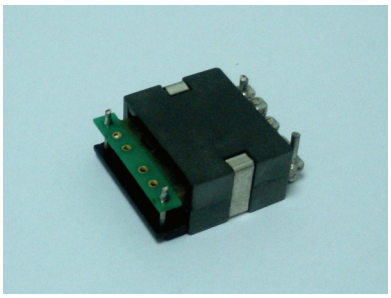
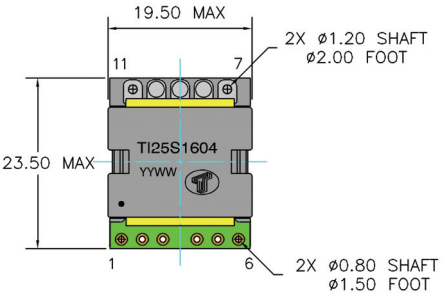
Techdak
天 鉭 电 子

RoHS COMPLIANT

TI25 SERIES

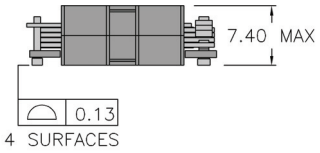
SMT High Current
Planar Inductors

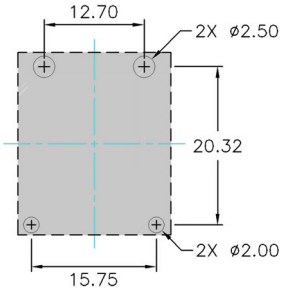




FEATURES

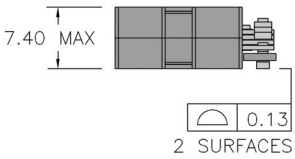
- High Thermal Efficiency & Energy Storage,
- High Current Rating Up to 73 Amps,
- Lower Profile of 7.4 mm Max.
- Wider Flexibility of Inductances
- Footprint 23.50 mm X 19.50 mm
- Operating Temperature -40º C to +130º C

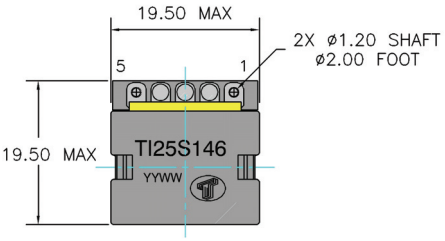




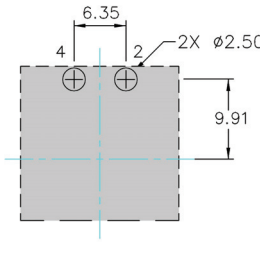
DESCRIPTION

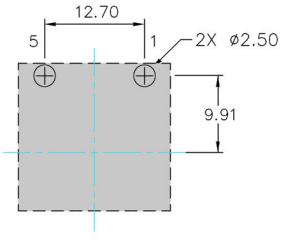
The TI25 series of planar inductors are optimised for DC/DC power supplies of high current. Due to a lead-free constructions, they are able to offer high thermal efficiency and high current handing with the lowest DCR ratings. The main windings inductor serves as an output choke, while the auxiliary windings controls input current to the PWM (TI25S1604). Application also include power systems for telecommunications, industrial control systems, automotive and heavy equipment vehicle systems where desired to high density and high energy efficiency.

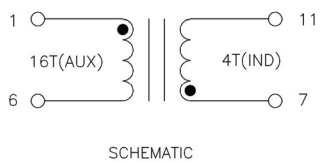


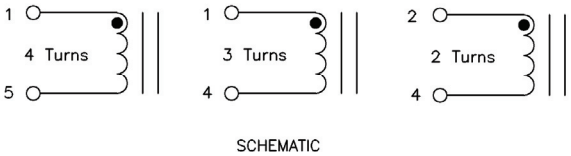


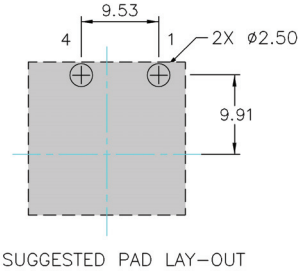
Weight .....11.8 grams
Tray 40/tray











TI25 SERIES

SMT High Current
Planar Inductors

ELECTRICAL SPECIFICATIONS											
Part Number	Inductance[1] @ 0 Adc (uH±10%)	Inductance[1] @ Irated (uH±15%)	Irated[2] A dc	DCR (mΩ Max)		Turns Ratio		Main Aux. Hi-Pot	Isaturation[3] (Amps)		Iheating[4] (Amps)
				Main	Aux	Main	Aux.		@25° C	@100° C	
TI25S1604	2.10	2.00	30.0	2.0	1500	4	16	1500	45	40	37.0
2//2 Turns											
TI25D221	0.46	0.45	73.0	0.40	N/A	2	N/A	N/A	95	80	73
TI25D222	0.67	0.63	55.0	0.40	N/A	2	N/A	N/A	63	53	73
TI25D223	0.90	0.85	39.0	0.40	N/A	2	N/A	N/A	46	37	73
TI25D224	1.12	1.05	30.0	0.40	N/A	2	N/A	N/A	35	30	73
TI25D225	1.35	1.25	25.0	0.40	N/A	2	N/A	N/A	29	26	73
TI25D226	1.56	1.45	21.0	0.40	N/A	2	N/A	N/A	24	22	73
2 Turns											
TI25S121	0.46	0.45	53.0	0.80	N/A	2	N/A	N/A	95	80	52
TI25S122	0.67	0.63	52.0	0.80	N/A	2	N/A	N/A	63	53	52
TI25S123	0.90	0.85	39.0	0.80	N/A	2	N/A	N/A	46	37	52
TI25S124	1.12	1.05	30.0	0.80	N/A	2	N/A	N/A	35	30	52
TI25S125	1.35	1.25	26.0	0.80	N/A	2	N/A	N/A	29	26	52
TI25S126	1.56	1.45	22.0	0.80	N/A	2	N/A	N/A	24	22	52
3 Turns											
TI25S131	1.00	0.95	42.0	1.20	N/A	3	N/A	N/A	68	54	42
TI25S132	1.50	1.45	36.0	1.20	N/A	3	N/A	N/A	43	35	42
TI25S133	2.00	1.95	25.0	1.20	N/A	3	N/A	N/A	29	25	42
TI25S134	2.50	2.45	20.0	1.20	N/A	3	N/A	N/A	23	21	42
TI25S135	3.00	2.85	15.0	1.20	N/A	3	N/A	N/A	18	16	42
TI25S136	3.50	3.45	12.0	1.20	N/A	3	N/A	N/A	15	13	42
4 Turns											
TI25S141	1.78	1.65	37.0	1.60	N/A	4	N/A	N/A	55	43	37
TI25S142	2.66	2.45	30.0	1.60	N/A	4	N/A	N/A	35	27	37
TI25S143	3.55	3.35	17.0	1.60	N/A	4	N/A	N/A	20	18	37
TI25S144	4.45	4.00	14.0	1.60	N/A	4	N/A	N/A	16	15	37
TI25S145	5.33	4.85	11.0	1.60	N/A	4	N/A	N/A	13	12	37
TI25S146	6.21	5.80	9.0	1.60	N/A	4	N/A	N/A	11	10	37

NOTES:

1. Inductance of TI25S1604 measured on Agilient/HP4284 between pins 7 & 11 at 100 kHz, 0.1 Vrms.
2. The Irated is either 85% of the Isaturation or the Iheating depending which is lower.
3. The Isaturation is the current which causes the inductance to drop by 15% of its nominal value.
4. The Iheating is the current which causes the temperature of the part to increase by approximately 45° C.