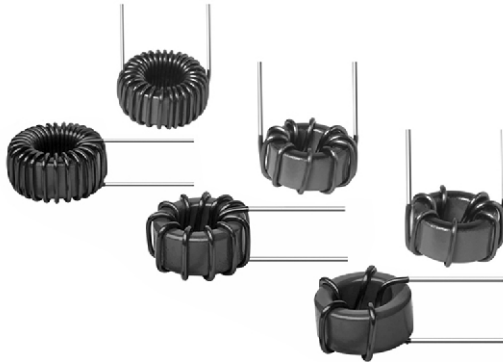


# Toroid, High Current, High Temperature, Radial Led



## 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)				
0.39	20	0.0014	0.0016	0.0018	0.002	32.0	28.0	23	0.053 [1.346]
1.2	20	0.002	0.0023	0.0025	0.0028	25.5	22.5	12.5	0.053 [1.346]
1.5	20	0.0023	0.0026	0.0028	0.003	23.25	21.0	10.5	0.053 [1.346]
4.7	20	0.0064	0.0072	0.0072	0.008	11.9	11.25	5.9	0.042 [1.067]
10	20	0.0132	0.0145	0.015	0.0164	7.25	7.0	4.2	0.034 [0.864]
15	20	0.021	0.023	0.022	0.024	5.6	5.5	3.4	0.031 [0.787]
22	20	0.024	0.027	0.026	0.029	5.2	5.0	2.5	0.031 [0.787]
39	20	0.048	0.050	0.050	0.055	3.3	3.3	1.9	0.025 [0.635]
68	20	0.080	0.086	0.082	0.090	2.5	2.5	1.4	0.022 [0.559]
100	20	0.099	0.108	0.106	0.118	2.25	2.25	1.15	0.022 [0.559]

### 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 40 °C
- (2) DC current that will cause L<sub>0</sub> to drop approx. 20 %

