



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 ($\text{m}\Omega$)		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) _____

BOURNS®

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: euocus@bourns.com

www.bourns.com



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.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Additional Information

Click these links for more information:



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 I_{rms}^1
..... 40 °C typ. at rated I_{rms}^2

Rated Current

..... Inductance drops 35 % at I_{sat}

Moisture Sensitivity Level.....1

ESD Classification (HBM)..... N/A

Materials

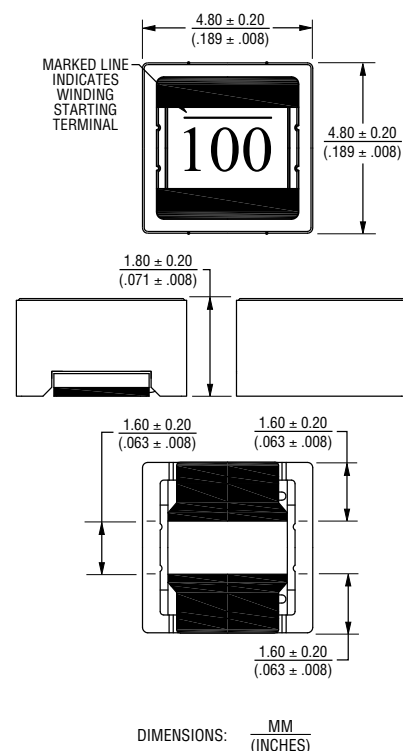
Core..... Ferrite

Wire Enameled copper

Terminal Finish Sn

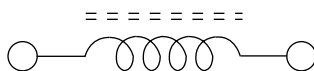
Packaging..... 800 pcs. per 7-inch reel

Product Dimensions

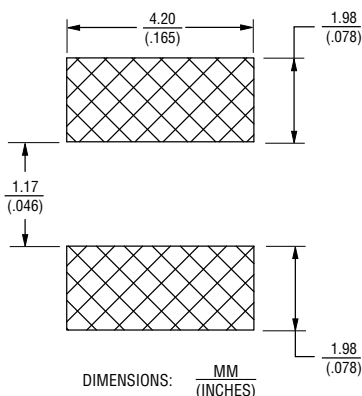


DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Electrical Schematic



Recommended Layout

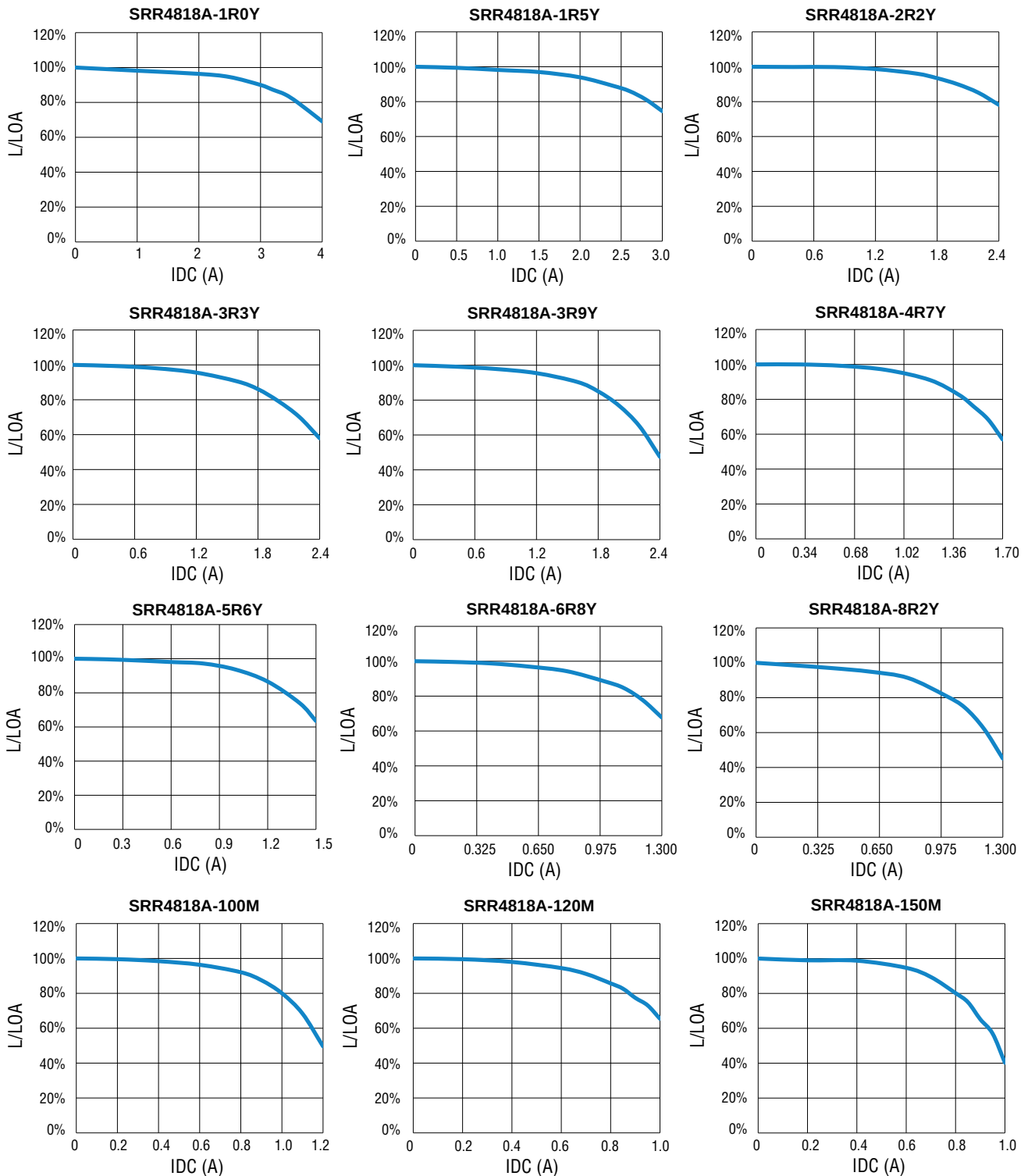


DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

SRR4818A Series – Shielded Power Inductors

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Inductance vs. IDC



Specifications are subject to change without notice.

