



**THE DATASHEET OF  
SRR3818A-1R5Y**





## Features

- Shielded construction
- Inductance range: 1 to 100  $\mu\text{H}$
- Heating current up to 3.6 A
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

# SRR3818A Series - Shielded Power Inductors

## Electrical Specifications @ 25 °C

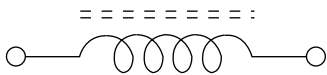
Bourns Part Number	Inductance @ 100 kHz/0.1 V		SRF (MHz) Typ.	DCR (m $\Omega$ )		I rms <sup>1</sup> (A) Typ.	I rms <sup>2</sup> (A) Typ.	I sat (A)
	L ( $\mu\text{H}$ )	Tol. (%)		Typ.	Max.			
SRR3818A-1R0Y	1.0	± 30	165	27.5	37	2.75	3.6	2.1
SRR3818A-1R5Y	1.5	± 30	125	33	47	2.5	3.1	1.6
SRR3818A-2R2Y	2.2	± 30	95	45.5	60	2	2.6	1.4
SRR3818A-2R7Y	2.7	± 30	90	49.5	65	1.9	2.5	1.3
SRR3818A-3R3Y	3.3	± 30	75	64.5	85	1.7	2.1	1.15
SRR3818A-3R9Y	3.9	± 30	70	80	105	1.6	2	1.05
SRR3818A-4R7Y	4.7	± 30	60	90	120	1.5	1.9	0.95
SRR3818A-6R8Y	6.8	± 30	50	125	160	1.25	1.6	0.8
SRR3818A-100M	10	± 20	40	180	235	1	1.3	0.65
SRR3818A-150M	15	± 20	30	260	340	0.8	1.05	0.55
SRR3818A-220M	22	± 20	25	395	500	0.65	0.8	0.43
SRR3818A-330M	33	± 20	20	590	740	0.5	0.65	0.34
SRR3818A-470M	47	± 20	15	825	1030	0.45	0.56	0.3
SRR3818A-680M	68	± 20	13	1280	1600	0.38	0.46	0.24
SRR3818A-101M	100	± 20	11	2040	2600	0.28	0.34	0.2

## How to Order

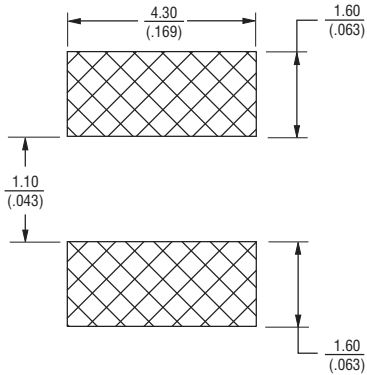
**SRR3818A - 1R0Y**

Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

## Electrical Schematic



## Recommended Layout



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

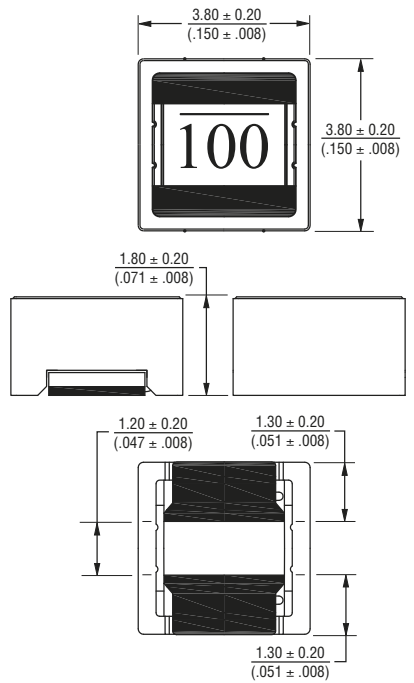
## General Specifications

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<sub>rms</sub><sup>1</sup>  
 ..... 40 °C typ. at rated I<sub>rms</sub><sup>2</sup>  
 Rated Current  
 ..... Inductance drops 35 % at I<sub>sat</sub>  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