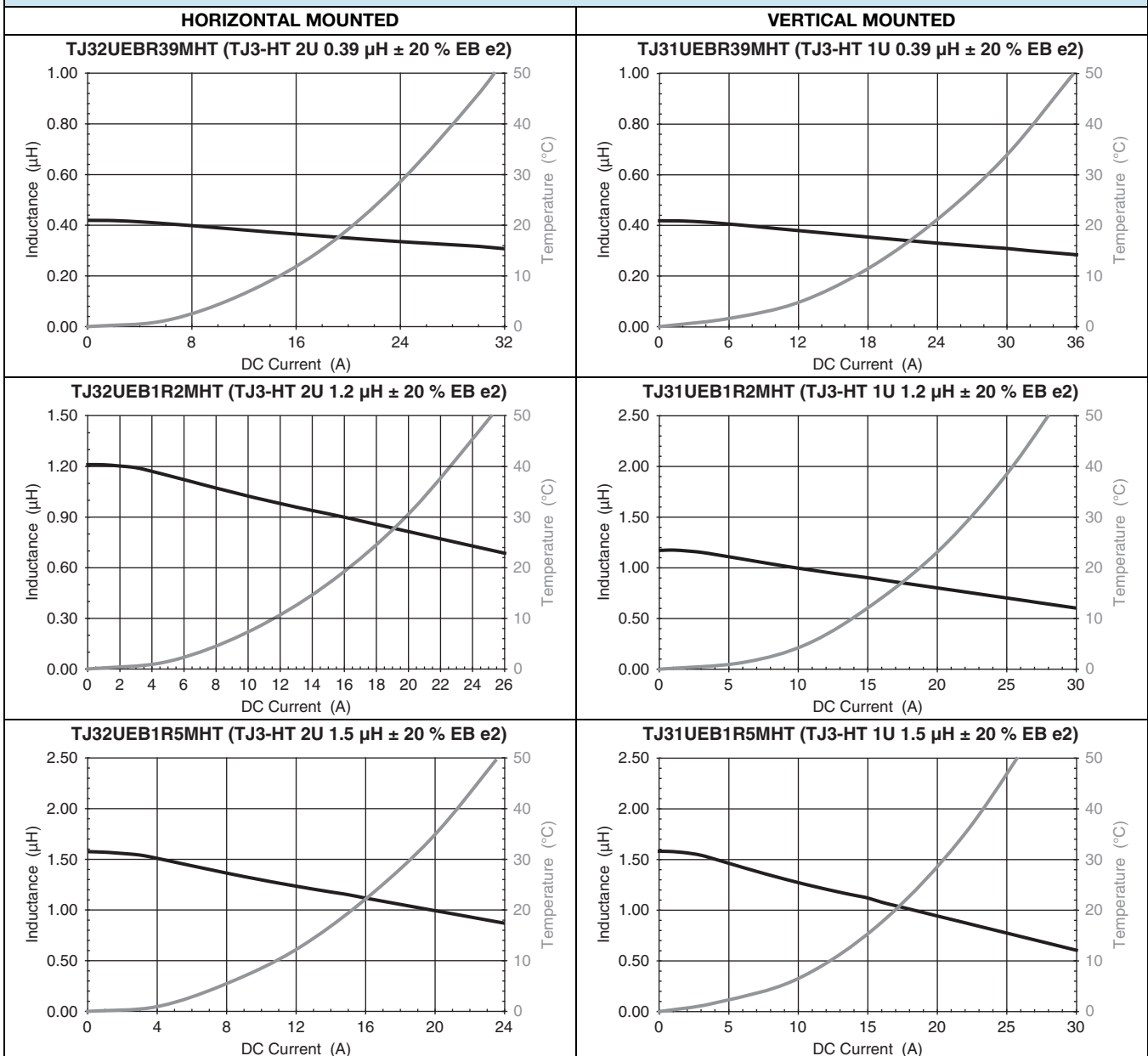
DIMENSIONS in inches [millimeters]	
<p>0.66 [16.76] Max.</p> <p>0.36 [9.144] Max.</p> <p>LEADS TINNED TO WITHIN 0.062 [1.575] MAX. OF COIL</p> <p>0.50 [12.70] Min.</p> <p>TINNED LEADS</p> <p>D</p> <p>0.28 [7.112] Ref.</p> <p><b>VERTICAL MOUNT</b> (Mounting/Coating Code - 1U)</p>	<p>0.66 [16.76] Max.</p> <p>0.36 [9.144] Max.</p> <p>0.60 [15.24] Ref.</p> <p>D</p> <p>0.50 [12.70] Min.</p> <p>TINNED LEADS</p> <p>LEADS TINNED TO WITHIN 0.062 [1.575] MAX. OF COIL</p> <p><b>HORIZONTAL MOUNT</b> (Mounting/Coating Code - 2U)</p>



ORDERING INFORMATION					
TJ3-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	3	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**





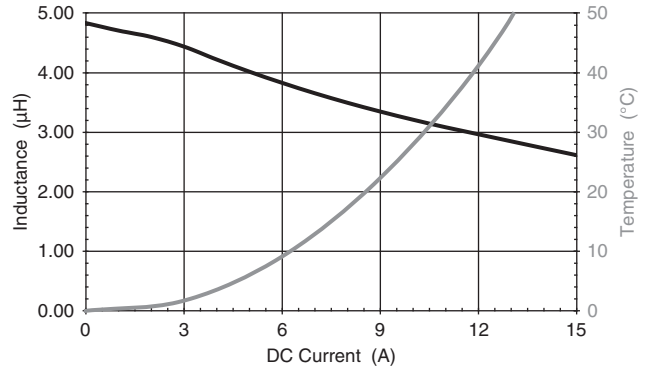
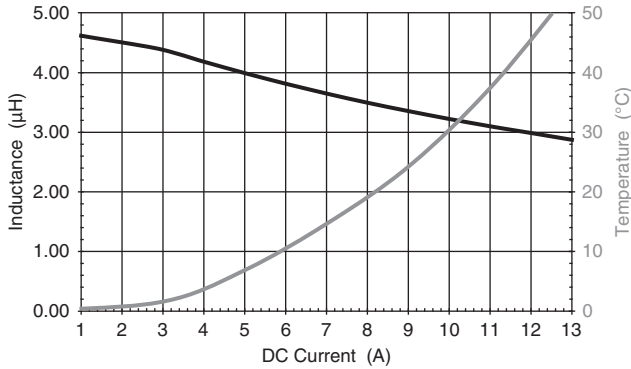
PERFORMANCE GRAPHS: INDUCTANCE VS. DC CURRENT AND DC CURRENT VS. TEMPERATURE

