

Type TFC453232 (0.1 ~ 1000) μ H

- # Standard EIA 1812 package
- # Moulded wirewound construction
- # Reflow or wave soldering
- # High inductance
- # High S.R.F.
- # High Q

High quality inductors exhibiting excellent mechanical and electrical characteristics supplied as 500 pieces on 12mm tape and reel or bulk packed. Type TFC453232 offer large inductance values in the standard EIA 1812 package.

Electrodes are phosphor bronze tin plated to achieve ideal solderability using reflow or solder bath techniques, case material is epoxy resin and the inductance coil is wound using polyurethane enamelled copper wire on a ferrite former.

Electrical specification

Case style	EIA 1812
Inductance range	(0.1 ~ 1000) μ H
Marking	Epoxy ink
Working temp. range	(-40 +85) $^{\circ}$ C
Storage temp. range	(-40 +85) $^{\circ}$ C
Insulation resistance	1000 Meg. Ω min., 100Vd.c.
Dielectric strength	250V a.c. applied between terminal and case, one minute max.

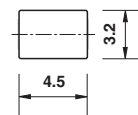
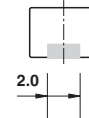
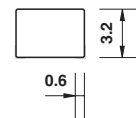
Environmental specification

High temp.	μ H \pm 10% max., Q \pm 20% max., +85 $^{\circ}$ C for 500 hours with rated d.c. current
Humidity load life	μ H \pm 5% max., Q \pm 20% max., relative humidity 90% ~ 95%, +60 $^{\circ}$ C for 500 hours with rated d.c. current
Low temp. storage	μ H \pm 5% max., Q \pm 20% max., -40 $^{\circ}$ C for 500 hours
Thermal shock	μ H \pm 5% max., Q \pm 20% max., 100 cycles; 30 minutes @ +40 $^{\circ}$ C, 30 minutes @ +85 $^{\circ}$ C
Resistance to solvents	Resistant to freon, TF, TE, or TMS for 5 minutes

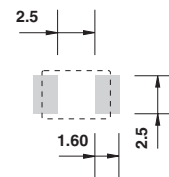
Mechanical specification

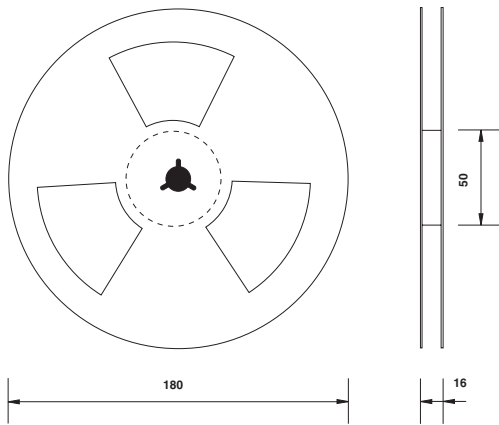
Vibration	μ H \pm 5% max., Q \pm 20% max., frequency sweep (10 ~ 55)Hz in one minute, amplitude 1.5mm, each of three mutually perpendicular planes, two hours each plane
Shock	μ H \pm 5% max., Q \pm 20% max., 100G, 6 milli. sec., half sine wave each of three mutually perpendicular planes, three shocks each plane
Solderability	90% uniform coating min. with precoating of flux, and dip into solder at +230 $^{\circ}$ C, 3 secs.
Solder heat resistance	μ H \pm 5% max., Q \pm 20% max., 5 minutes preheating at +120 $^{\circ}$ C, 5 secs. at +260 $^{\circ}$ C
Terminal pull test	1kg load in horizontal direction for 1 minute

Dimensions(mm) shown x4

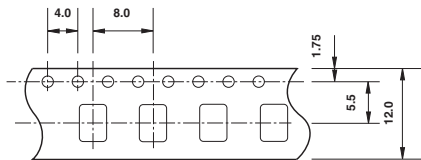


Suggested pad layout
Suitable for reflow or wave soldering



TFC453232 tape and reel dimensions(mm)


Centre hole diameter 13.0mm, slot width 2mm spaced at 120°
Reel quantity 500 pieces, leader tape 400mm minimum
Trailer tape: 10 empty compartments minimum



