

DESCRIPTION:

- Magnetic shielded structure: excellent resistance to electromagnetic interference(EMI)
- A composite structure, ultra-low buzz noise
- Low loss, high efficiency, wide application frequency
- Lightweight design, save space, suitable for high density SMT
- Die-casting by low loss alloy powder
- Large current and low impedance, small parasitic capacitance
- Automotive electronics, Camcorder, LCD television set, Digital camera, P.D.A, Notebook

OTHER:

- Operating temperature range: -40°C to +125°C (Including coil's temperature rise)
- Storage temperature range: -40°C to +85°C
- RoHS Compliant version is available

YUAN DEAN SCIENTIFIC

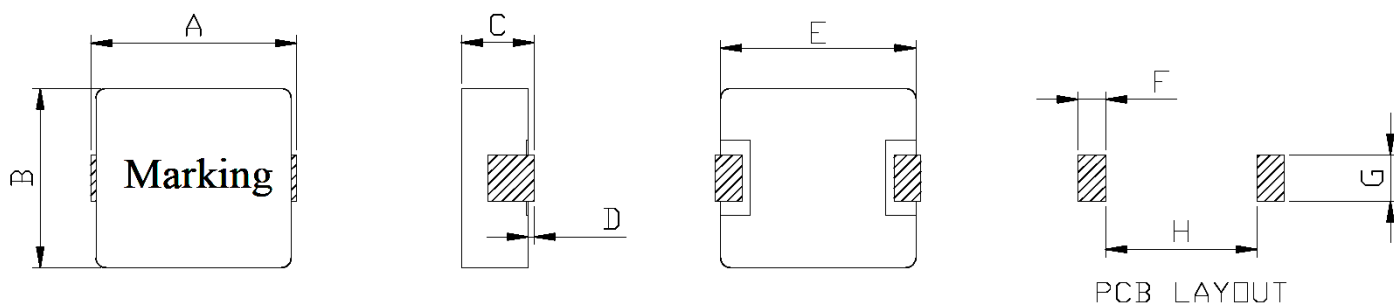
**SMD Molding
Power Chokes
TF/TG SERIES**

**Part Number Meaning**

TF	XX	XX	-	XRXX	M	XRXA
A	B	C		D	E	F

- A : Type
 B / C : Appearance and dimensions
 D : Inductance
 E : Tolerance ±20%
 F : Current data

TF Mechanical Diagrams



unit: mm

TYPE	A(max)	B	C(max)	D	E	F	G	H
TF0402	4.6	4±0.2	2.0	0~0.3	4±0.2	1.5	2.5	2.2
TF0703	7.4	6.5±0.2	3.0	0~0.3	6.5±0.2	1.85	3.5	3.7
TF0735	7.4	6.5±0.2	3.5	0~0.3	6.5±0.2	1.85	3.5	3.7
TF1004	11.5	10±0.2	4.0	0~0.3	10±0.2	4.1	4.1	5.4

*All data is tested based on 25°C ambient temperature.

*Design as customer's requested specifications.

TF0402 Series

Part Number	Inductance (μH)	Test Freq ^① (KHz)	DCR max (mΩ)	Isat max ^② (A)	Irms max ^③ (A)
TF0402-R22M10A	0.22	100	9.30	15.0	10.0
TF0402-R47M8A	0.47	100	14.00	9.0	8.0
TF0402-R56M7A	0.56	100	14.70	8.0	7.0
TF0402-R68M6R3A	0.68	100	16.20	7.0	6.3
TF0402-R82M5R5A	0.82	100	19.20	6.5	5.5
TF0402-1R0M5A	1.00	100	21.60	6.0	5.0
TF0402-1R2M5A	1.20	100	22.80	5.0	5.0
TF0402-1R5M4R5A	1.50	100	30.48	4.5	4.5
TF0402-2R2M4R5A	2.20	100	33.00	4.0	4.5
TF0402-4R3M2R6A	4.30	100	100.00	3.8	2.6