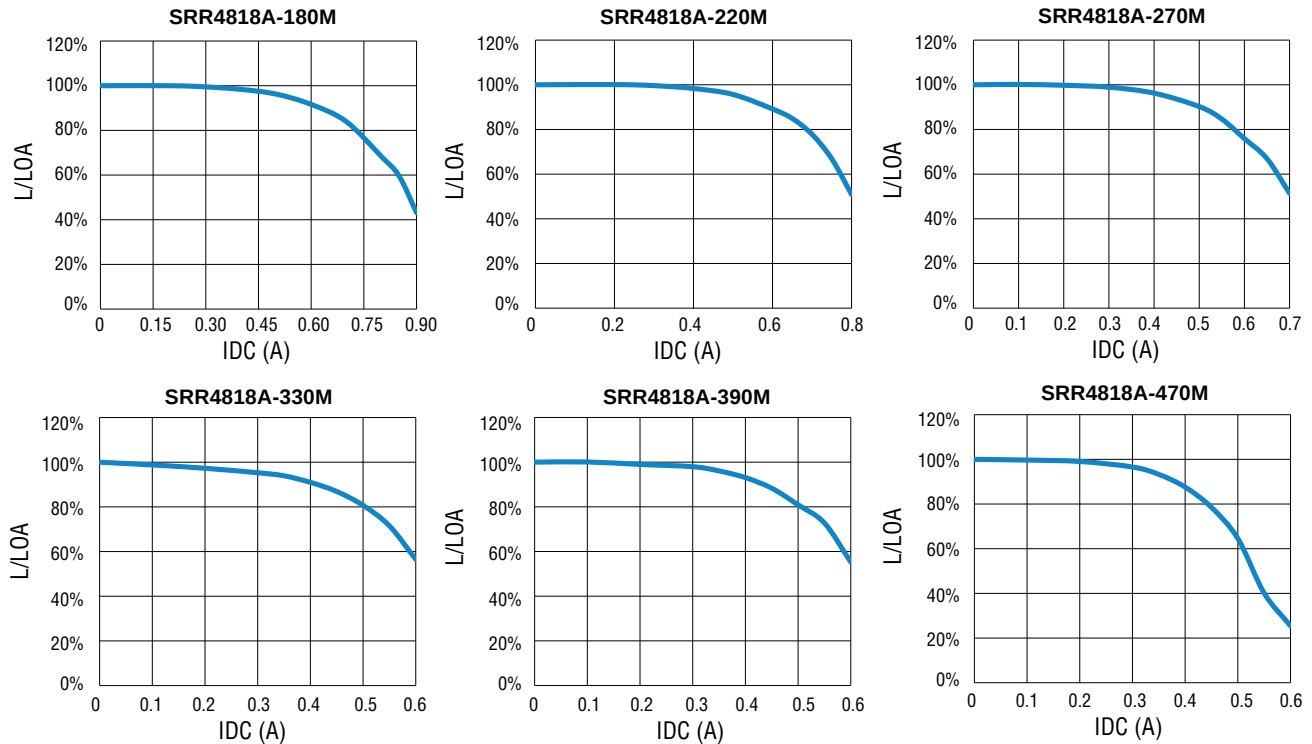
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