Tape transport hole diameter 1.5mm
Compartment size 3.60mm x 4.90mm, depth 3.40mm

Standard values

TFC Part No.	μH	Q min.	Test Freq. MHz	S.R.F. min. MHz	Ω d.c. max.	I d.c. max. mA
TFC453232 R10M T	0.10	35	25.2	300	0.18	800
TFC453232 R12M T	0.12	35	25.2	280	0.20	770
TFC453232 R15M T	0.15	35	25.2	250	0.22	730
TFC453232 R18M T	0.18	35	25.2	220	0.24	700
TFC453232 R22M T	0.22	40	25.2	200	0.25	665
TFC453232 R27M T	0.27	40	25.2	180	0.26	635
TFC453232 R33M T	0.33	40	25.2	165	0.28	605
TFC453232 R39M T	0.39	40	25.2	150	0.30	575
TFC453232 R47M T	0.47	40	25.2	145	0.32	545
TFC453232 R56M T	0.56	40	25.2	140	0.36	520
TFC453232 R68M T	0.68	40	25.2	135	0.40	500
TFC453232 R82M T	0.82	40	25.2	130	0.45	475
TFC453232 1R0K T	1.0	50	7.96	100	0.50	450
TFC453232 1R2K T	1.2	50	7.96	80	0.55	430
TFC453232 1R5K T	1.5	50	7.96	70	0.60	410
TFC453232 1R8K T	1.8	50	7.96	60	0.65	390
TFC453232 2R2K T	2.2	50	7.96	55	0.70	380
TFC453232 2R7K T	2.7	50	7.96	50	0.75	370
TFC453232 3R3K T	3.3	50	7.96	45	0.80	355
TFC453232 3R9K T	3.9	50	7.96	40	0.90	330
TFC453232 4R7K T	4.7	50	7.96	35	1.00	315
TFC453232 5R6K T	5.6	50	7.96	33	1.10	300
TFC453232 6R8K T	6.8	50	7.96	27	1.20	285
TFC453232 8R2K T	8.2	50	7.96	23	1.40	270
TFC453232 100K T	10	50	2.52	20	1.50	250
TFC453232 120K T	12	50	2.52	18	2.0	225
TFC453232 150K T	15	50	2.52	17	2.5	200
TFC453232 180K T	18	50	2.52	15	2.8	190
TFC453232 220K T	22	50	2.52	13	3.2	180
TFC453232 270K T	27	50	2.52	12	3.6	170
TFC453232 330K T	33	50	2.52	11	4.0	160
TFC453232 390K T	39	50	2.52	10	4.5	150
TFC453232 470K T	47	50	2.52	10	5.0	140
TFC453232 560K T	56	50	2.52	9.0	5.5	135
TFC453232 680K T	68	50	2.52	9.0	6.0	130
TFC453232 820K T	82	50	2.52	8.0	7.0	120
TFC453232 101K T	100	40	0.796	8.0	8.0	110
TFC453232 121K T	120	40	0.796	6.0	8.0	110
TFC453232 151K T	150	40	0.796	5.0	9.0	105
TFC453232 181K T	180	40	0.796	5.0	9.5	105
TFC453232 221K T	220	40	0.796	4.0	10	100
TFC453232 271K T	270	40	0.796	4.0	12	92
TFC453232 331K T	330	40	0.796	3.5	14	85
TFC453232 391K T	390	40	0.796	3.0	16	80
TFC453232 471K T	470	40	0.796	3.0	26	62
TFC453232 561K T	560	30	0.796	3.0	30	50
TFC453232 681K T	680	30	0.796	3.0	30	50
TFC453232 821K T	820	30	0.796	2.5	35	30
TFC453232 102K T	1000	25	0.252	2.5	40	30

Ordering information

Order type TFC453232 chip inductors using the following standard part numbers to indicate value, tolerance and packaging:

TFC Part No ----- TFC453232 2R2 K T

TFC453232 ----- Type No.

2R2 ----- Inductance value code

K ----- Tolerance:

----- M = 20%, K = 10%, J = 5%

T ----- Packing method:

----- T = embossed tape and reel,

----- B = bulk