



**MAX. DIM :**  
**L = 19.05 mm**  
**W = 12.50 mm**  
**H = 16.51 mm**

- For use in high frequency DC/DC converters.
- Low radiation.
- Low core loss
- Current handling up to 31 Amps.
- Energy storage of 380  $\mu$ J.

### MECHANICAL SPECIFICATIONS

Front View	Side View/Bottom View	PCB Layout (Top)	Schematic
<b>VERTICAL VERSION</b>			
<b>HORIZONTAL VERSION</b>			
			<p>T50147 HOLE DIA. 0.069" X 0.124" (X2)                      T50179 HOLE DIA. 0.055" X 0.106" (X2)</p> <p style="text-align: right;"><b>INCHES [mm]</b></p>

### ELECTRICAL SPECIFICATIONS

#### VERTICAL VERSION

FALCO PART NUMBER	RoHS PART NUMBER	OCL( $\mu$ H) <sup>1</sup>	TOL	DCR ( $\Omega$ max)	I rating <sup>2</sup> (Amp)	A max. in / mm	B max. in / mm	C max. in / mm	D Ref. in / mm	Pin Length in / mm	Hole Dia. in / mm
	T50180	0.400	$\pm 25\%$	0.00100	31.00	0.669 / 17.00	0.492 / 12.50	0.610 / 15.50	0.354 / 9.00	0.157 / 4.00	0.104 / 2.64
	*T50147	0.570	$\pm 15\%$	0.00096	**28.00	0.689 / 17.50	0.417 / 10.60	0.630 / 16.00	0.354 / 9.00	0.130 / 3.30	
*T50023	T5L023	0.828	$\pm 15\%$	0.00114	30.50	0.690 / 17.53	0.470 / 11.94	0.620 / 15.75	0.375 / 9.53	0.250 / 6.35	
T50022		0.828	$\pm 12\%$	0.00135	25.20	0.750 / 19.05	0.450 / 11.43	0.650 / 16.51	0.360 / 9.14	0.250 / 6.35	0.076 / 1.93
	*T50179	1.100	$\pm 20\%$	0.00200	23.00	0.689 / 17.50	0.472 / 12.00	0.610 / 15.50	0.335 / 8.51	0.157 / 4.00	
*T50163		1.130	$\pm 15\%$	0.00135	26.00	0.690 / 17.53	0.470 / 11.94	0.620 / 15.75	0.375 / 9.53	0.250 / 6.35	
	T50166	1.860	$\pm 15\%$	0.00264	**22.00	0.700 / 17.78	0.450 / 11.43	0.630 / 16.00	0.350 / 8.89	0.126 / 3.20	0.069 / 1.75
	T50103	2.300	$\pm 20\%$	0.00550	12.50	0.709 / 18.00	0.394 / 10.00	0.630 / 16.00	0.338 / 8.58	0.157 / 4.00	0.048 / 1.22

#### HORIZONTAL VERSION

FALCO PART NUMBER	RoHS PART NUMBER	OCL( $\mu$ H) <sup>1</sup>	TOL	DCR ( $\Omega$ max)	I rating <sup>2</sup> (Amp)	A max. in / mm	B max. in / mm	C max. in / mm	D Ref. in / mm	Pin Length in / mm	Hole Dia. in / mm
	T5H166	1.860	$\pm 15\%$	0.00264	**22.00	0.720 / 18.29	0.450 / 11.43	0.720 / 18.29	0.270 / 6.86	0.134 / 3.40	0.069 / 1.75

\* Part is bifillar wound  
 \*\*  $\Delta T = 40^{\circ}\text{C}$



RoHS COMPLIANT PRODUCT

1. Inductance tested at 100 KHz 0.25 V.
2. Temperature rise is 45°C Typ.
3. Operating Temp. range -40° to +105°C.

# Power Inductors Shielded - THT Toroidal 13 mm (TTIB1306 Series)

## Inductance vs Current