TF0703 Series

Part Number	Inductance (μH)	Test Freq ^① (KHz)	DCR max (mΩ)	Isat max ^② (A)	Irms max ^③ (A)
TF0703-0R22M34A	0.22	100	2.40	34.0	23.0
TF0703-R36M18A	0.36	100	4.30	24.0	18.0
TF0703-R47M17A	0.47	100	4.50	19.0	17.0
TF0703-R56M15A	0.56	100	5.00	17.0	15.0
TF0703-0R68M16A	0.68	100	5.00	19.0	16.0
TF0703-R82M12A	0.82	100	6.60	14.0	12.0

TF0703 Series

Part Number	Inductance (μ H)	Test Freq ^① (KHz)	DCR max (m Ω)	Isat max ^② (A)	Irms max ^③ (A)
TF0703-1R0M11A	1.00	100	7.00	13.0	11.0
TF0703-1R1M11A	1.10	100	7.00	13.0	11.0
TF0703-1R5M10A	1.50	100	10.00	12.0	10.0
TF0703-2R2M7A	2.20	100	20.00	11.0	7.0
TF0703-3R3M7A	3.30	100	24.00	10.0	7.0
TF0703-4R7M5A	4.70	100	35.00	7.0	5.0
TF0703-5R6M5A	5.60	100	45.00	6.0	5.0
TF0703-6R8M4R5A	6.80	100	50.00	5.5	4.5
TF0703-8R2M4R5A	8.20	100	54.00	5.0	4.5

TF0735 Series

Part Number	Inductance (μ H)	Test Freq ^① (KHz)	DCR max (m Ω)	Isat max ^② (A)	Irms max ^③ (A)
TF0735-100M3R5A	10.00	100	60.00	5.5	3.5

TF1004 Series

Part Number	Inductance (μ H)	Test Freq ^① (KHz)	DCR max (m Ω)	Isat max ^② (A)	Irms max ^③ (A)
TF1004-R22M39A	0.22	100	1.10	50.0	39.0
TF1004-R36M34A	0.36	100	1.20	43.0	34.0
TF1004-R45M34A	0.45	100	1.40	36.0	34.0
TF1004-R56M29A	0.56	100	1.80	33.0	29.0
TF1004-R60M25A	0.60	100	1.87	32.0	25.0
TF1004-R68M24A	0.68	100	3.00	31.0	24.0
TF1004-R88M18A	0.88	100	2.46	23.0	18.0
TF1004-1R0M22A	1.00	100	3.20	22.0	22.0
TF1004-1R5M20A	1.50	100	3.70	18.0	20.0
TF1004-2R2M14A	2.20	100	6.60	19.0	14.0
TF1004-3R3M10A	3.30	100	11.40	14.0	10.0
TF1004-4R7M9A	4.70	100	15.50	14.0	9.0
TF1004-5R6M8A	5.60	100	22.00	12.0	8.0
TF1004-6R8M7A	6.80	100	26.00	11.0	7.0
TF1004-8R2M7A	8.20	100	27.80	11.0	7.0
TF1004-100M5R5A	10.00	100	38.00	10.0	5.5

① Inductance measure condition at 100kHz,1V.

② Saturation current the actual value of DC current when the inductance decreases 20% typ of its initial value.

