



Features

- Shielded construction
- Inductance range: 1 to 100 μH
- 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 ($\text{m}\Omega$)		I_{rms}^1 (A) Typ.	I_{rms}^2 (A) Typ.	I_{sat} (A)
	L (μH)	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) _____

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

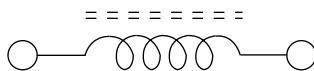
Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877

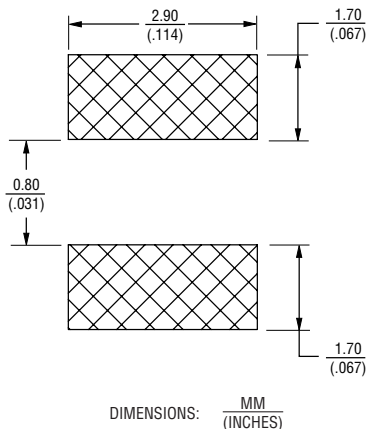
Email: euocus@bourns.com

www.bourns.com

Electrical Schematic



Recommended Layout



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

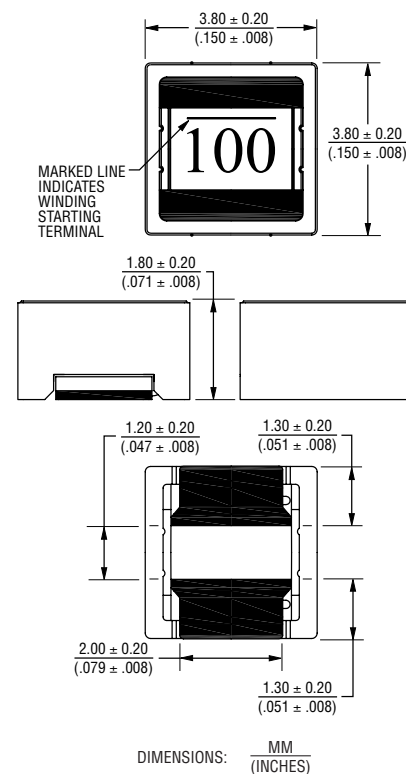
Core..... Ferrite

Wire..... Enameled copper

Terminal Finish SnAgCu

Packaging..... 1000 pcs. per 7-inch reel

Product Dimensions



CALIFORNIA WARNING Can expose you to lead, a carcinogen and reproductive toxicant.

