

Date 11/22/2024 Page 1 of 6

SERIES: F2D2-2918T | DESCRIPTION: HIGH CURRENT POWER INDUCTORS

FEATURES

- Ferrite core
- Moisture Sensitivity: Level (MSL) 1
- High inductance, high current, low magnetic loss, low ESR, small parasitic capacitance
- Operating temperature -40°C to 125°C









MODEL	Inductance (Lo)	Tolerance	DC Resistance (DCR)	Saturation Current (Isat)	Temperature Rise Current (Irms)
	typ [µH]	typ [± %]	$egin{aligned} \mathbf{max} \\ [\mathbf{m}\Omega] \end{aligned}$	typ [A]	typ [A]
F2D2-2918T-3R3MC	3.30	20	2.86	92.5	28.0
F2D2-2918T-4R7MC	4.70	20	2.86	61.2	28.0
F2D2-2918T-6R8MC	6.80	20	2.86	45.0	28.0
F2D2-2918T-100MC	10.0	20	2.86	31.2	28.0
F2D2-2918T-150MC	15.0	20	2.86	21.2	28.0
F2D2-2918T-220MC	22.0	20	2.86	14.0	28.0
F2D2-2918T-330MC	33.0	20	2.86	8.70	28.0

Notes:

- 1. Referenced ambient temperature 25°C
- 2. Test Condition: 100 kHz, 0.1 Vrms
- 3. Saturation Current Isat (typ): DC current (A) that will cause L0 to drop approximately 20% lsat (max): DC current (A) that will cause L0 to drop 20% max

Temperature Rise Current - Irms (typ): DC current (A) that will cause an approximate ΔT of 40°C Irms (max): DC current (A) that will cause an approximate ΔT of 40°C max

4. Operating temperature range includes self-temperature rise

PART NUMBER KEY

Type / Product Series
F2D2-2918T - XXX XX

Type / Product Series
F2D2-2918T = High Current Power Inductors

Inductance * Inductance Tolerance

M = ±20%

^{*} Note: Inductance expressed by three figures. The unit is micro henry (µH). The first and second figures are significant digits, the third figure expresses the number of zeros which follow the two figures. If there is a decimal point, it is expressed by the capital letter "R" (3R8 = 3.8 µH). In that case, all figures are significant digits.

SAFETY AND COMPLIANCE

Parameter	Compliant
RoHS	Compliance with ROHS, Reach compliant and Halogen Free

ENVIROMENTAL

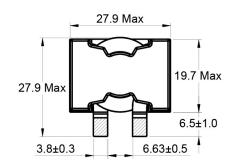
Parameter	Conditions	Min	Тур	Max	Units
Operating temperature	Including coils self-temeprature rise	-40		125	°C
Storage temperature		-40		125	°C

MECHANICAL

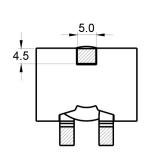
Parameter	Conditions	Min	Тур	Max	Units
Core material	Ferrite				
Dimensions	27.9 x 27.9 x 17.8				mm
Weight	36.2				g