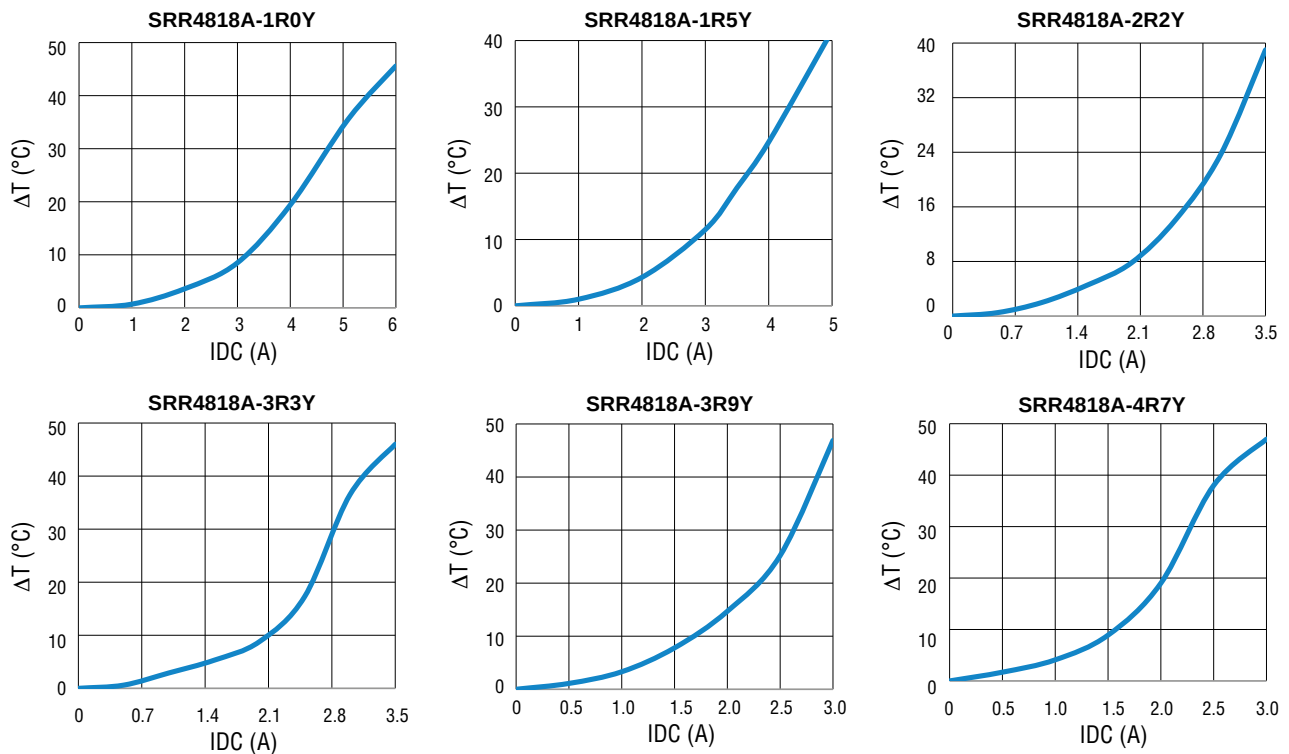
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Inductance vs. IDC (Continued)