## Materials

Core..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging..... 1000 pcs. per 7-inch reel

## Product Dimensions



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



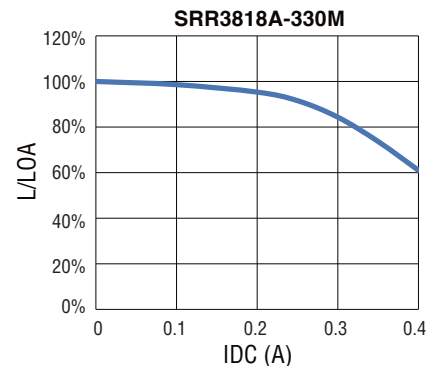
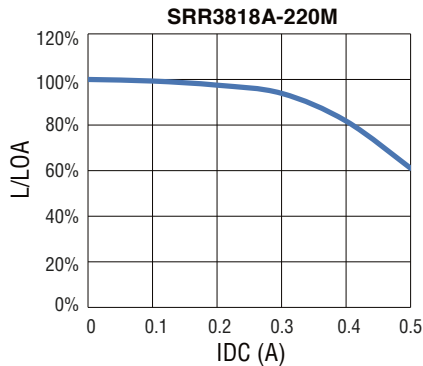
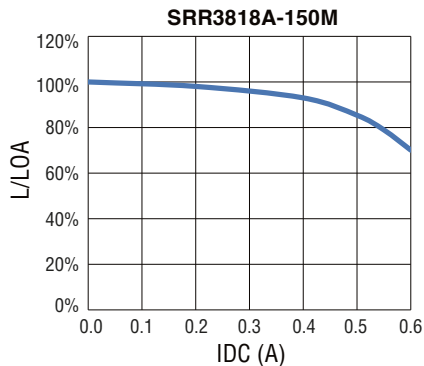
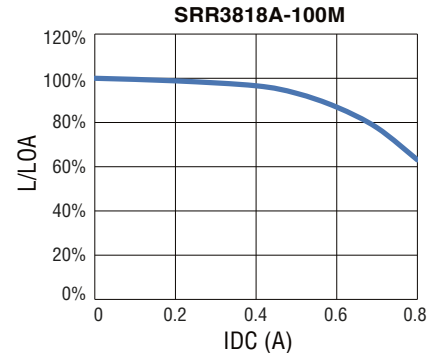
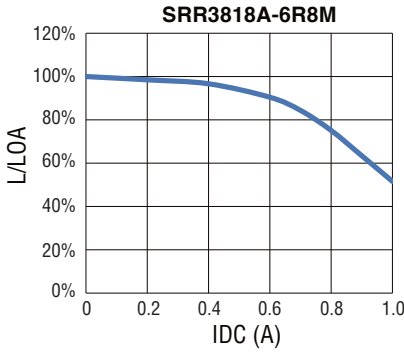
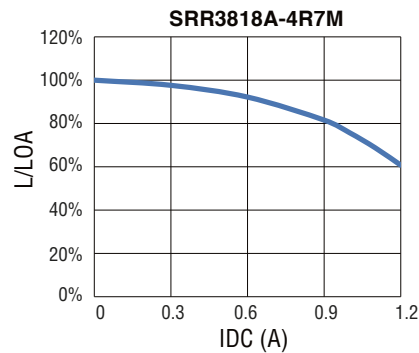
