



## 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)
	<b>typ</b> [μΗ]	<b>typ</b> [± %]	$egin{aligned} \mathbf{max} \\ [\mathbf{m}\Omega] \end{aligned}$	<b>typ</b> [A]	<b>typ</b> [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  $\Delta T$  of 40°C Irms (max): DC current (A) that will cause an approximate  $\Delta T$  of 40°C max

4. Operating temperature range includes self-temperature rise

### **PART NUMBER KEY**

<sup>\*</sup> 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**

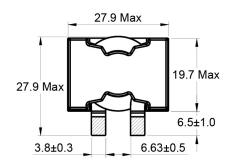
Parameter	Conditions	Min	Тур	Max	Units
Operating temperature	Including coils self-temeprature rise	-40		125	°C
Storage temperature		-40		125	°C

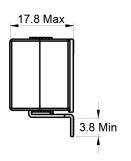
### **MECHANICAL**

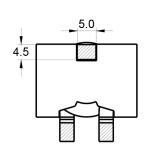
Parameter	Conditions	Min	Тур	Max	Units
Core material	Ferrite				
Dimensions	27.9 x 27.9 x 17.8				mm
Weight	36.2				g

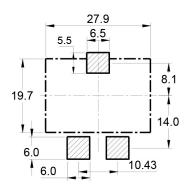
### **MECHANICAL DRAWING**

Units: mm

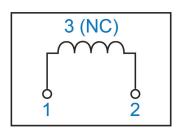


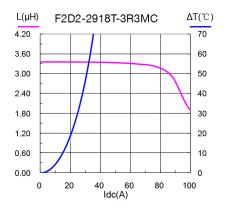


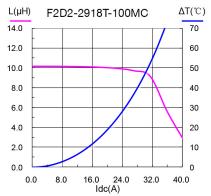


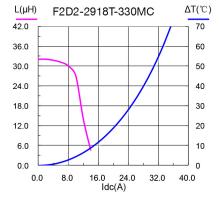


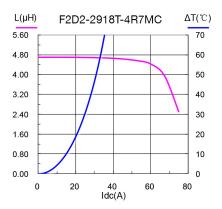
## **ELECTRICAL DIAGRAM**

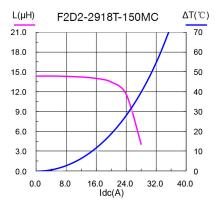


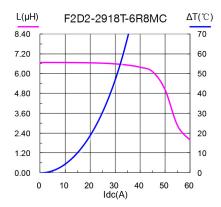


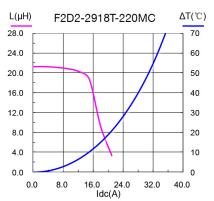




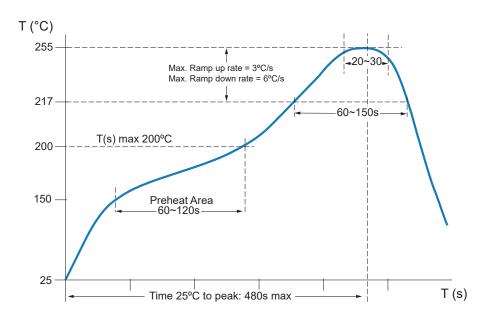








## **REFLOW SOLDERING TEMPERATURE CURVE**

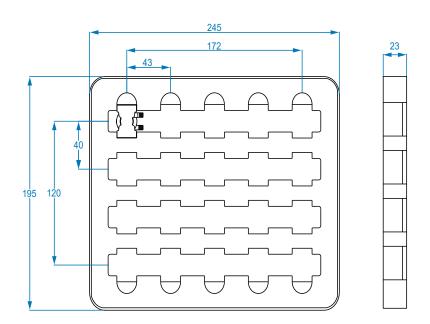


### **CLASSIFICATION OF PEAK PACKAGE BODY TEMPERATURE**

	Dockers Thiskness	Package Volume				
	Package Thickness	< 350 mm <sup>3</sup>	350 ~ 2000 mm <sup>3</sup>	> 2000 mm <sup>3</sup>		
	< 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		

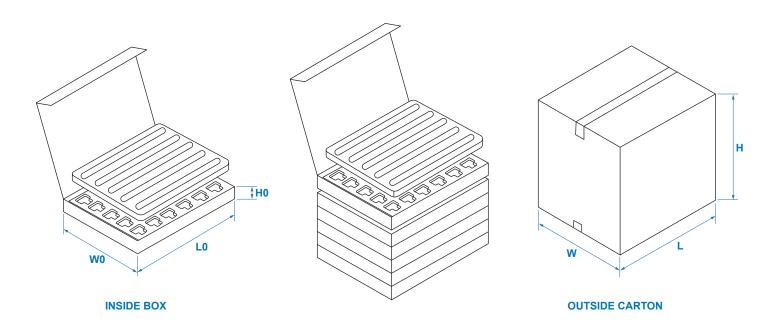
## **QUANTITY PER TRAY & PACKING INFORMATION**

Units: mm



# **PACKAGE DIMENSIONS (mm)**

<b>Product Series</b>	L0	W0	H0	L	W	Н
F2D2-2918T	265	205	30	275	232	261



## **QUANTITY PER PACKAGE**

Product Series	Pcs per Tray	Qty of Trays	Pcs per Outside Carton
F2D2-2918T	20	8	160

### **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.

### **REVISION HISTORY**

Rev.	Description	Date
1	initial release	November/22/2024
Α	packaging updated	May/11/2025

**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.