HORIZONTAL MOUNTED

VERTICAL MOUNTED

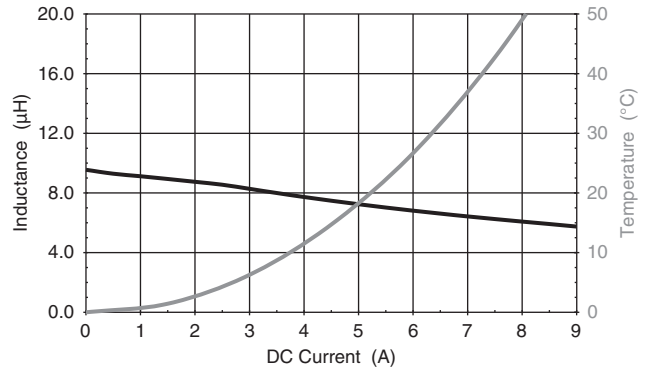
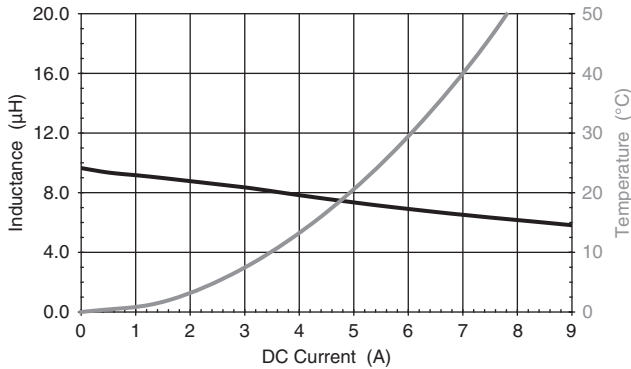
TJ32UEB4R7MHT (TJ3-HT 2U 4.7 μH ± 20 % EB e2)

TJ31UEB4R7MHT (TJ3-HT 1U 4.7 μH ± 20 % EB e2)



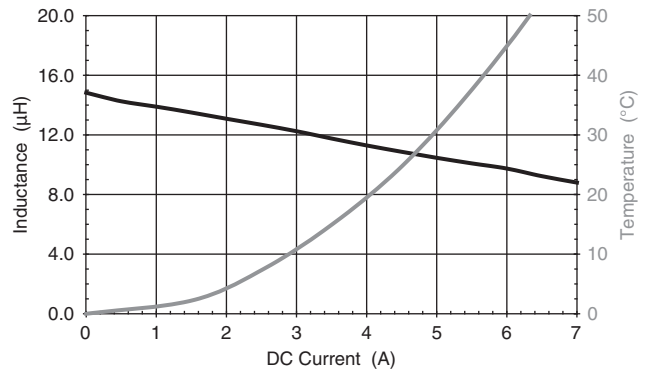
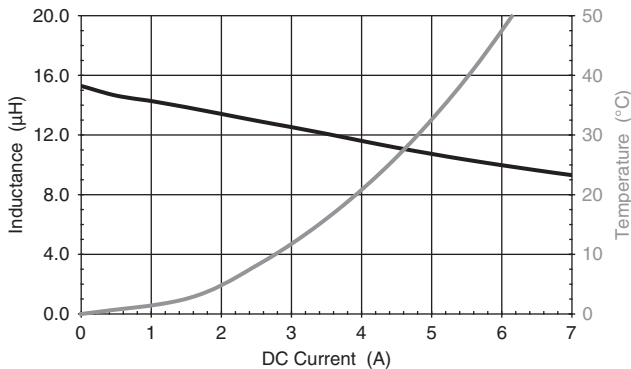
TJ32UEB100MHT (TJ3-HT 2U 10 μH ± 20 % EB e2)

