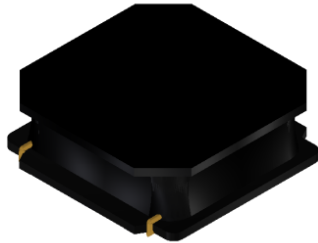
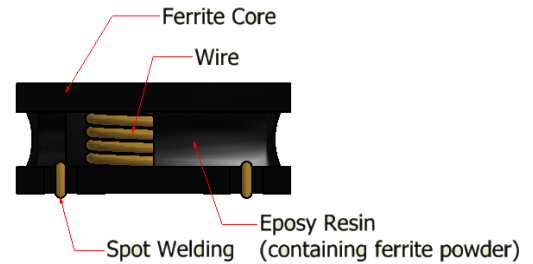


## FNR60series



### CONSTRUCTION



### FEATURES

Magnetically structure  
Low DC resistance  
Large Current Capability

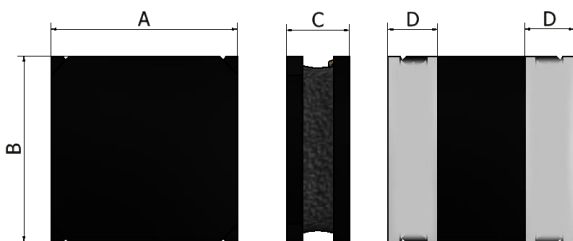
### APPLICATIONS

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

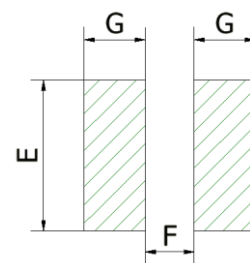
### SPECIFICATIONS

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

### SHAPE AND DIMENSIONS



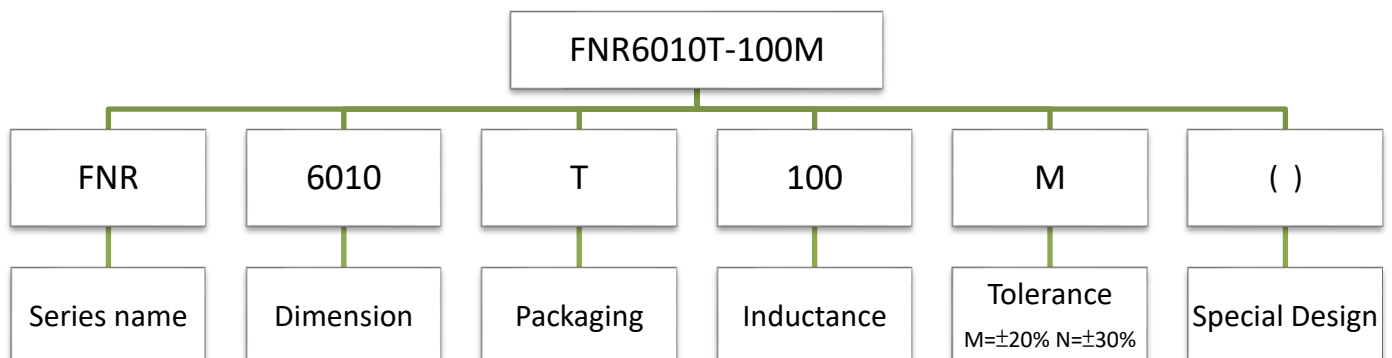
### RECOMMENDED PATTERN



(Unit: mm)

TYPE	A	B	C	D	E	F	G
FNR6010	6.0±0.1	6.0±0.1	1.0max	1.4±0.2	6.2	2.8	1.8
FNR6012	6.0±0.1	6.0±0.1	1.2max	1.4±0.2	6.2	2.8	1.8
FNR6020	6.0±0.1	6.0±0.1	2.0±0.2	1.4±0.2	6.2	2.8	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.
FNR6010T-2R2M	2.2	±20%	100	0.155	2200	1900	1900	1700
FNR6010T-3R3M	3.3	±20%	100	0.205	1900	1600	1600	1450
FNR6010T-4R7M	4.7	±20%	100	0.277	1650	1350	1500	1400
FNR6010T-6R8M	6.8	±20%	100	0.450	1600	1300	1220	1150
FNR6010T-8R2M	8.2	±20%	100	0.390	1200	1100	1210	1100
FNR6010T-100M	10	±20%	100	0.400	1200	1000	1200	1050

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.
FNR6012T-2R2N	2.2	±30%	100	0.090	2800	2100	2100	1730
FNR6012T-3R3M	3.3	±20%	100	0.120	2500	1800	1900	1700
FNR6012T-4R7M	4.7	±20%	100	0.125	2000	1500	1850	1550
FNR6012T-5R6M	5.6	±20%	100	0.145	1850	1500	1750	1400
FNR6012T-6R8M	6.8	±20%	100	0.165	1600	1300	1350	1180
FNR6012T-100M	10	±20%	100	0.235	1300	1000	1250	1000
FNR6012T-150M	15	±20%	100	0.330	1100	800	1000	790
FNR6012T-220M	22	±20%	100	0.465	900	760	750	630
FNR6012T-330M	33	±20%	100	0.700	750	590	670	530
FNR6012T-470M	47	±20%	100	1.050	610	520	540	460
FNR6012T-680M	68	±20%	100	1.350	530	440	450	410
FNR6012T-101M	100	±20%	100	2.180	450	350	380	320

