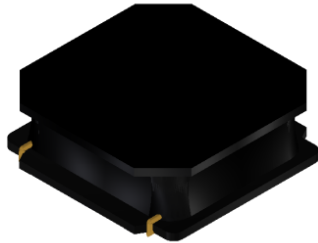
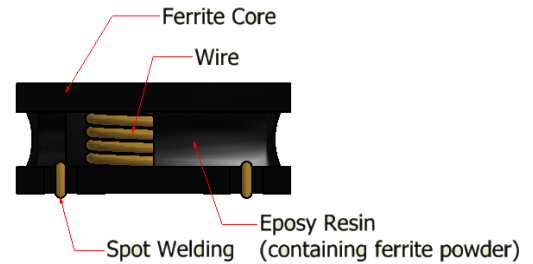


FNR50series



CONSTRUCTION



FEATURES

Magnetically structure
Low DC resistance
Large Current Capability

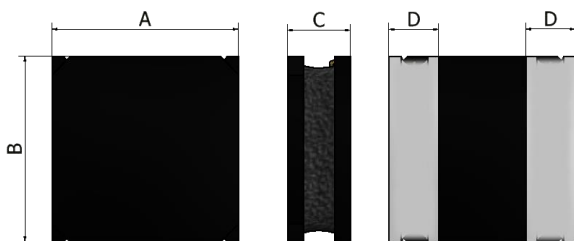
APPLICATIONS

Hard Disk Drives
Car audio equipment
Tablet PC
Navigation system
SSD
Touch Panel

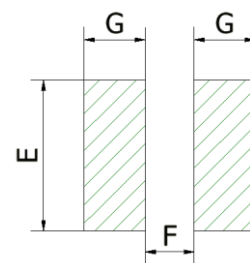
SPECIFICATIONS

Operating temperature range	-40 to +125°C
Storage temperature range	Under 25°C
Packaging style	Taping
Quantities	1,000~2,000 pieces/reel

SHAPE AND DIMENSIONS



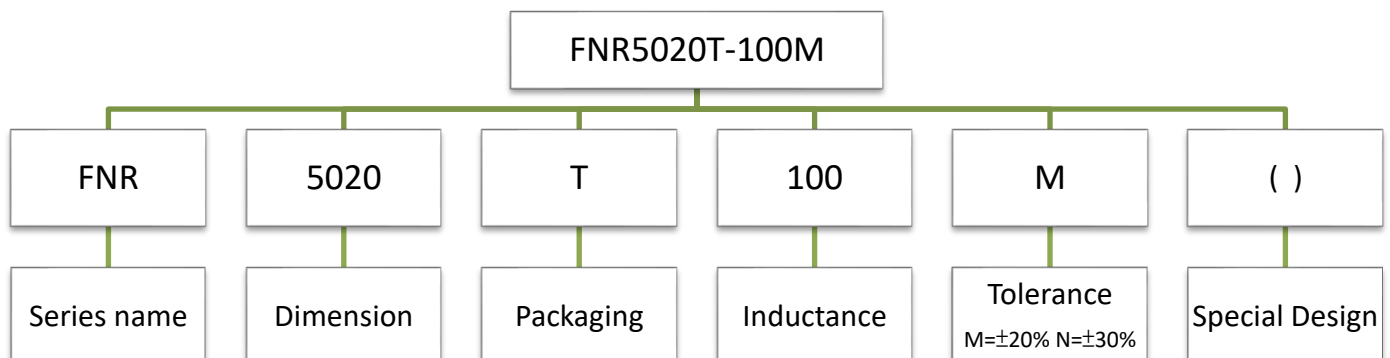
RECOMMENDED PATTERN



(Unit: mm)

TYPE	A	B	C	D	E	F	G
FNR5012	5.0±0.2	5.0±0.2	1.2max	1.4±0.1	5.2	1.6.	1.8
FNR5020	5.0±0.2	5.0±0.2	2.0max	1.4±0.1	5.2	1.6.	1.8
FNR5040	5.0±0.2	5.0±0.2	4.0±0.2	1.4±0.1	5.2	1.6.	1.8

PRODUCT IDENTIFICATION (ex.)



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (uH)	Inductance tolerance	Test Frequency (kHz)	DC Resistance (Ω) ±20%	Saturation current Isat(mA)		Temperature rise current Irms(mA)	
					Typ.	Max.	Typ.	Max.
FNR5012T-1R0N	1.0	±30%	100	0.053	4500	4200	2300	2100
FNR5012T-1R5N	1.5	±30%	100	0.070	3800	3600	2200	2000
FNR5012T-2R2M	2.2	±20%	100	0.085	3100	2900	2000	1800
FNR5012T-3R3M	3.3	±20%	100	0.160	2400	2200	1450	1250
FNR5012T-4R7M	4.7	±20%	100	0.180	2200	2000	1400	1200
FNR5012T-6R8M	6.8	±20%	100	0.260	1700	1500	1100	900
FNR5012T-100M	10	±20%	100	0.420	1400	1100	850	750
FNR5012T-150M	15	±20%	100	0.670	1200	950	640	550

