



## TF100505 (0402) Series SMD MULTILAYER CERAMIC CHIP INDUCTORS

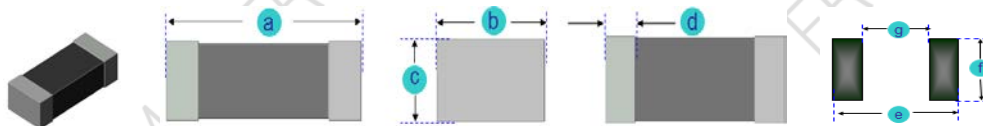
Rev. A

### A. Electrical Specifications:

P/N	L (nH)	Tol.	Test Freq. (MHz)	Q Min.	SRF Min. (MHz)	DCR Max. (Ω)	I rms. Max. (mA)
TF100505-1N0_	1.0	S, C, D	100	8	10000	0.08	300
TF100505-1N1_	1.1	S, C, D	100	8	10000	0.08	300
TF100505-1N2_	1.2	S, C, D	100	8	10000	0.09	300
TF100505-1N3_	1.3	S, C, D	100	8	10000	0.09	300
TF100505-1N5_	1.5	S, C, D	100	8	10000	0.10	300
TF100505-1N6_	1.6	S, C, D	100	8	10000	0.10	300
TF100505-1N8_	1.8	S, C, D	100	8	6000	0.12	300
TF100505-2N0_	2.0	S, C, D	100	8	6000	0.12	300
TF100505-2N2_	2.2	S, C, D	100	8	6000	0.13	300
TF100505-2N4_	2.4	S, C, D	100	8	6000	0.13	300
TF100505-2N7_	2.7	S, C, D	100	8	6000	0.16	300
TF100505-3N0_	3.0	S, C, D	100	8	6000	0.16	300
TF100505-3N3_	3.3	S, C, D	100	8	6000	0.16	300
TF100505-3N6_	3.6	S, C, D	100	8	5000	0.20	300
TF100505-3N9_	3.9	S, C, D	100	8	4000	0.20	300
TF100505-4N3_	4.3	S, C, D	100	8	4000	0.20	300
TF100505-4N7_	4.7	S, C, D	100	8	4000	0.20	300
TF100505-5N1_	5.1	S, C, D	100	8	4000	0.23	300
TF100505-5N6_	5.6	S, C, D	100	8	4000	0.23	300
TF100505-6N2_	6.2	S, C, D	100	8	3900	0.25	300
TF100505-6N8_	6.8	J, G	100	8	3900	0.25	300
TF100505-7N5_	7.5	J, G	100	8	3700	0.28	300
TF100505-8N2_	8.2	J, G	100	8	3500	0.28	300
TF100505-9N1_	9.1	J, G	100	8	3400	0.30	300
TF100505-10N_	10.0	J, G	100	8	3200	0.31	300
TF100505-12N_	12.0	J, G	100	8	2600	0.45	300
TF100505-15N_	15.0	J, G	100	8	2300	0.55	300
TF100505-18N_	18.0	J, G	100	8	2000	0.65	300
TF100505-22N_	22.0	J, G	100	8	1600	0.70	300
TF100505-27N_	27.0	J, G	100	8	1400	0.80	300
TF100505-33N_	33.0	J, G	100	8	1200	0.90	200
TF100505-39N_	39.0	J, G	100	8	1100	1.00	200
TF100505-47N_	47.0	J, G	100	8	900	1.10	200
TF100505-56N_	56.0	J, G	100	8	750	1.10	200
TF100505-68N_	68.0	J, G	100	8	750	1.20	180
TF100505-82N_	82.0	J, G	100	8	600	1.30	150
TF100505-R10_	100.0	J, G	100	8	600	1.60	150
TF100505-R12_	120.0	J, G	100	8	600	1.60	150
TF100505-R15_	150.0	J, G	100	8	550	2.40	140
TF100505-R18_	180.0	J, G	100	8	500	3.70	130
TF100505-R22_	220.0	J, G	100	8	450	4.20	120
TF100505-R27_	270.0	J, G	100	8	450	4.80	110

### B. Dimensions: mm (Inch)

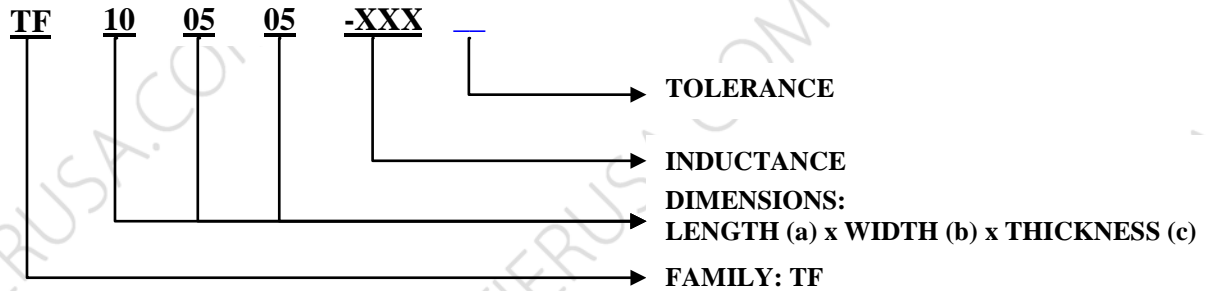
Series	a	b	c	d	e	f	g
TF100505	1.0(0.040)	0.5(0.020)	0.5(0.020)	0.25(0.010)	2.20(0.086)	0.70(0.028)	0.40(0.016)
Tol.	± 0.1(0.004)	± 0.1(0.004)	± 0.1(0.004)	± 0.15(0.006)	Typ.	Typ.	Typ.





**TF100505 (0402) Series**  
**SMD MULTILAYER CERAMIC CHIP INDUCTORS**  
Rev. A

**C. Part Number Key:**



**D. General Information:**

1. P/N: "TF100505-xxx\_", "TF100505" = Type, "xxx" = Inductance, "\_" = Tolerance.
2. Tolerance "\_": M:  $\pm 20\%$ , K:  $\pm 10\%$ , J:  $\pm 5\%$ , H:  $\pm 3\%$ , G:  $\pm 2\%$ , S:  $\pm 0.3\text{nH}$ , C:  $\pm 0.2\text{nH}$ , D:  $\pm 0.1\text{nH}$ .
3. The product's materials: Ceramic.
4. Excellent solder ability and high heat resistance for either flow or reflow soldering.
5. Monolithic structures for highly reliable surface mount applications.
6. Superior Q characteristics guaranteed over the wide frequency and allow high frequency application.
7. The completely monolithic structure gives high reliability and allows high SRF.
8. Both flow and IR re-flow application are possible.
9. Operating temperature:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
10. Maximum Temperature Rise:  $15^{\circ}\text{C}$  (when measured at  $25^{\circ}\text{C}$  ambient).
11. Unspecified values available on request.
12. Inductance and Current range: From 1.0nH (300mA) to 270.0nH (110mA)
13. SRF: From 450 MHz to 10,000 MHz
14. MSL: Level 1.

**E. Applications:**

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)