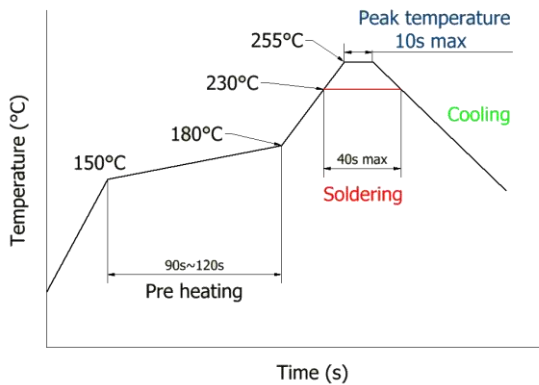
Part No.	Inductance (uH)	Inductance tolerance	Test Frequency (kHz)	DC Resistance (Ω) ±30%	Saturation current Isat(mA)		Temperature rise current Irms(mA)	
					Typ.	Max.	Typ.	Max.
FNR6020T-R90N	0.9	±30	100	0.018	6300	5000	4200	4000
FNR6020T-1R5N	1.5	±30	100	0.026	5000	4000	3600	3200
FNR6020T-2R2N	2.2	±30	100	0.034	4200	3500	3200	2900
FNR6020T-3R3N	3.3	±30	100	0.040	3200	3000	2700	2400
FNR6020T-4R7N	4.7	±30	100	0.058	2500	2300	2200	2000
FNR6020T-6R8M	6.8	±20	100	0.085	2200	2000	1800	1650
FNR6020T-100M	10	±20	100	0.125	2000	1800	1600	1450
FNR6020T-150M	15	±20	100	0.190	1300	1100	1300	1100
FNR6020T-220M	22	±20	100	0.260	1100	900	1100	900

\*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)

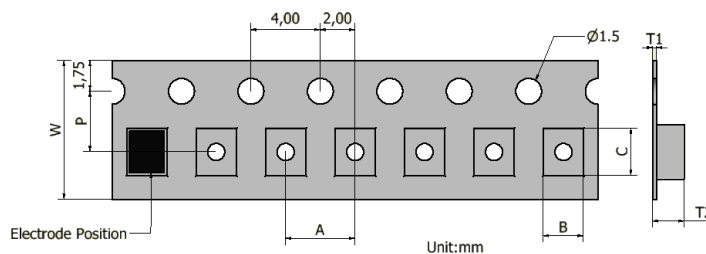
\*Rated current: smaller value of either Isat or Irms.

## RECOMMENDED SOLDERING CONDITIONS



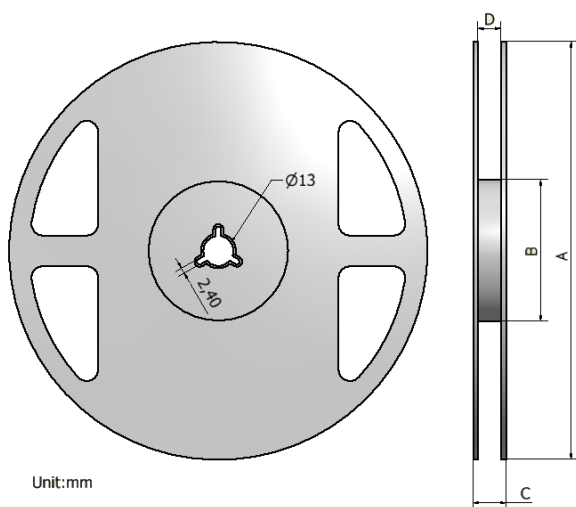
## PACKAGE

### (1) Taping specifications



Type	W	P	A	B	C	T1	T2
FNR6010	12	5.5	8.0	6.3	6.3	0.35	1.4
FNR6012	12	5.5	8.0	6.3	6.3	0.35	1.6
FNR6020	16	7.5	12.0	7.0	7.0	0.35	2.4

### (2) Reel Specifications



Type	A	B	C	D	Q'ty/Reel
FNR6010	180±0.1	60±0.1	14.5±0.1	10±0.15	2000
FNR6012	180±0.1	60±0.1	14.5±0.1	10±0.15	2000
FNR6020	330±1.5	75±2.0	17.5±0.5	12.5±0.5	2000

### Label

Wire Wound Power Inductors  
 FNR60□□T-□□□M/N  
 □□□□PCS  
 Lot No. \_\_\_\_\_  
 FUMIWA TECHNIAL CO., LTD.

Type	Q'ty
PCS/Reel	2000
Reel/inner Box	10000
Inner Box/Carton	50000