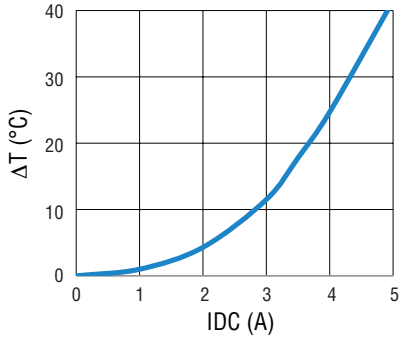


Temperature vs. IDC

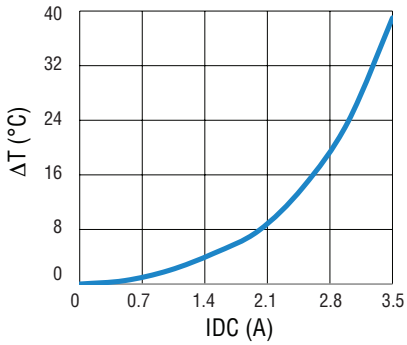
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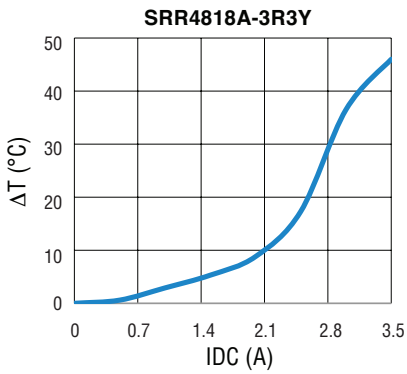
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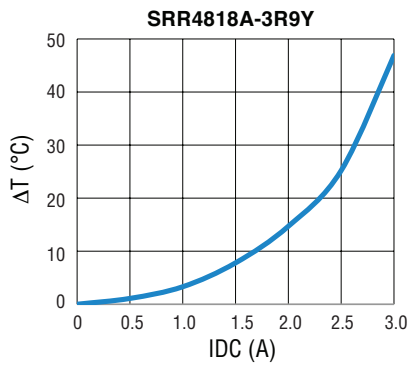
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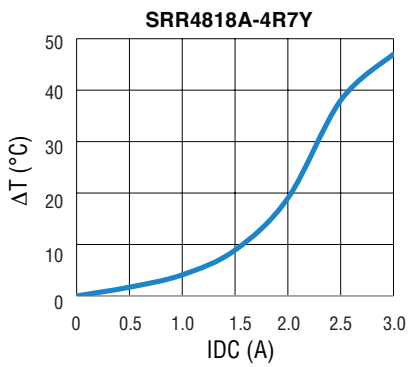
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SRR4818A-3R9Y



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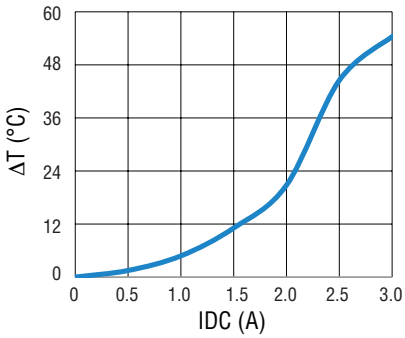


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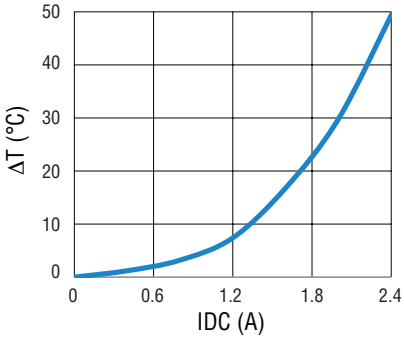
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Temperature vs. IDC (Continued)