See www.P65Warnings.ca.gov

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

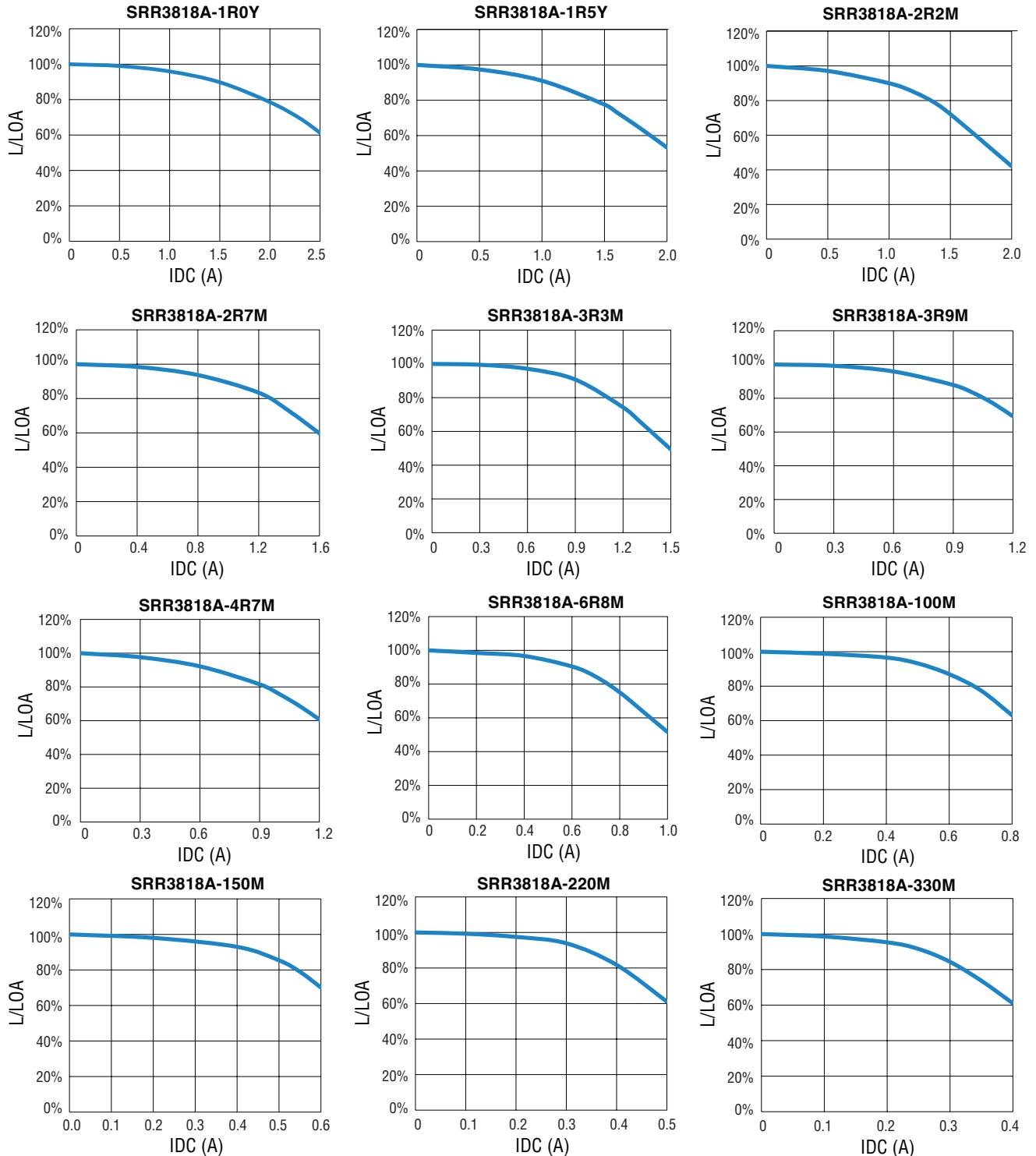
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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Inductance vs. IDC