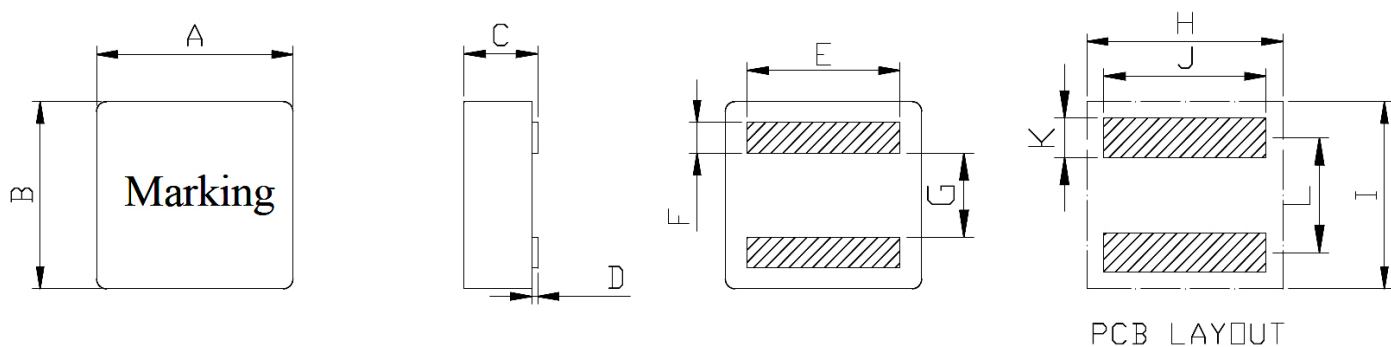
③ Temperature rise current the actual value of DC current when the temperature rise is $\Delta T40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).

Part Number Meaning

TG	XX	XX	-	XRXX	M	XRXA
A	B	C		D	E	F

- A : Type
 B / C : Appearance and dimensions
 D : Inductance
 E : Tolerance±20%
 F : Current data

TG Mechanical Diagrams



unit: mm

TYPE	A	B	C	Dmin	E	F	G	H	I	J	K	L
TG0630	6.65±0.2	6.45±0.2	3.0±0.2	0.05	4.9±0.4	1.3±0.1	2.75±0.25	6.85	6.65	6.0	1.8	4.0
TG0660	6.65±0.2	6.45±0.2	5.8±0.2	0.05	4.9±0.4	1.3±0.1	2.75±0.25	6.85	6.65	6.0	1.8	4.0
TG0770	7.9±0.2	7.6±0.2	6.8±0.2	0.10	5.7±0.3	1.5±0.15	2.8±0.25	8.1	7.8	6.5	1.65	4.5
TG0730	7.9±0.2	7.6±0.2	3.0±0.2	0.10	5.7±0.3	1.5±0.15	2.8±0.25	8.1	7.8	6.5	1.65	4.5
TG0880	8.8±0.2	8.3±0.2	7.8±0.2	0.10	6.5±0.3	1.4±0.2	3.6±0.4	9.0	8.5	7.5	2.0	5.0
TG1060	11.6±0.3	10.5±0.3	5.7±0.3	0.15	8.3±0.5	2.2±0.3	4.45±0.3	11.9	10.8	9.0	2.5	6.4
TG1090	11.6±0.3	10.5±0.3	8.8±0.2	0.15	8.3±0.5	2.2±0.3	4.45±0.3	11.9	10.8	9.0	2.5	6.4
TG1508	16.4±0.3	15.4±0.3	8.0max	0.20	13±0.75	3.2±0.2	7.5±0.3	16.7	15.7	15.0	5.0	10.5
TG1510	16.4±0.3	15.4±0.3	10.0max	0.20	13±0.75	3.2±0.2	7.5±0.3	16.7	15.7	15.0	5.0	10.5

*All data is tested based on 25°C ambient temperature.

*Design as customer's requested specifications.

TG0630 Series

Part Number	Inductance (μ H)	Test Freq ^① (KHz)	DCR max (m Ω)	Isat max ^② (A)	Irms max ^③ (A)
TG0630-R18M32A	0.18	100	1.50	39.0	32.0
TG0630-R33M25A	0.33	100	2.40	30.0	25.0
TG0630-R56M22A	0.56	100	3.20	29.0	22.0
TG0630-1R0M18A	1.00	100	6.50	23.0	18.0
TG0630-1R8M14A	1.80	100	11.3	18.2	14.0
TG0630-2R2M10A	2.20	100	14.6	15.9	10.0
TG0630-3R3M8A	3.30	100	22.0	12.2	8.0

TG0660 Series

Part Number	Inductance (μ H)	Test Freq ^① (KHz)	DCR max (m Ω)	Isat max ^② (A)	Irms max ^③ (A)
TG0660-4R7M11A	4.70	100	15.0	10.5	11.0
TG0660-6R8M9A	6.80	100	20.2	9.20	9.0
TG0660-100M7A	10.0	100	30.5	7.60	7.0
TG0660-220M5A	22.0	100	63.4	5.60	5.0