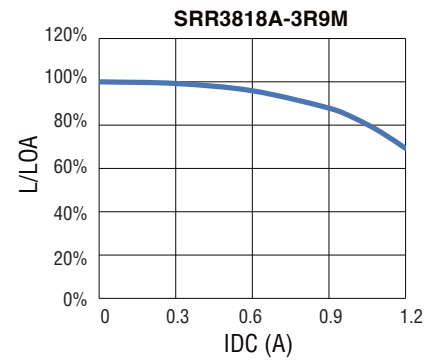
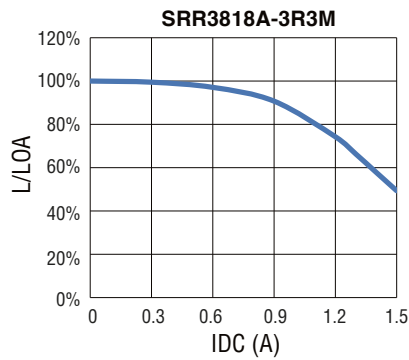
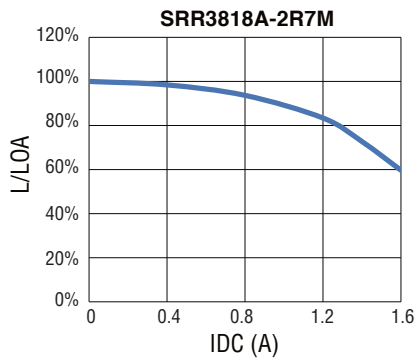
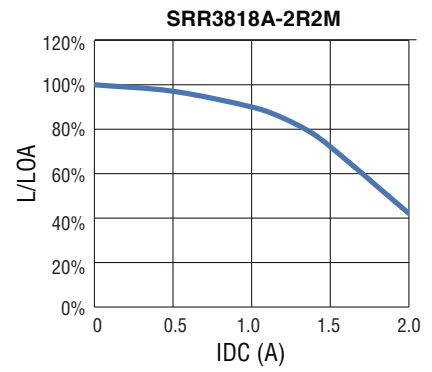
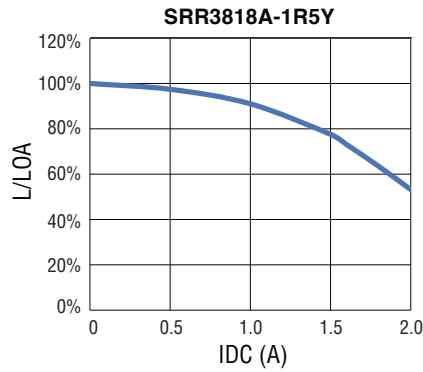
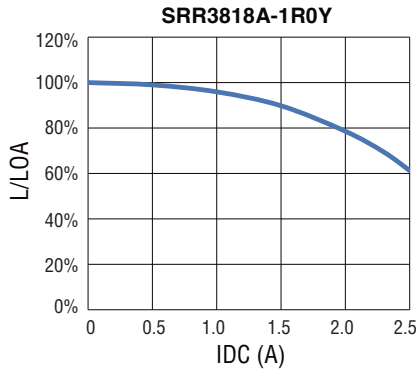
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*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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# SRR3818A Series - Shielded Power Inductors