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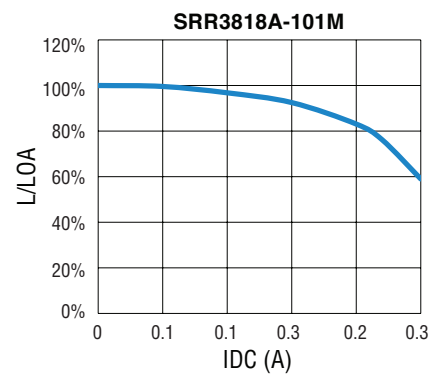
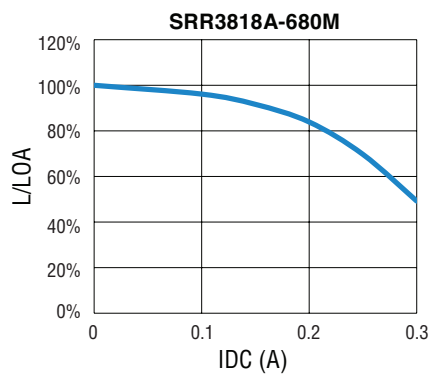
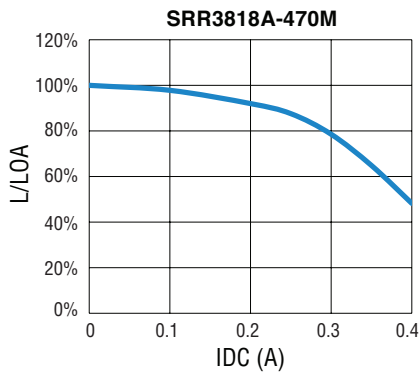
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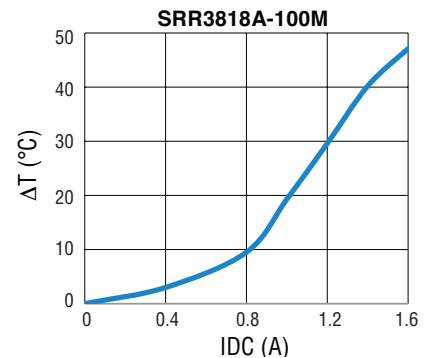
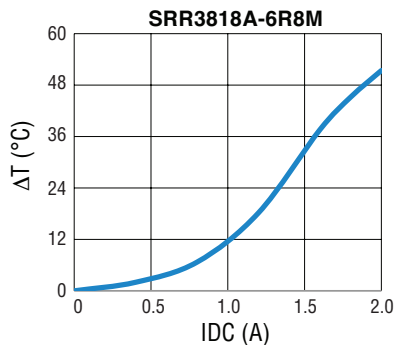
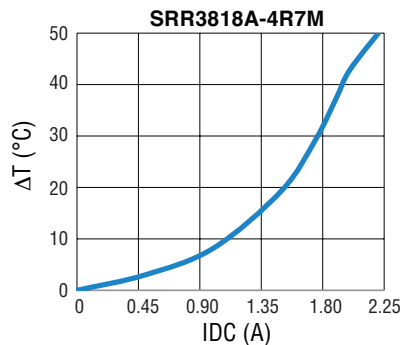
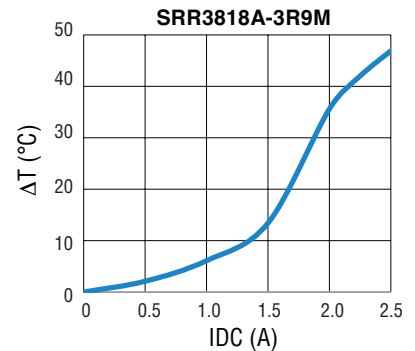
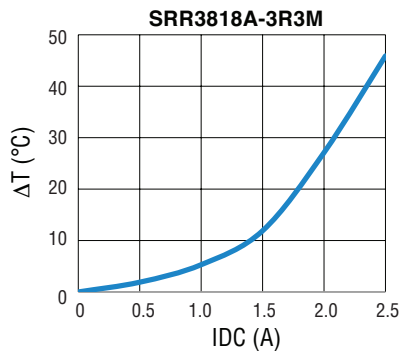
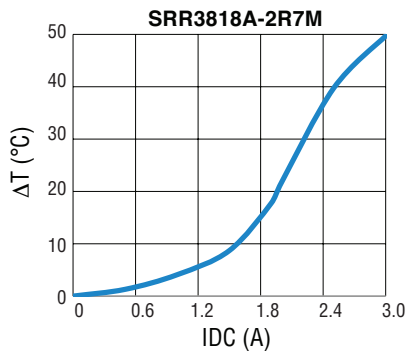
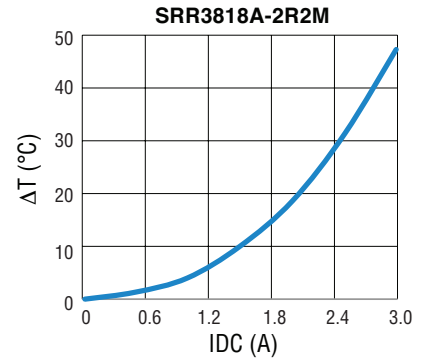
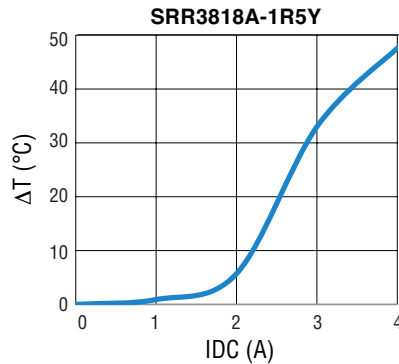
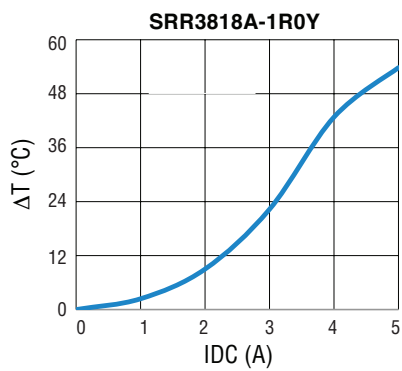
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Inductance vs. IDC (Continued)