TG0770 Series

Part Number	Inductance (μ H)	Test Freq ^① (KHz)	DCR max (m Ω)	Isat max ^② (A)	Irms max ^③ (A)
TG0770-R16M36A	0.16	100	0.65	78.0	36.0
TG0770-R55M29A	0.55	100	1.40	43.0	29.0
TG0770-R80M25R8A	0.80	100	2.50	37.8	25.8
TG0770-1R8M21A	1.80	100	4.80	25.0	21.0
TG0770-4R7M13R6A	4.70	100	13.8	15.2	13.6
TG0770-6R8M9R2A	6.80	100	19.5	12.8	9.20

TG0730 Series

Part Number	Inductance (μ H)	Test Freq ^① (KHz)	DCR max (m Ω)	Isat max ^② (A)	Irms max ^③ (A)
TG0730-R16M32R5A	0.16	100	1.60	60.0	32.5
TG0730-R60M23A	0.60	100	4.00	36.0	23.0
TG0730-1R5M15A	1.50	100	9.20	23.5	15.0
TG0730-3R3M10A	3.30	100	23.5	12.3	10.0
TG0730-6R8M6R8A	6.80	100	35.0	10.7	6.80

TG0880 Series

Part Number	Inductance (μH)	Test Freq ^① (KHz)	DCR max (mΩ)	Isat max ^② (A)	Irms max ^③ (A)
TG0880-R68M37A	0.68	100	1.60	38.0	37.0
TG0880-4R7M14R6A	4.70	100	10.0	17.4	14.6
TG0880-220M7A	22.0	100	34.5	7.50	7.00

TG1060 Series

Part Number	Inductance (μH)	Test Freq ^① (KHz)	DCR max (mΩ)	Isat max ^② (A)	Irms max ^③ (A)
TG1060-R18M46A	0.18	100	0.65	120.0	46.0
TG1060-R68M33R9A	0.68	100	1.55	52.0	33.9
TG1060-2R2M20A	2.20	100	4.15	32.0	20.0
TG1060-4R7M14A	4.70	100	10.2	25.0	14.0

TG1090 Series

Part Number	Inductance (μH)	Test Freq ^① (KHz)	DCR max (mΩ)	Isat max ^② (A)	Irms max ^③ (A)
TG1090-2R2M32A	2.20	100	2.50	33.0	32.0
TG1090-4R7M24A	4.70	100	6.20	25.0	24.0
TG1090-100M15R5A	10.0	100	13.1	17.5	15.5
TG1090-220M11R8A	22.0	100	22.5	13.5	11.8

TG1508 Series

Part Number	Inductance (μH)	Test Freq ^① (KHz)	DCR max (mΩ)	Isat max ^② (A)	Irms max ^③ (A)
TG1508-R40M60A	0.40	100	0.70	111	60.0
TG1508-2R0M39R9A	2.00	100	2.10	51.0	39.9
TG1508-4R5M27A	4.50	100	4.20	34.2	27.0
TG1508-6R1M22R6A	6.10	100	5.85	31.0	22.6

TG1510 Series

Part Number	Inductance (μH)	Test Freq ^① (KHz)	DCR max (mΩ)	Isat max ^② (A)	Irms max ^③ (A)
TG1510-1R0M58A	1.00	100	1.00	80.0	58.0
TG1510-8R2M24A	8.20	100	6.90	30.0	24.0
TG1510-150M18A	15.0	100	13.0	23.0	18.0
TG1510-330M12A	33.0	100	21.0	16.7	12.0

① Inductance measure condition at 100kHz, 0.1V.

② Saturation current the actual value of DC current when the inductance decreases 30% typ of its initial value.

③ Temperature rise current the actual value of DC current when the temperature rise is $\Delta T 40^{\circ}\text{C}$ ($T_a = 25^{\circ}\text{C}$).