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## Inductance vs. IDC



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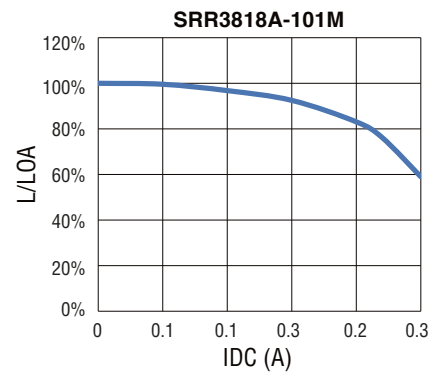
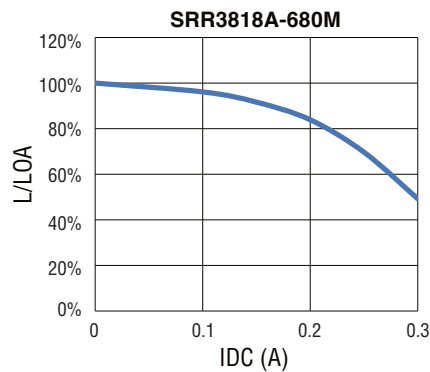
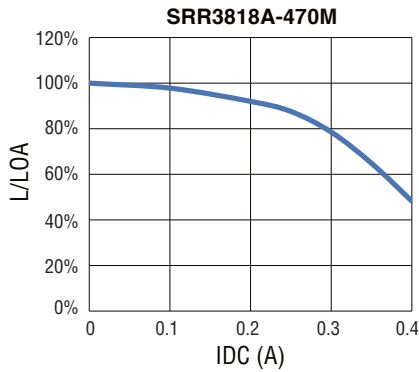
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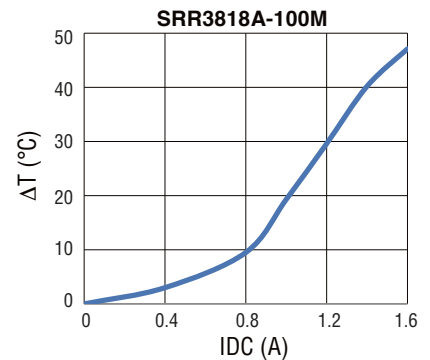
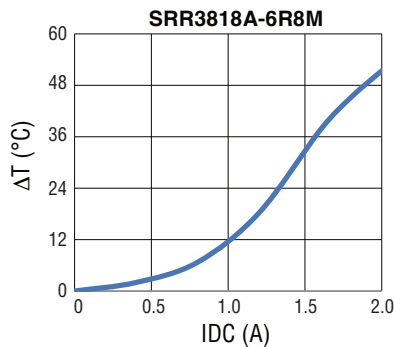
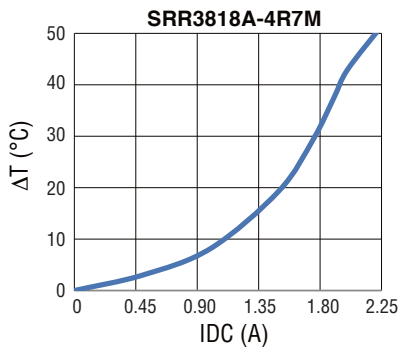
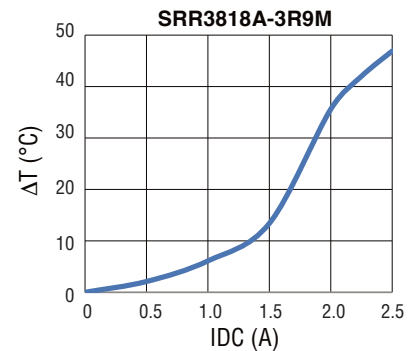
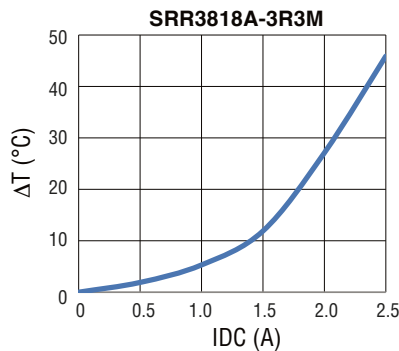
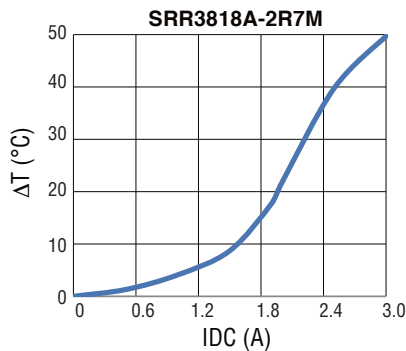
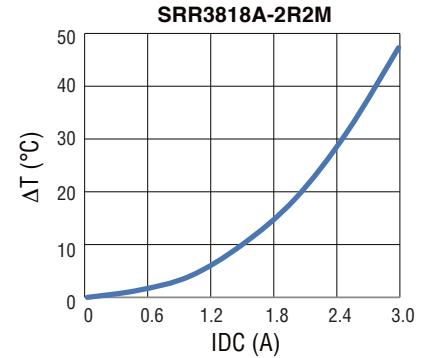
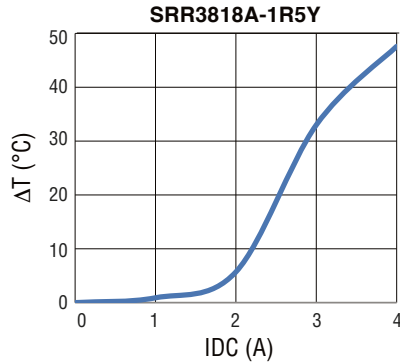
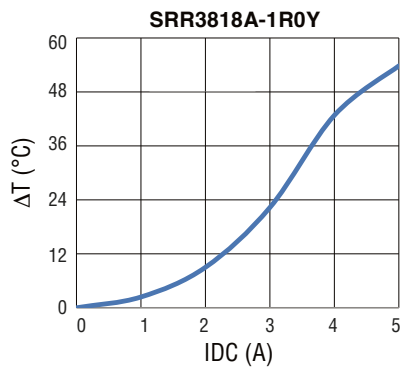
# SRR3818A Series - Shielded Power Inductors

