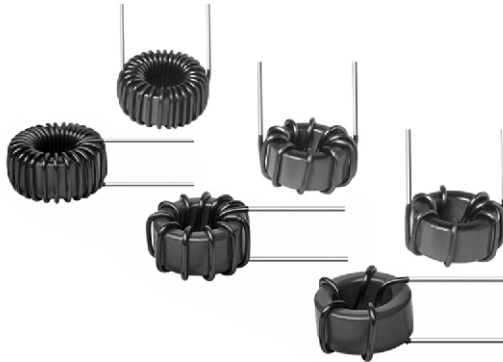


# Toroid, High Current, High Temperature, Radial Led



## FEATURES

- Printed circuit mounting
- Toroid design reduces EMI
- Vertical or horizontal mounting to optimize PCB layout
- High temperature rating of 200 °C - no aging
- Material categorization: For definitions please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

## APPLICATIONS

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

STANDARD ELECTRICAL SPECIFICATIONS in inches [millimeters]									
IND. L <sub>0</sub> (μH)	TOLERANCE (%)	DCR (VERTICAL MOUNT)		DCR (HORIZONTAL MOUNT)		RATED CURRENT VERTICAL MOUNT (A) <sup>(1)</sup>	RATED CURRENT HORIZONTAL MOUNT (A) <sup>(1)</sup>	SATURATION CURRENT (A) <sup>(2)</sup>	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<sub>RMS</sub>, 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 L<sub>0</sub> to drop approx. 20 %

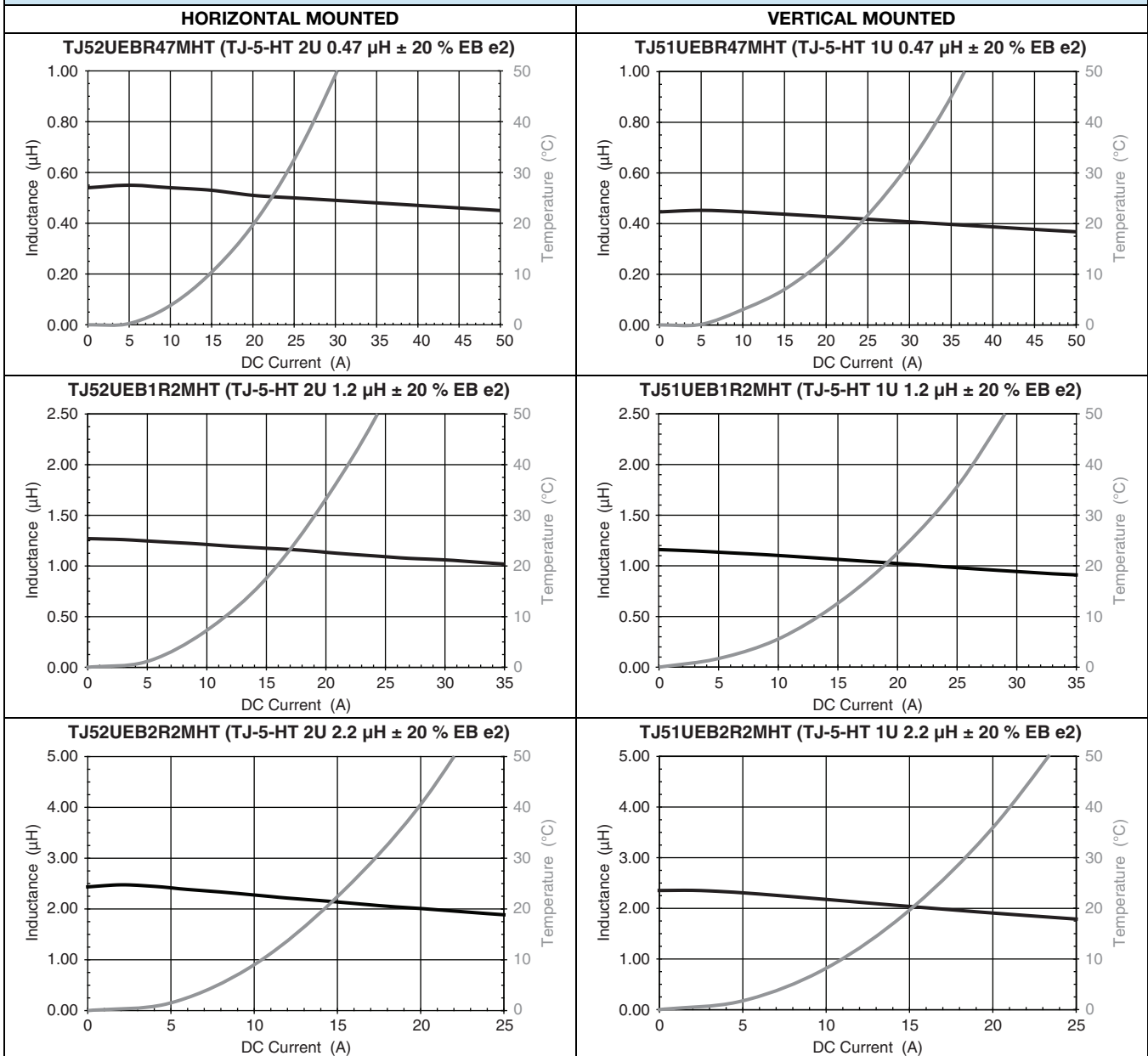
DIMENSIONS in inches [millimeters]	
<p>VERTICAL MOUNT (Mounting/Coating Code - 1U)</p>	<p>HORIZONTAL MOUNT (Mounting/Coating Code - 2U)</p>