Part No.	Inductance (uH)	Inductance tolerance	Test Frequency (kHz)	DC Resistance (Ω) ±20%	Saturation current Isat(mA)		Temperature rise current Irms(mA)	
					Typ.	Max.	Typ.	Max.
FNR5020T-1R0N	1.0	±30%	100	0.021	5100	4700	4400	4100
FNR5020T-1R5N	1.5	±30%	100	0.026	4200	3800	3500	3200
FNR5020T-2R2M	2.2	±20%	100	0.035	3400	3100	3200	2900
FNR5020T-3R3M	3.3	±20%	100	0.048	3000	2650	2800	2500
FNR5020T-4R7M	4.7	±20%	100	0.060	2200	1950	2200	1800
FNR5020T-6R8M	6.8	±20%	100	0.090	2000	1750	1800	1500
FNR5020T-100M	10	±20%	100	0.120	1600	1400	1600	1300

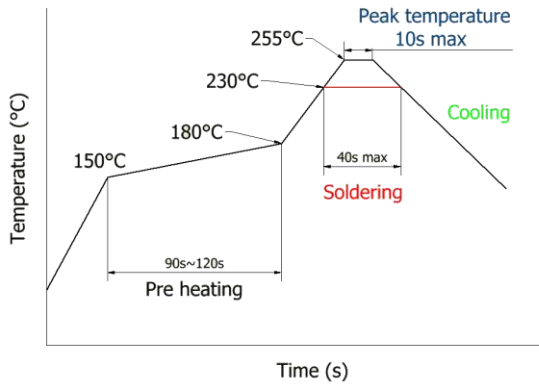
Part No.	Inductance (uH)	Inductance tolerance	Test Frequency (kHz)	DC Resistance (Ω) ±30%	Saturation current Isat(mA)		Temperature rise current Irms(mA)	
					Typ.	Max.	Typ.	Max.
FNR5040T-1R5N	1.5	±30%	100	0.016	7100	6500	4400	4100
FNR5040T-2R2N	2.2	±30%	100	0.021	5700	5100	3700	3400
FNR5040T-3R3N	3.3	±30%	100	0.026	4800	4200	3500	3200
FNR5040T-4R7M	4.7	±20%	100	0.032	4200	3800	3200	2900
FNR5040T-6R8M	6.8	±20%	100	0.050	3300	2900	2400	2100
FNR5040T-100M	10	±20%	100	0.060	2800	2500	2200	1900
FNR5040T-150M	15	±20%	100	0.090	2300	2000	1800	1500
FNR5040T-220M	22	±20%	100	0.135	1800	1500	1400	1150
FNR5040T-330M	33	±20%	100	0.190	1500	1200	1100	900
FNR5040T-470M	47	±20%	100	0.310	1200	1000	900	700

*The saturation current value (Isat) is the DC current value having inductance decrease down to 30% (at 25°C)

*The temperature rise current value (Irms)is the DC current value having temperature increase up to 40°C (at 25°C)

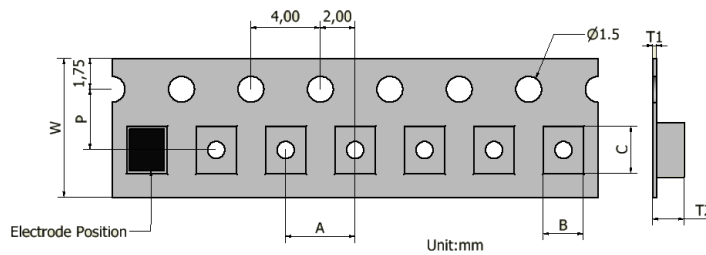
*Rated current: smaller value of either Isat or Irms.

RECOMMENDED SOLDERING CONDITIONS



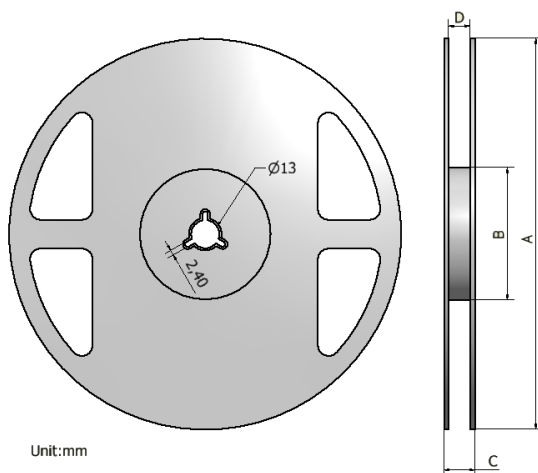
PACKAGE

(1) Taping specifications



Type	W	P	A	B	C	T1	T2
FNR5020	12	5.5	8.0	5.4	5.4	0.30	1.5
FNR5040	12	5.5	8.0	5.4	5.4	0.30	4.5
FNR5040	12	5.5	8.0	5.4	5.4	0.30	4.5

(2) Reel Specifications



Type	A	B	C	D	Q'ty/Reel
FNR5012	180±0.1	60±0.1	14.5±0.1	10±0.15	2000
FNR5020	330±1.5	75±2.0	17.5±0.5	12.5±0.5	2000
FNR5040	330±1.5	75±2.0	17.5±0.5	12.5±0.5	1500

Label

Wire Wound Power Inductors
 FNR50□□T-□□□M/N
 □□□□PCS
 Lot No. _____
 FUMIWA TECHNIAL CO., LTD.

Type	Q'ty
PCS/Reel	1000~2000
Reel/inner Box	5000~10000
Inner Box/Carton	30000~50000