Temperature vs. IDC



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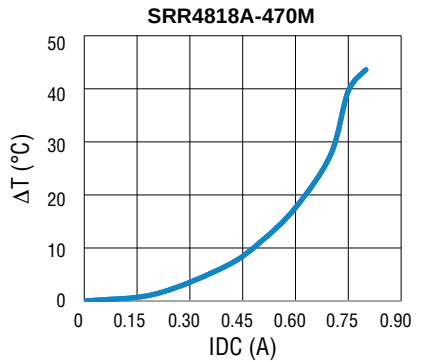
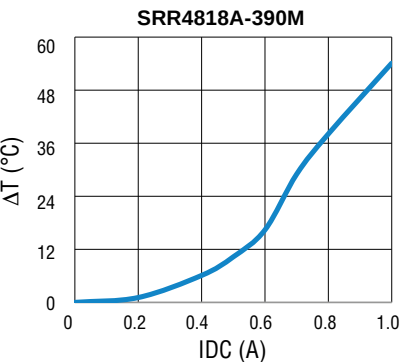
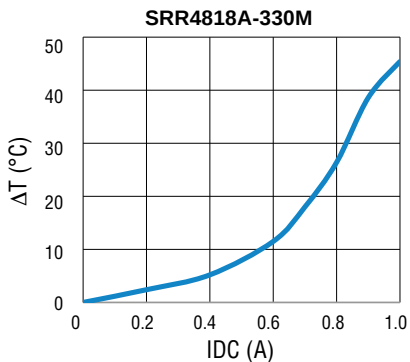
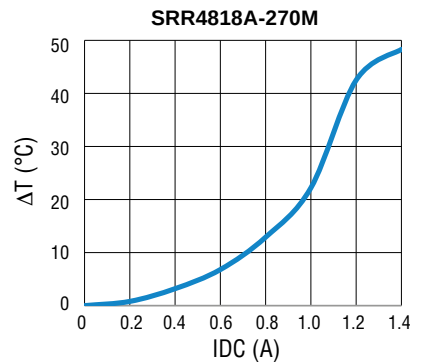
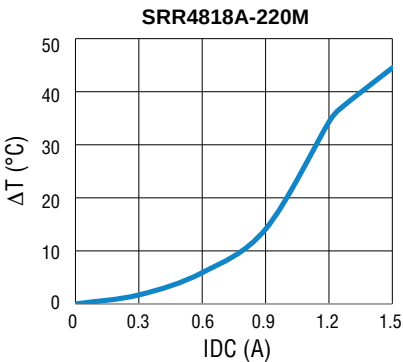
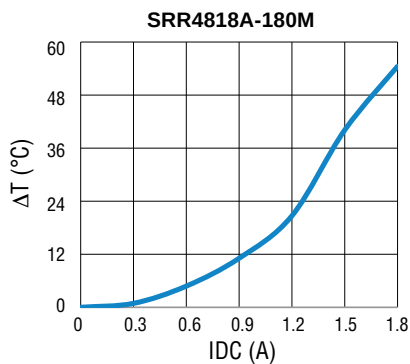
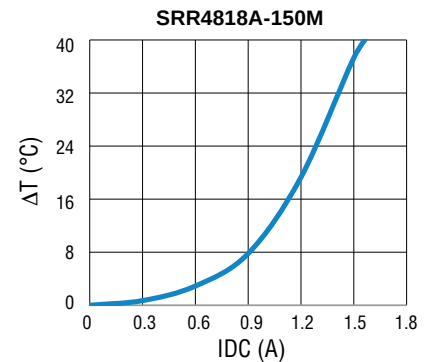
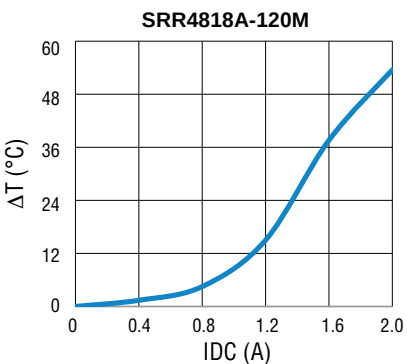
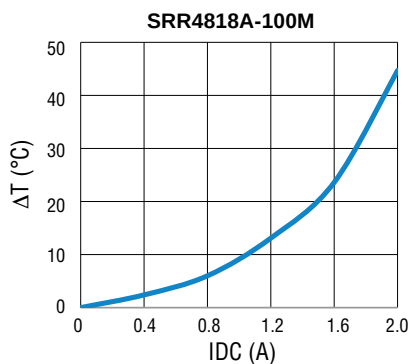
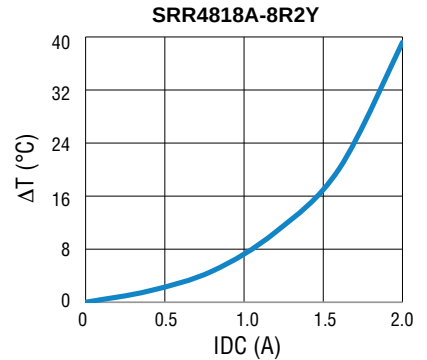
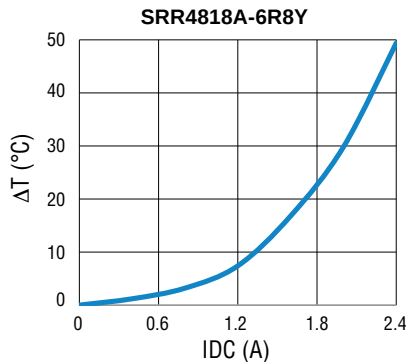
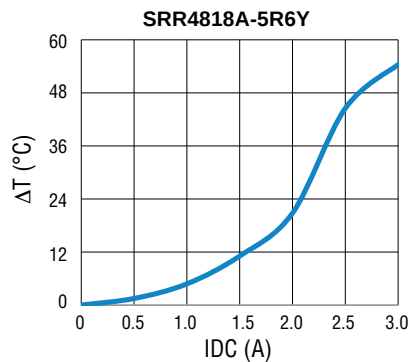
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Temperature vs. IDC (Continued)