ORDERING INFORMATION					
TJ5-HT	1U	10 $\mu$ H	$\pm 20\%$	EB	e2
MODEL	MOUNTING/COATING CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER												
T	J	5	1	U	E	B	1	0	0	M	H	T
MODEL			MOUNTING/COATING CODE		PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	

**PERFORMANCE GRAPHS: INDUCTANCE VS. DC CURRENT AND DC CURRENT VS. TEMPERATURE**



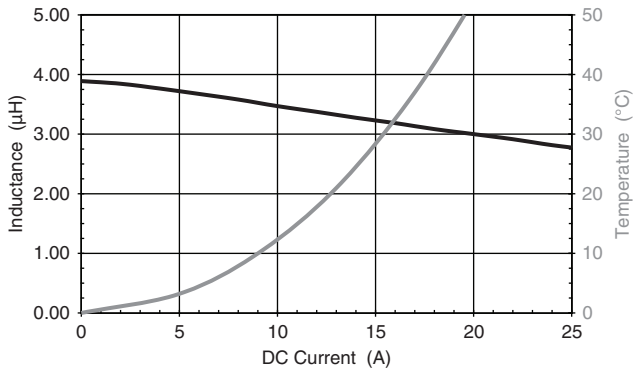


PERFORMANCE GRAPHS: INDUCTANCE VS. DC CURRENT AND DC CURRENT VS. TEMPERATURE

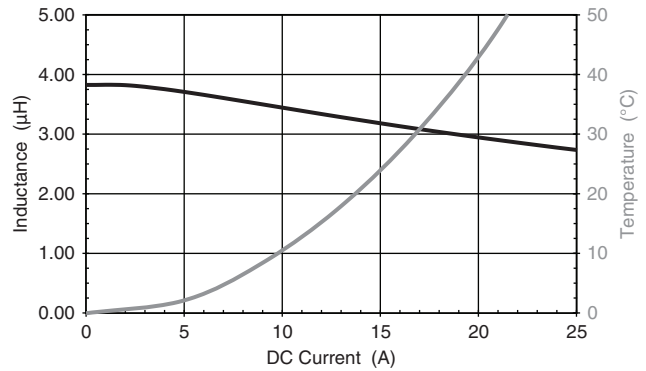
HORIZONTAL MOUNTED

VERTICAL MOUNTED

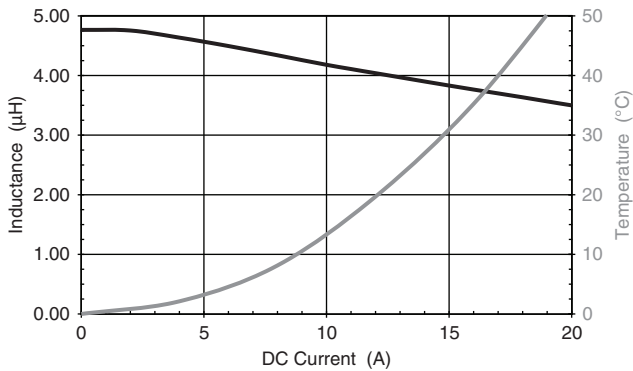
TJ52UEB3R9MHT (TJ-5-HT 2U 3.9 μH ± 20 % EB e2)