TJ31UEB100MHT (TJ3-HT 1U 10 μH ± 20 % EB e2)



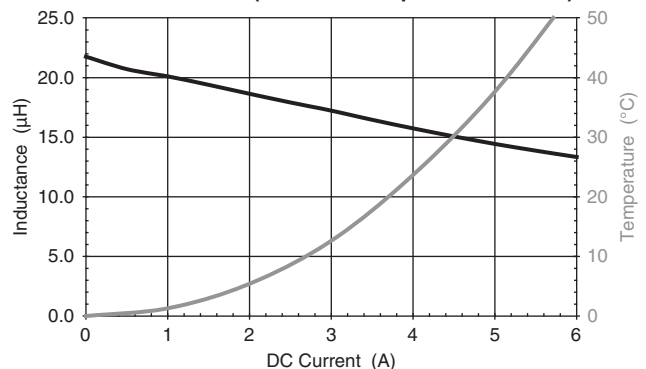
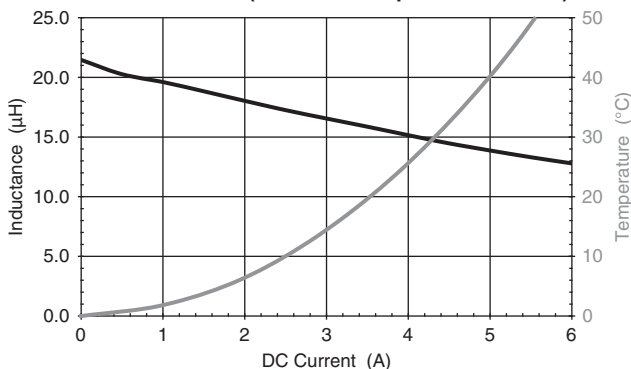
TJ32UEB150MHT (TJ3-HT 2U 15 μH ± 20 % EB e2)

TJ31UEB150MHT (TJ3-HT 1U 15 μH ± 20 % EB e2)



TJ32UEB220MHT (TJ3-HT 2U 22 μH ± 20 % EB e2)

TJ31UEB220MHT (TJ3-HT 1U 22 μH ± 20 % EB e2)



