Balanced top hat® RF Transformer

TRS1.5-182+

50Ω 10 to 1800 MHz

Features

- suitable for tin/lead and RoHS solder systems
- wideband, 10 to 1800 MHz
- balanced transmission line
- good return loss, 20 dB typ. at 1 dB band
- excellent amplitude unbalance, 0.3 dB typ.
- aqueous washable
- excellent intermod suppression

CASE STYLE: TT1618

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	10, 20, 50, 100, 200
13"	500

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio			1		Ohm
Frequency Range		10		1800	MHz
Insertion Loss*	50 -1200	—	0.6	1.4	dB
	10-1800	—	0.9	2.8	
Amplitude Unbalance	50-1000	—	0.3	0.95	dB
	1000-1200	—	0.5	0.90	
	10-1800	—	0.7	1.70	
Phase Unbalance	50-500	—	2	8	Degree
	500-1000	—	3	9	
	10-1800		7.5	10	
Primary Return Loss (Input)	50-500	—	18	—	dB
	500-1000	—	17	—	
	1000-1200	—	17	—	
	10-1800	—	14	—	

*Insertion Loss is referenced to mid-band loss, 0.65 dB typ.

Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	1W
DC Current	30mA

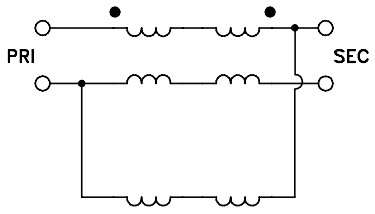
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

Function	Pin Number
PRIMARY DOT	4
PRIMARY	1
SECONDARY DOT	2
SECONDARY	3

Demo Board MCL P/N: TB-789+

Config. K



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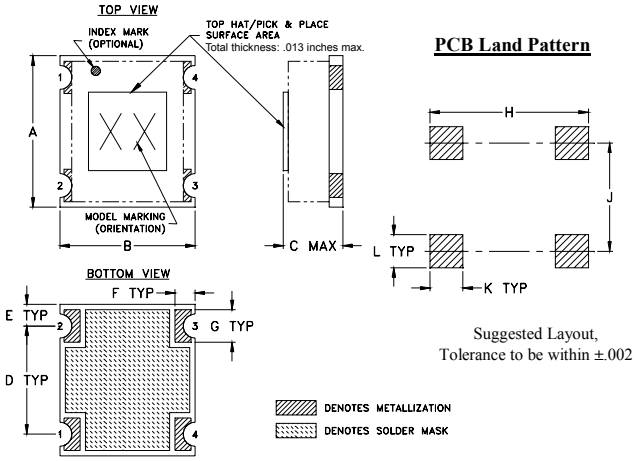
www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F
.280	.250	.12	.200	.040	.037
7.11	6.35	3.05	5.08	1.02	0.94

G	H	J	K	L	wt.
.060	.293	.200	.061	.061	grams
1.52	7.44	5.08	1.55	1.55	2.8

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
10.0	0.67	20.51	0.85	7.60
50.0	0.60	25.09	0.68	1.76
100.0	0.58	23.52	0.62	0.41
500.0	0.77	16.29	0.33	3.89
1050.0	1.09	14.27	0.45	5.50
1200.0	1.19	14.14	0.65	5.02
1300.0	1.27	13.80	0.78	4.52
1400.0	1.37	13.30	0.88	3.92
1600.0	1.63	11.87	1.04	2.47
1800.0	2.01	10.08	1.15	1.38