



TOROIDAL INDUCTORS

TJ5-HT



High Current, High Temperature, Toroidal Inductors

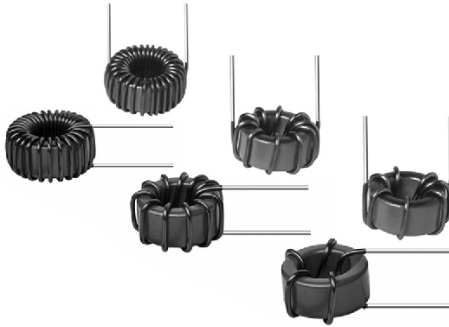
KEY BENEFITS

- High temperature rating to 200 °C
- High current rating, up to 50 A
- Low magnetic radiation due to toroidal shape and distributed air gap
- Low DCR of 0.0016 Ω typical at 0.47 μH
- Compliant to RoHS directive 2002/95/EC
- Horizontal and vertical mount options

APPLICATIONS

- Switching power supplies
- EMI/RFI filtering
- Output chokes
- Automotive subsystems
- Deep-well drilling

Toroid, High Current, High Temperature, Radial Leaded


FEATURES

- Printed circuit mounting
- Toroid design reduces EMI
- Vertical or horizontal mounting to optimize P.C. board layout
- High temperature rating of 200 °C - no aging
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

APPLICATIONS

- Switching power supplies
- EMI/RFI filtering
- Output chokes

STANDARD ELECTRICAL SPECIFICATIONS in inches [millimeters]									
IND. L ₀ (μH)	TOLERANCE (%)	DCR (VERTICAL MOUNT)		DCR (HORIZONTAL MOUNT)		RATED CURRENT VERTICAL MOUNT (A) ⁽¹⁾	RATED CURRENT HORIZONTAL MOUNT (A) ⁽¹⁾	SATURATION CURRENT (A) ⁽²⁾	LEAD DIAMETER D
		TYP. (Ω)	MAX. (Ω)	TYP. (Ω)	MAX. (Ω)				
0.47	20	0.0016	0.0024	0.0022	0.003	36	30	50	0.053 [1.346]
1.2	20	0.0028	0.0032	0.0032	0.0035	28	24	33	0.053 [1.346]
2.2	20	0.0036	0.0042	0.0042	0.0048	23	22	22	0.053 [1.346]
3.9	20	0.0045	0.0058	0.005	0.006	21	19.5	18	0.053 [1.346]
4.7	20	0.005	0.0064	0.0055	0.007	19	18.5	15	0.053 [1.346]
6.8	20	0.006	0.0074	0.0065	0.0078	18	17	14	0.053 [1.346]
10	20	0.0075	0.011	0.0084	0.012	15.8	15.5	10	0.053 [1.346]
22	20	0.015	0.019	0.016	0.02	10.8	10.5	7	0.042 [1.067]
39	20	0.02	0.025	0.022	0.028	9.2	9.1	5	0.042 [1.067]
100	20	0.05	0.069	0.054	0.075	5.5	5.5	3.0	0.034 [0.864]
470	20	0.17	0.29	0.175	0.3	2.8	2.8	1.5	0.027 [0.686]

Notes

- Operating temperature (ambient + ΔT): - 55 °C to + 200 °C, inductance tested at 0.25 V_{RMS}, 1 kHz, DCR tested at 25 °C ± 5 °C, all material rated at 200 °C

⁽¹⁾ DC current that will cause an approx. ΔT of 50 °C

⁽²⁾ DC current that will cause L₀ to drop approx. 20 %

DIMENSIONS in inches [millimeters]	
<p>1.0 [25.40] Max.</p> <p>0.58 [14.732] Max.</p> <p>LEADS TINNED TO WITHIN 0.62 [1.575] MAX. OF COIL</p> <p>0.50 [12.70] Min.</p> <p>TINNED LEADS</p> <p>D</p> <p>0.48 [12.192] Ref.</p> <p>VERTICAL MOUNT (Mounting/Coating Code - 1U)</p>	<p>1.0 [25.40] Max.</p> <p>0.58 [14.732] Max.</p> <p>0.90 [22.86] Ref.</p> <p>LEADS TINNED TO WITHIN 0.62 [1.575] MAX. OF COIL</p> <p>0.50 [12.70] Min.</p> <p>TINNED LEADS</p> <p>D</p> <p>HORIZONTAL MOUNT (Mounting/Coating Code - 2U)</p>

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