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## Inductance vs. IDC (Continued)



## Temperature vs. IDC



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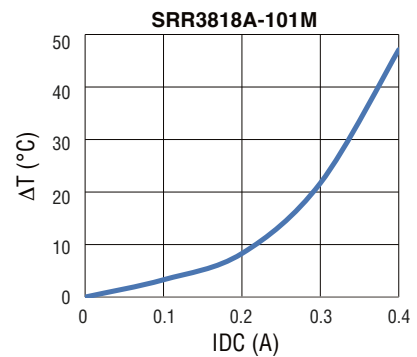
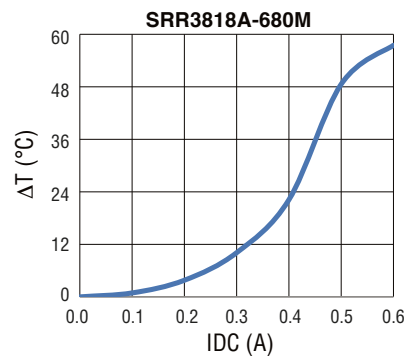
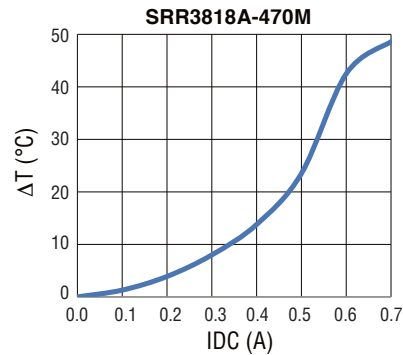
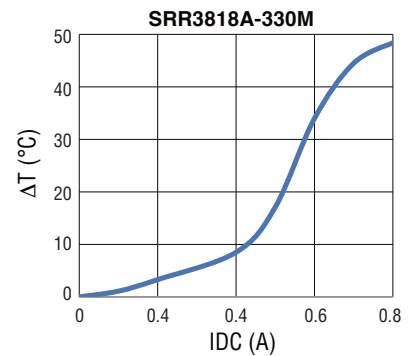
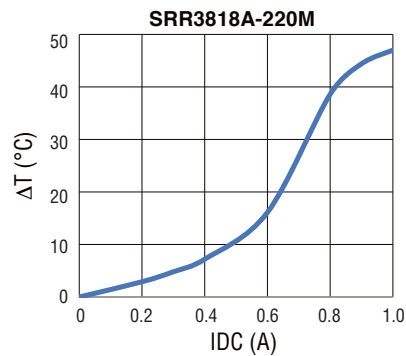
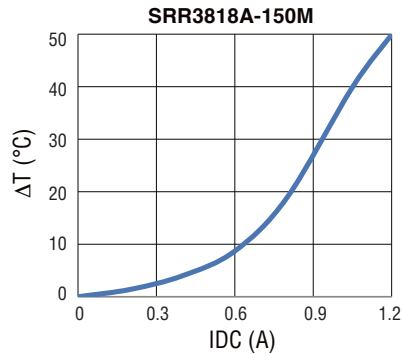
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# SRR3818A Series - Shielded Power Inductors