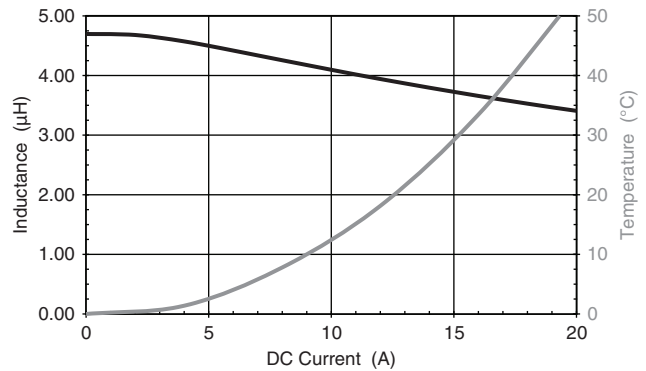
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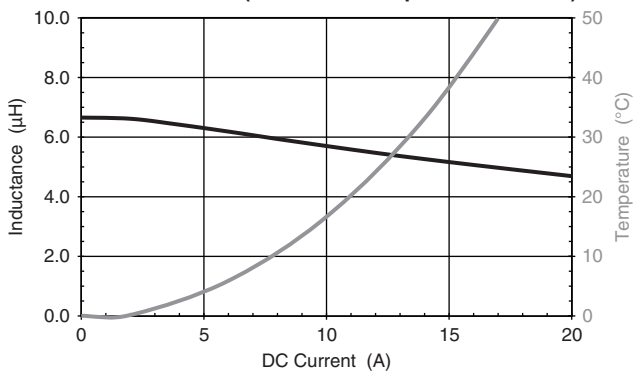
TJ52UEB4R7MHT (TJ-5-HT 2U 4.7 μH ± 20 % EB e2)



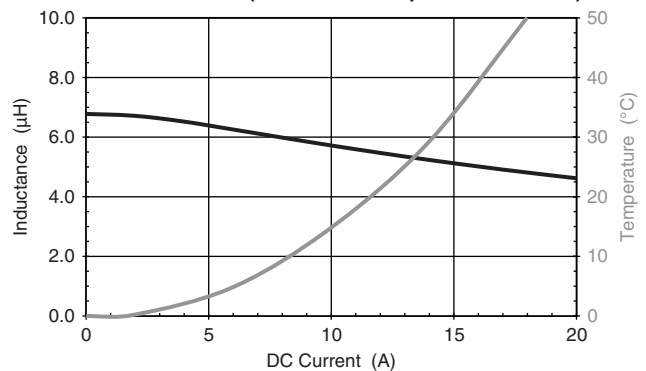
TJ51UEB4R7MHT (TJ-5-HT 1U 4.7 μH ± 20 % EB e2)



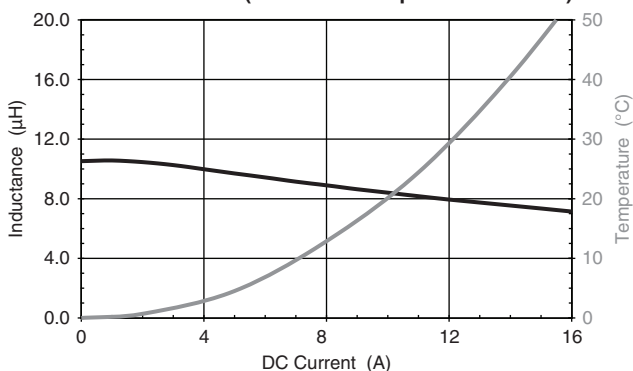
TJ52UEB6R8MHT (TJ-5-HT 2U 6.8 μH ± 20 % EB e2)



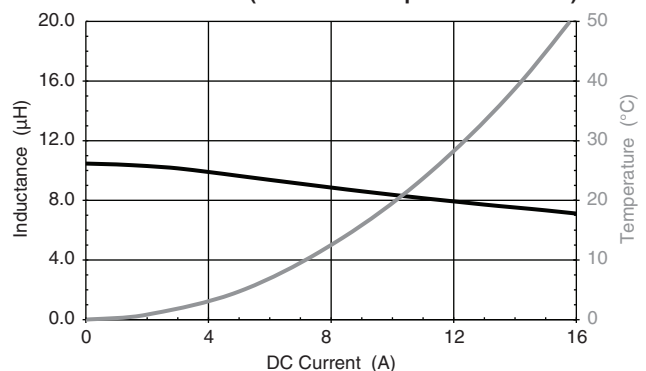
TJ51UEB6R8MHT (TJ-5-HT 1U 6.8 μH ± 20 % EB e2)