Temperature vs. IDC



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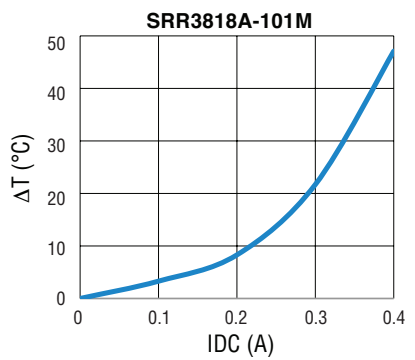
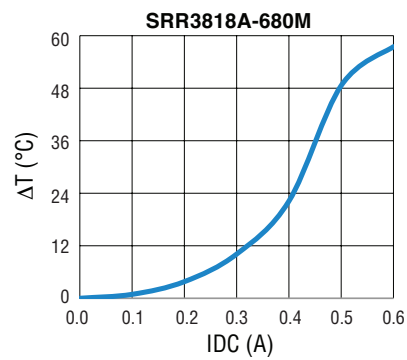
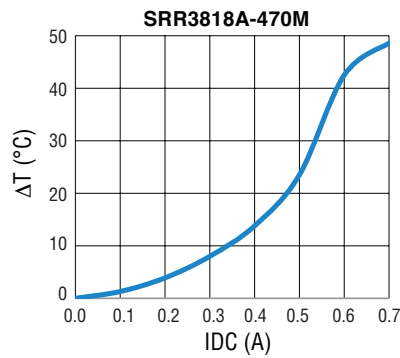
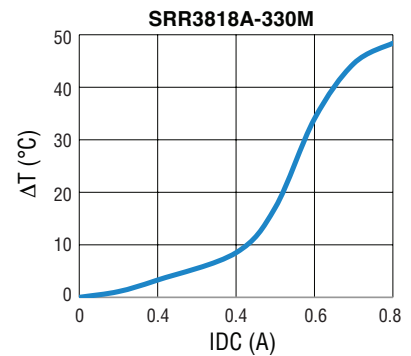
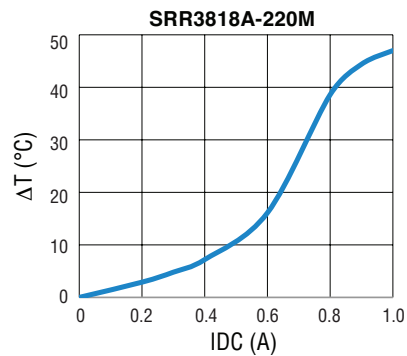
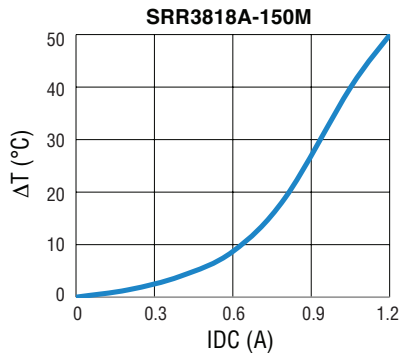
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Temperature vs. IDC (Continued)