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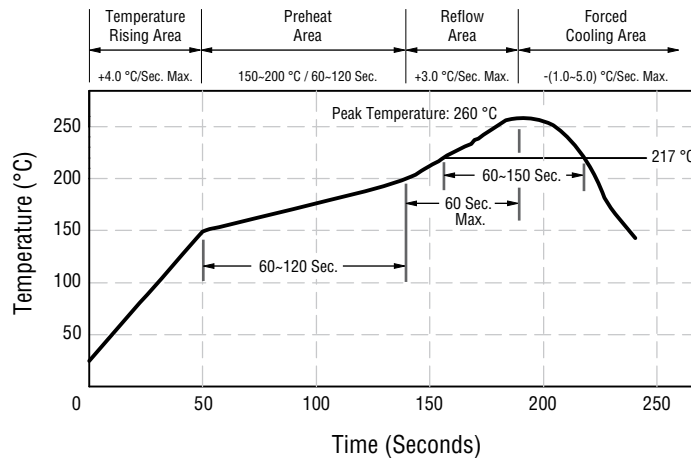
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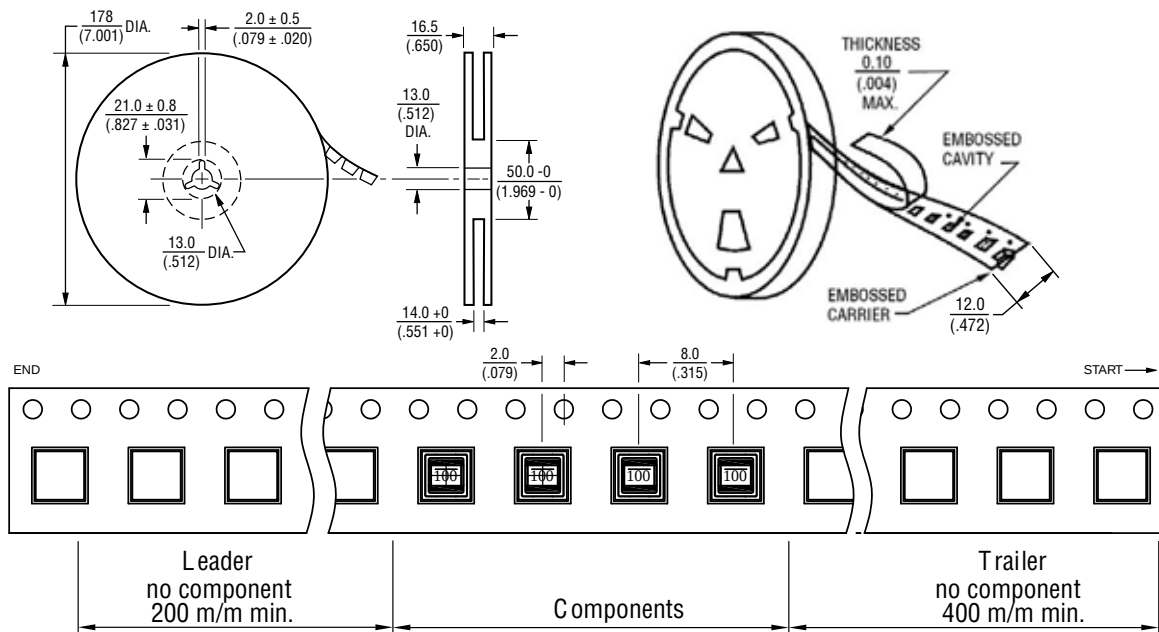
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Soldering Profile



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

Packaging Specifications



USER DIRECTION OF FEED
 QTY: 800 PCS. PER REEL

DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

REV. 06/24

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