TJ52UEB100MHT (TJ-5-HT 2U 10 μH ± 20 % EB e2)

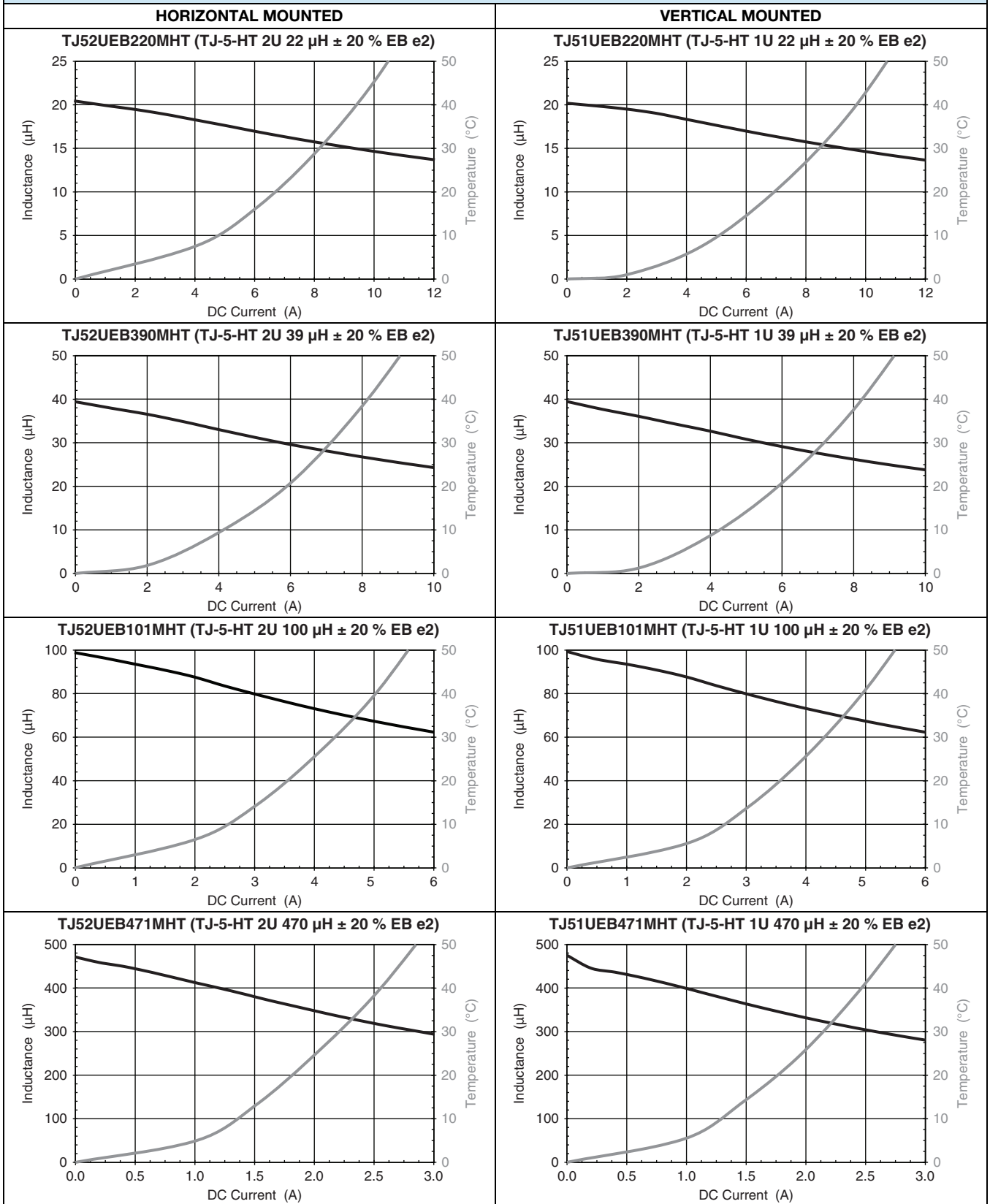


TJ51UEB100MHT (TJ-5-HT 1U 10 μH ± 20 % EB e2)





PERFORMANCE GRAPHS: INDUCTANCE VS. DC CURRENT AND DC CURRENT VS. TEMPERATURE





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