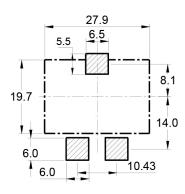
MECHANICAL DRAWING

Units: mm

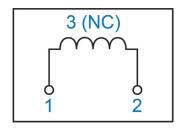




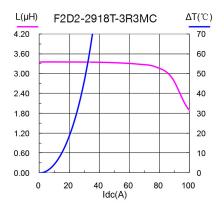


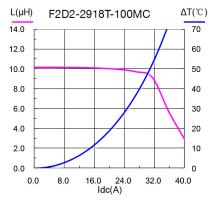


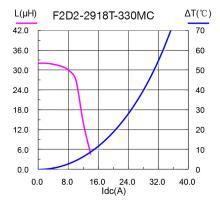
ELECTRICAL DIAGRAM

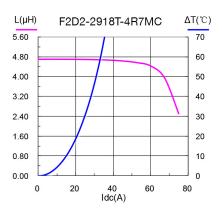


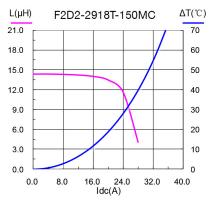
PERFORMANCE CURVES

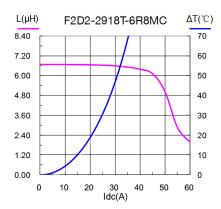


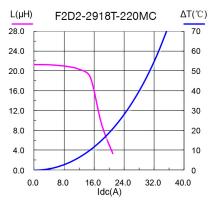




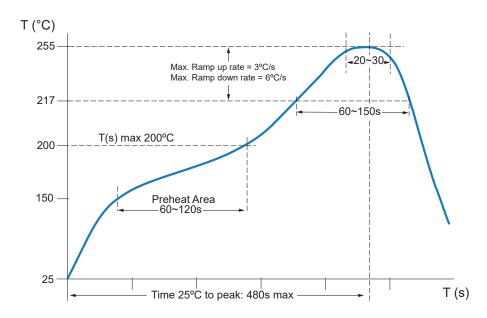








REFLOW SOLDERING TEMPERATURE CURVE

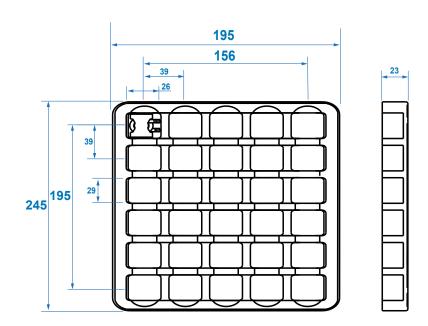


CLASSIFICATION OF PEAK PACKAGE BODY TEMPERATURE

	Doolsono Thiolsono	Package Volume			
	Package Thickness	$< 350 \text{ mm}^3$	350 ~ 2000 mm ³	> 2000 mm ³	
	< 1.6 mm	260 °C	260 °C	260 °C	
PB-Free Assembly	1.6 ~ 2.5 mm	260 °C	250 °C	245 °C	
	≥ 2.5 mm	250 °C	245 °C	245 °C	

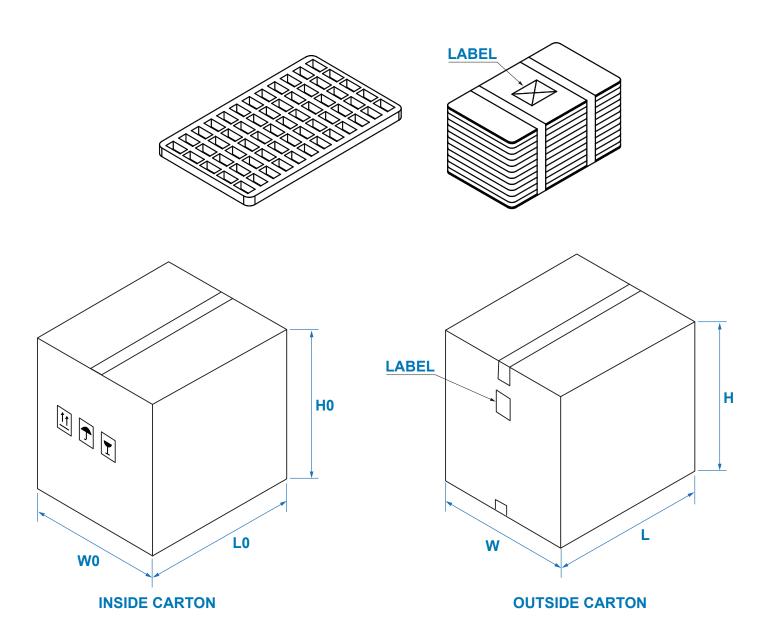
QUANTITY PER TRAY & PACKING INFORMATION

Units: mm



PACKAGE DIMENSIONS (mm)

Product Series	LO	W0	H0	L	W	Н
F2D2-2918T	260	210	235	275	232	261



QUANTITY PER PACKAGE

Product Series	Pcs per Tray	Qty of Trays	Pcs per Outside Carton
F2D2-2918T	30	9	270

Storage Conditions

- a) Product in packing storage condition: temperature 5 \sim 40 °C, RH $\leq~70~\%.$
- b) It is recommended to use inductors within 12 months of delivery for optimal performance.
- c) Avoid storing in environments prone to high temperatures, excessive humidity, dust, or corrosion.

BEL | SERIES: F2D2-2918T | DESCRIPTION: HIGH CURRENT POWER INDUCTORS

Date 11/22/2024 | Page 6 of 6

REVISION HISTORY

Rev.	Description	Date
1	initial release	November/22/2024

NUCLEAR AND MEDICAL APPLICATIONS - Products are not designed or intended for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems.

TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.



Bel Fuse Inc. 300 Executive Drive, Suite 300 West Orange, NJ 07052 United States

© 2024 Bel Fuse Inc.

Toll Free 866-239-5777
Tel 516-239-5777 | Fax 516-239-7208
sales@signaltransformer.com
techhelp@signaltransformer.com