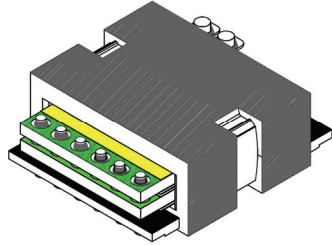


Planar Transformers

HS-TP30 SERIES

High Frequency 300 Watts



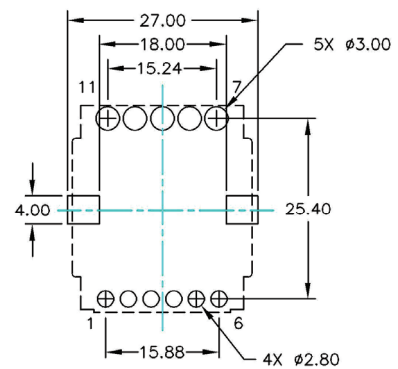
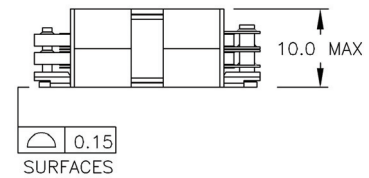
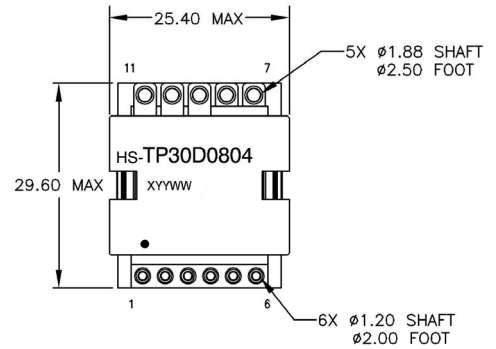
FEATURES

- 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

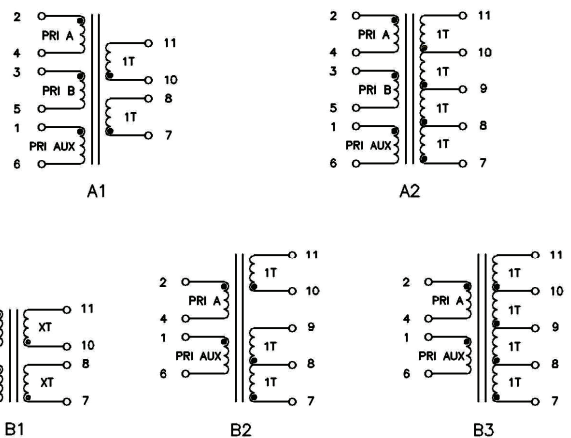
DESCRIPTION

The HS-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 1.2 volts.

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



SUGGESTED PAD LAY-OUT



SCHEMATICS

HS-TP30 SERIES



301 E. Arrow Highway, Suite 108
 San Dimas, CA 91773 USA
 Telephone: (909) 592-2234
 Fax: (909) 592-2231
 www.gei-inc.com

High Frequency 300 Watts
 Planar Transformers

ELECTRICAL SPECIFICATIONS															
Part Number	Primary ¹ Inductance (uH Min)	Leakage ² Inductance (uH Max)	DC Resistance (m Ω Max)				Secondary	Turns Ratio		Pri/Sec Hi-Pot	Figure	M. Height			
			Primary			Secondary		Primary	Secondary						
			A	B	AUX.										
HS-TP30S0402	46.00	0.30	10			1.20&1.20	4T	1T & 1T	1500 Vdc	B1	9.00 mm Max.				
HS-TP30S0502	73.00	0.30	12		468		5T (5T/aux)								
HS-TP30S0602	105.0	0.30	20		154		6T (2T/aux.)								
HS-TP30S0702	143.0	0.30	48		158		7T (3T/aux.)								
HS-TP30S0802	187.0	0.30	58				8T								
HS-TP30S0403	46.00	0.30	10			1.80&0.60	4T	2T & 1T		1500 Vdc		B2	9.00 mm Max.		
HS-TP30S0503	73.00	0.30	12		468		5T (5T/aux)								
HS-TP30S0603	105.0	0.30	20		154		6T (2T/aux.)								
HS-TP30S0703	143.0	0.30	48		158		7T (3T/aux.)								
HS-TP30S0803	187.0	0.30	58				8T								
HS-TP30S0404	46.00	0.30	10			4.8	4T	4T (1T:1T:1T:1T)				1500 Vdc		B3	9.00 mm Max.
HS-TP30S0504	73.00	0.30	12		468		5T (5T/aux)								
HS-TP30S0604	105.0	0.30	20		154		6T (2T/aux.)								
HS-TP30S0704	143.0	0.30	48		158		7T (3T/aux.)								
HS-TP30S0804	187.0	0.30	58				8T								
HS-TP30S0414	46.00	0.30	10			42&42	4T	7T & 7T	1500 Vdc		B1			9.00 mm Max.	
HS-TP30S0514	73.00	0.30	12		468		5T (5T/aux)								
HS-TP30S0614	105.0	0.30	20		154		6T (2T/aux.)								
HS-TP30S0714	143.0	0.30	48		158		7T (3T/aux.)								
HS-TP30S0814	187.0	0.30	58				8T								
HS-TP30D0802	187.0	0.30	10	10		0.60&0.60	4T&4T	1T & 1T		1500 Vdc	A1		10.00 mm Max.		
HS-TP30D1002	450.0	0.30	12	12	233		5T&5T (5T/aux)								
HS-TP30D1202	293.0	0.30	20	20	76		6T&6T (2T/aux)								
HS-TP30D1402	882.0	0.30	48	48	78		7T&7T (3T/aux)								
HS-TP30D1602	1152	0.30	58	58			8T&8T								
HS-TP30D0804	288.0	0.30	10	10		4.8	4T&4T	4T (1T:1T:1T:1T)			1500 Vdc	A2			10.00 mm Max.
HS-TP30D1004	450.0	0.30	12	12	233		5T&5T (5T/aux)								
HS-TP30D1204	648.0	0.30	20	20	76		6T&6T (2T/aux)								
HS-TP30D1404	882.0	0.30	48	48	78		7T&7T (3T/aux)								
HS-TP30D1604	1152	0.30	58	58			8T&8T								

NOTES:

- 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)..
- The leakage inductance is measured with both primary windings connected in series where applicable in all other winding shorted.
- All specifications typical at T_A=25° C.