

TP30 SERIES

High Frequency 300 Watts
Planar Transformers



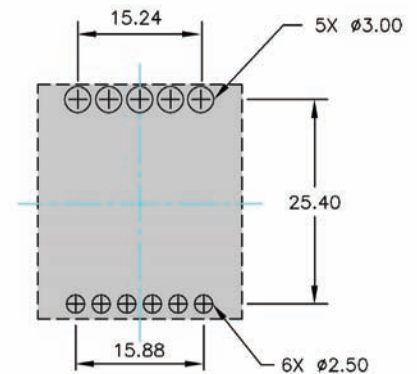
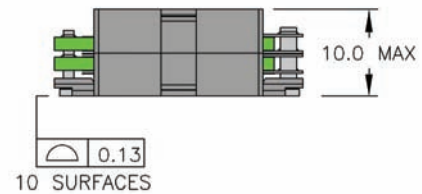
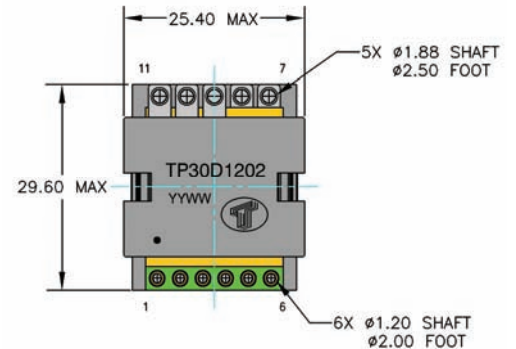
FEATURES

- Power Rating Up to 300 Watts
- High Efficiency of Over 98%
- High Power Density of 600 Watts Per Cubic Inch
- Footprint 29.6 mm X 25.4 mm
- Lower Profile of 9.0 mm and 10.0 mm
- High Isolation (operational) 1800 Vdc
- High Frequency 200 kHz – 700 kHz
- Operating Temperature -40° C to +125° C

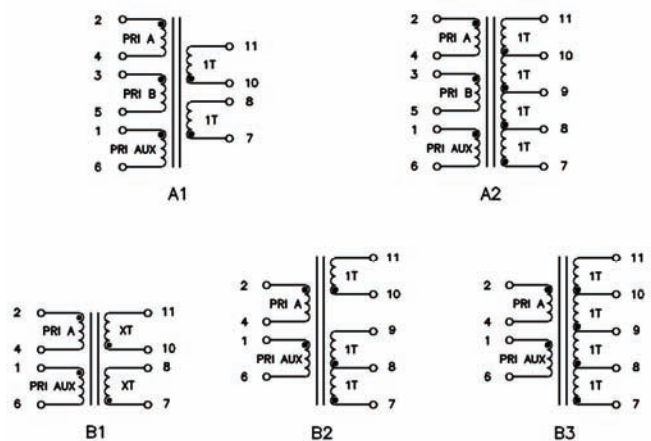
DESCRIPTION

The TP30 series of planar transformers are optimised for power supplies of high performance DC/DC. Due to an optimised core, winding geometry and interleaving technology, they are able to offer a high efficiencies up to over 98 percent, high power density of 600 watts per cubic inch, but lower profile of 9.0 mm and 10.0 mm . The series consist of 30 part numbers, off-the-shelf catalog parts can be arranged to 163 different winding configurations. Adding a primary auxiliary winding or a small gap to the transformer, they will be more expanding of configurations. The series are intended for use of DC-DC converter supply with forward, full-bridge, half-bridge and push – pull power supplies. Topologies in application with input voltages between 18 and 75 volts, and output voltages from 52 volts down to 1.xx volts.

Weight..... 20.00 grams
Tray.....30/tray



SUGGESTED PAD LAY-OUT



SCHEMATICS

TP30 SERIES

High Frequency 300 Watts
Planar Transformers

ELECTRICAL SPECIFICATIONS												
Part Number	Primary ¹ Inductance (uH Min)	Leakage ² Inductance (uH Max)	DC Resistance (mΩ Max)				Secondary	Turns Ratio		Pri/Sec Hi-Pot	Figure	M. Height
			Primary			Primary		Secondary				
			A	B	AUX.							
TP30S0402	54.00	0.30	10			1.20&1.20	4T	1T & 1T	1500 Vdc	B1	9.00 mm Max.	
TP30S0502	83.00	0.30	12		468		5T (5T/aux)					
TP30S0602	121.0	0.30	20		154		6T (2T/aux.)					
TP30S0702	166.0	0.30	48		158		7T (3T/aux.)					
TP30S0802	216.0	0.30	58				8T					
TP30S0403	54.00	0.30	10			1.80&0.60	4T	2T & 1T		B2		
TP30S0503	83.00	0.30	12		468		5T (5T/aux)					
TP30S0603	121.0	0.30	20		154		6T (2T/aux.)					
TP30S0703	166.0	0.30	48		158		7T (3T/aux.)					
TP30S0803	216.0	0.30	58				8T					
TP30S0404	54.00	0.30	10			4.8	4T	4T (1T:1T:1T:1T)		B3		
TP30S0504	83.00	0.30	12		468		5T (5T/aux)					
TP30S0604	121.0	0.30	20		154		6T (2T/aux.)					
TP30S0704	166.0	0.30	48		158		7T (3T/aux.)					
TP30S0804	216.0	0.30	58				8T					
TP30S0414	54.00	0.30	10			42&42	4T	7T & 7T	B1			
TP30S0514	83.00	0.30	12		468		5T (5T/aux)					
TP30S0614	121.0	0.30	20		154		6T (2T/aux.)					
TP30S0714	166.0	0.30	48		158		7T (3T/aux.)					
TP30S0814	216.0	0.30	58				8T					
TP30D0802	216.0	0.30	10	10		0.60&0.60	4T&4T	1T & 1T	A1			
TP30D1002	338.0	0.30	12	12	233		5T&5T (5T/aux)					
TP30D1202	486.0	0.30	20	20	76		6T&6T (2T/aux)					
TP30D1402	661.0	0.30	48	48	78		7T&7T (3T/aux)					
TP30D1602	864.0	0.30	58	58			8T&8T					
TP30D0804	216.0	0.30	10	10		4.8	4T&4T	4T (1T:1T:1T:1T)	A2			
TP30D1004	338.0	0.30	12	12	233		5T&5T (5T/aux)					
TP30D1204	486.0	0.30	20	20	76		6T&6T (2T/aux)					
TP30D1404	661.0	0.30	48	48	78		7T&7T (3T/aux)					
TP30D1604	864.0	0.30	58	58			8T&8T					

NOTES:

- 1.The inductance is measured with both primary windings connected in series where applicable (type D: 2 to 5 with 3 and 4 shorted, type S: 2 to 4 only)..
- 2.The leakage inductance is measured with both primary windings connected in series where applicable in all other winding shorted.
- 3.All specifications typical at T_A=25° C.