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## Temperature vs. IDC (Continued)



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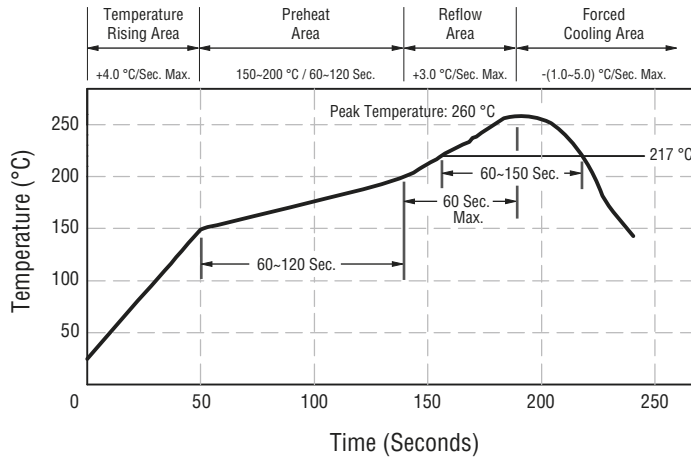
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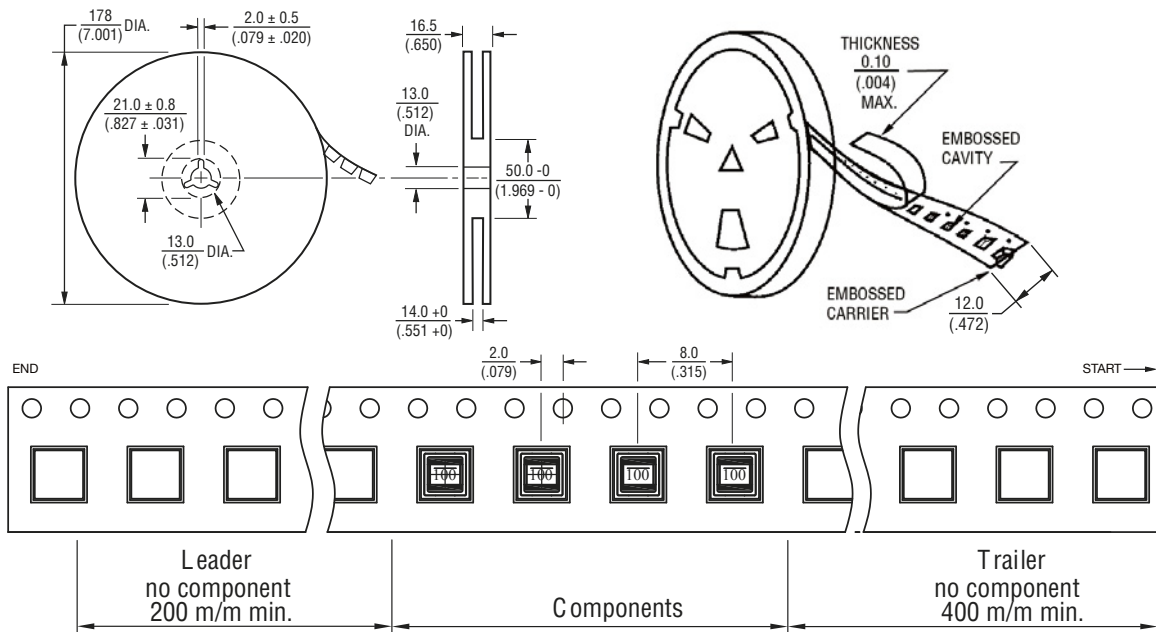
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## Soldering Profile



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: 1000 PCS. PER REEL

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

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