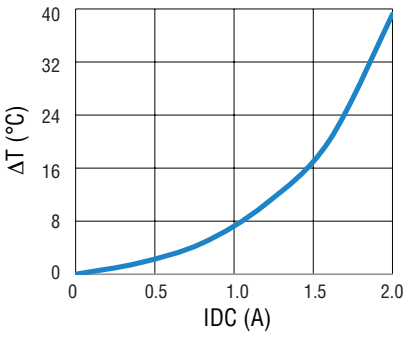
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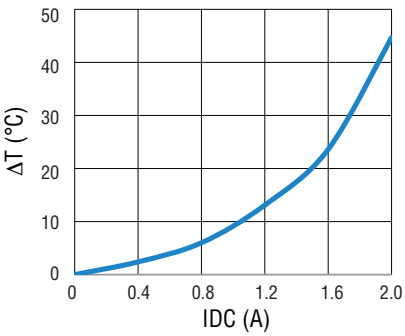
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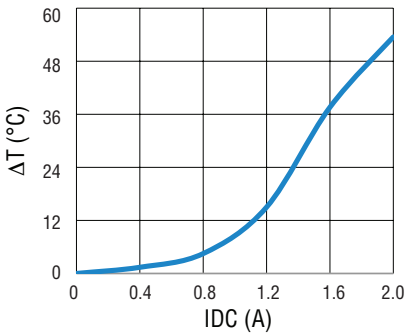
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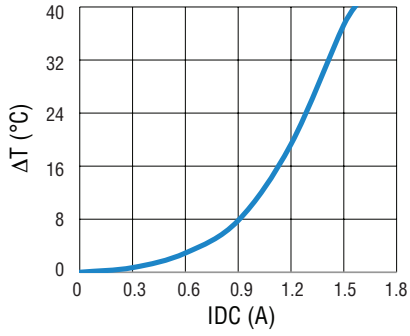
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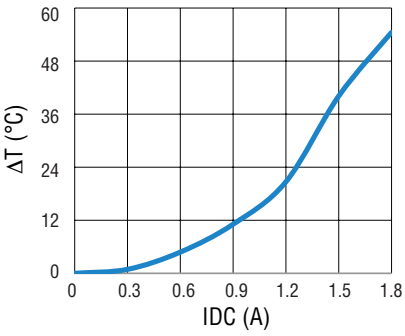
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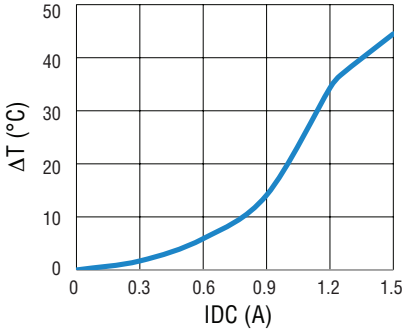
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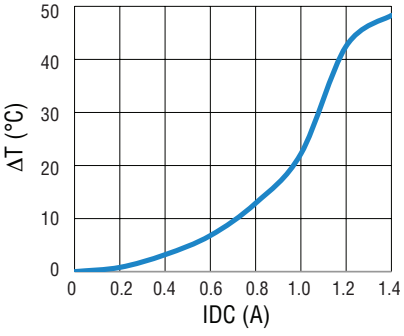
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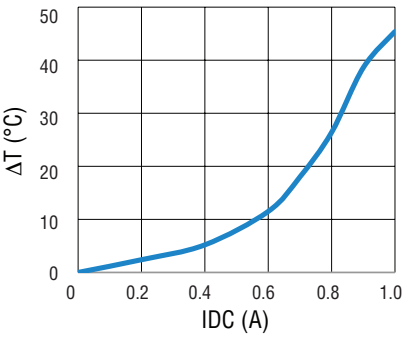
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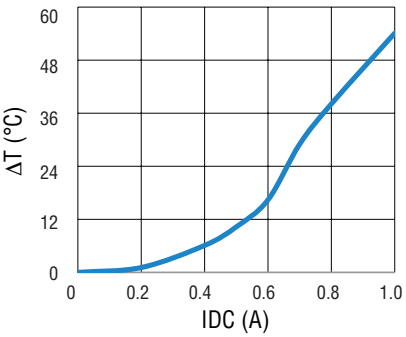
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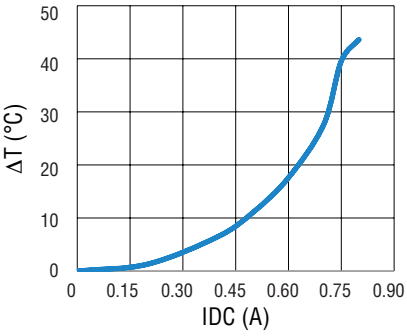
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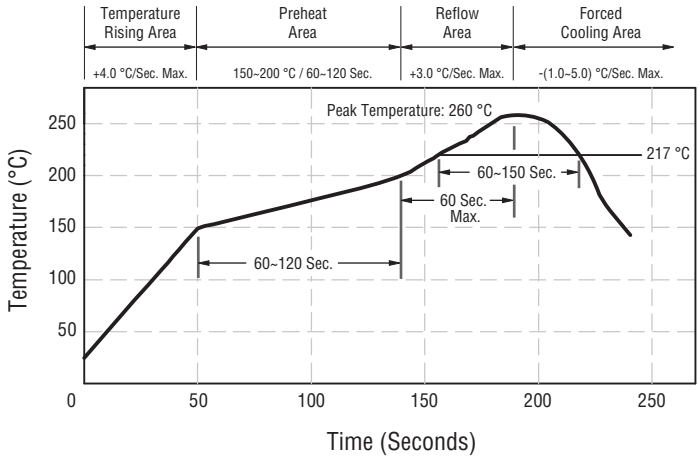
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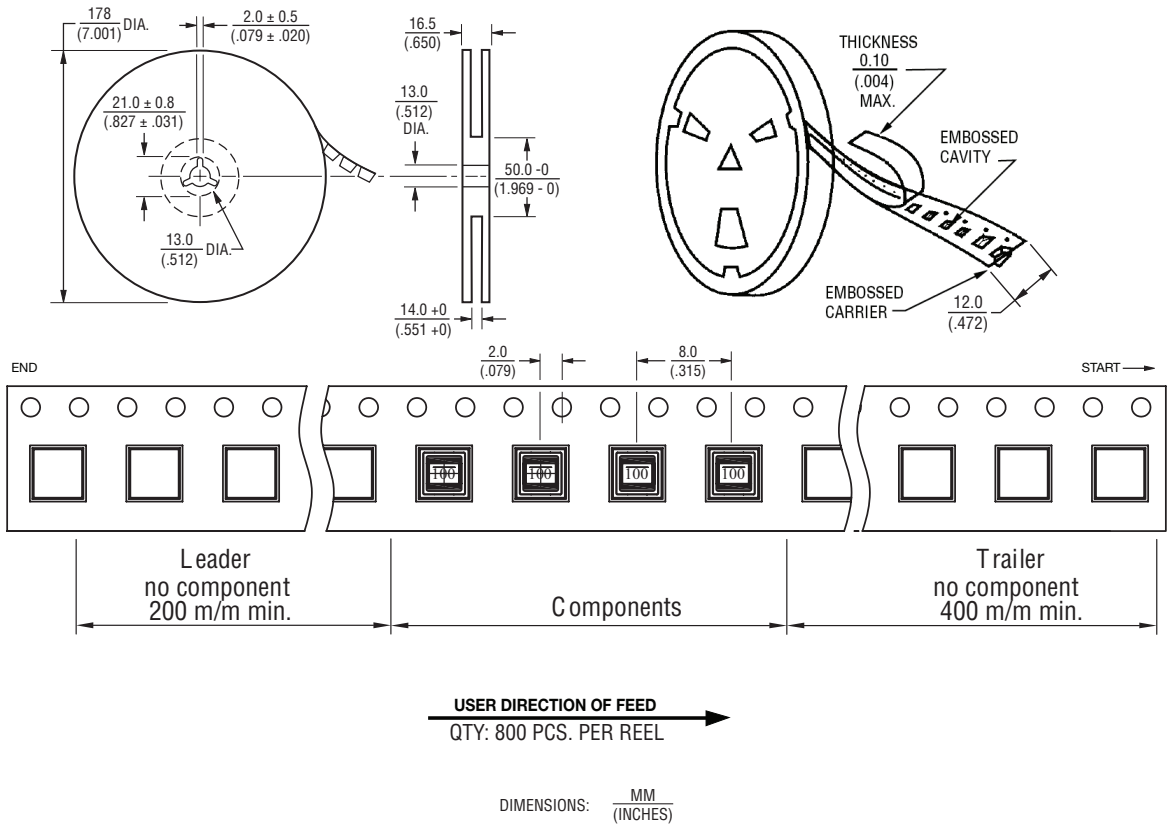
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Soldering Profile