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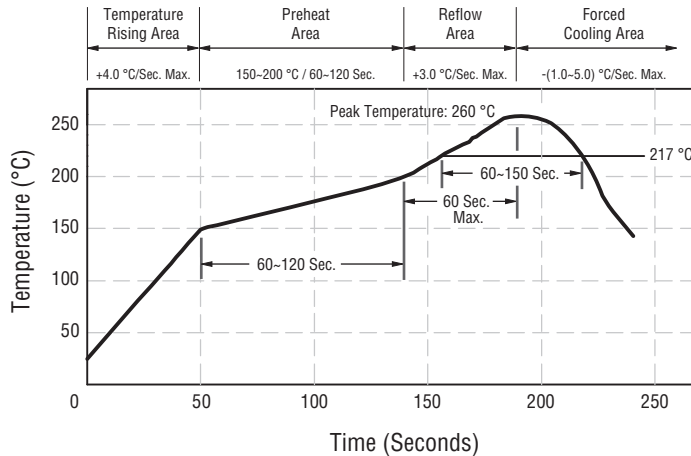
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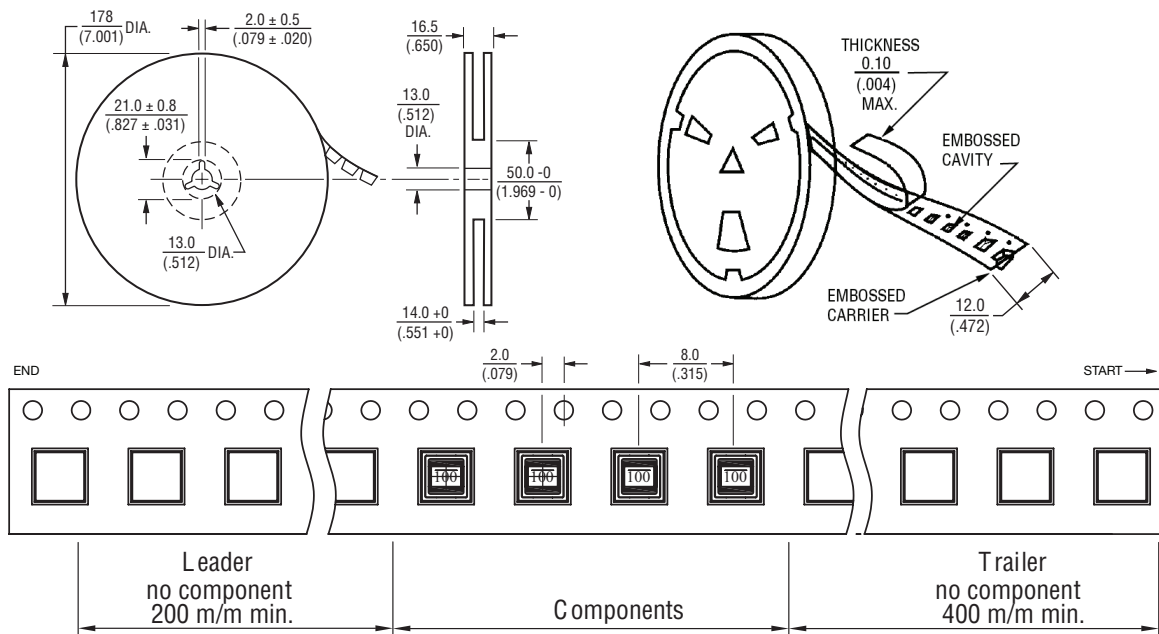
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Soldering Profile



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: 1000 PCS. PER REEL

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

REV. 08/25

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