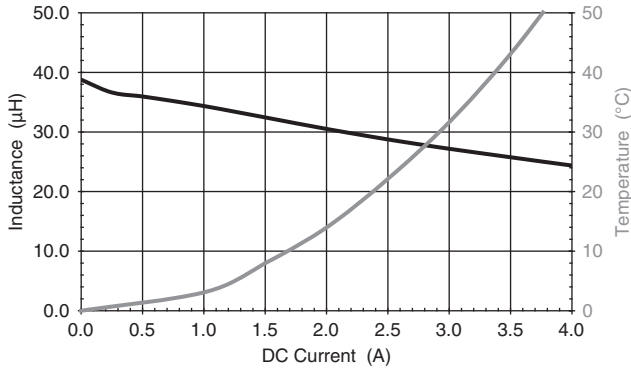


PERFORMANCE GRAPHS: INDUCTANCE VS. DC CURRENT AND DC CURRENT VS. TEMPERATURE

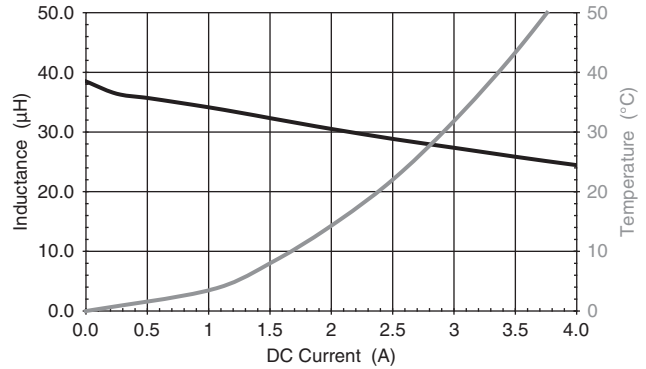
HORIZONTAL MOUNTED

VERTICAL MOUNTED

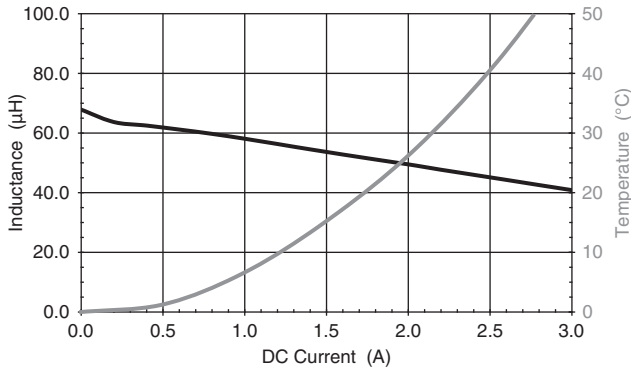
TJ32UEB390MHT (TJ3-HT 2U 39 μH ± 20 % EB e2)



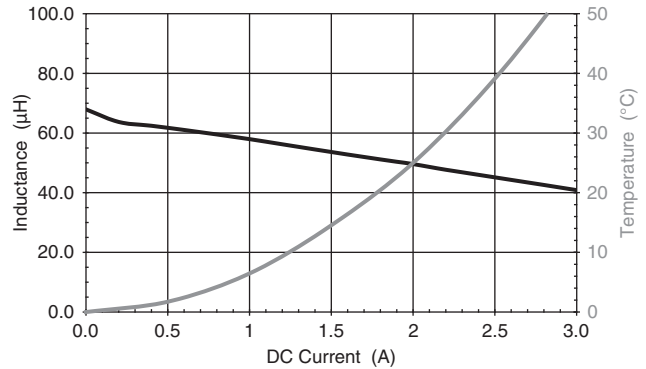
TJ31UEB390MHT (TJ3-HT 1U 39 μH ± 20 % EB e2)



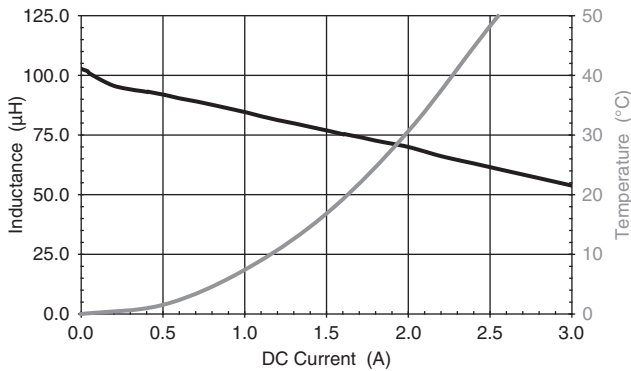
TJ32UEB680MHT (TJ3-HT 2U 68 μH ± 20 % EB e2)



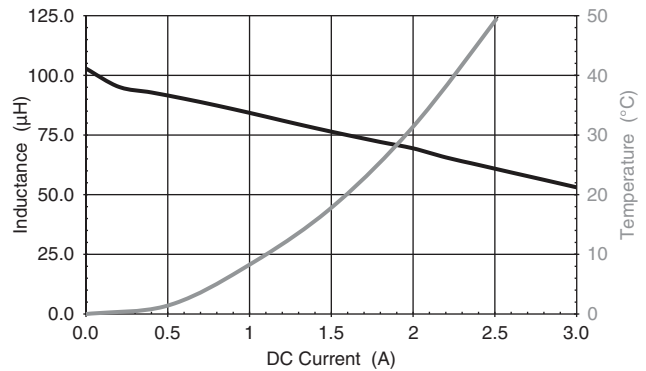
TJ31UEB680MHT (TJ3-HT 1U 68 μH ± 20 % EB e2)



TJ32UEB101MHT (TJ3-HT 2U 100 μH ± 20 % EB e2)



TJ31UEB101MHT (TJ3-HT 1U 100 μH ± 20 % EB e2)





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