Peak Temperature: 260 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 60~150 sec. max.

Packaging Specifications



REV. 08/25

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- Bourns considers implantable/invasive devices and devices/procedures designed as life-supporting or life-sustaining by the U.S. Food and Drug Administration or equivalent organizations outside of the United States as "life-critical" medical applications. Bourns expressly identifies those Bourns® standard products that are suitable for use in typical medical applications that are not life-critical in its publication entitled "Bourns Medical Grade Component Guide."

- Bourns expressly identifies those Bourns® standard products that are suitable for use in typical automotive applications associated with any Automate Safety Integrity Level (ASIL) in its publication entitled "Bourns Automotive Grade Component Guide." Bourns' designation of Bourns® product as compliant with the AEC-Q standard does not by itself mean that Bourns has approved such product for use in an automotive application.

- Bourns expressly identifies Bourns® standard products that are suitable for use in the typical aviation applications/systems requiring System Design Assurance Level (RTCA DO-254 DAL) of C, D or E in its publication entitled "Bourns Civilian Aerospace/Aviation Grade Component Guide." Bourns does not test its products for compliance with United States Federal Aviation Administration standards or any other generally equivalent governmental organization standard applicable to products designed or manufactured for use in aviation applications. Use of Bourns® standard components in aviation applications associated with RTCA DO-254 DAL A or B without proper approval noted above shall be at the user's sole risk.

- Bourns will review and authorize on a case-by-case basis the use of Bourns® standard products which are at least AEC-Q compliant in space-related civil applications (rockets, satellites) with a negotiated cross-waiver and indemnity agreement.

The use and level of testing applicable to Bourns® custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns® custom products are specially designed. Absent a written agreement between Bourns and the user regarding the use and level of such testing, the above provisions applicable to Bourns® standard products shall also apply to such Bourns® custom products.

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