

Surface Mount RF Transformer

TRS1-182-75-7+

75Ω 10 to 1800 MHz

Maximum Ratings

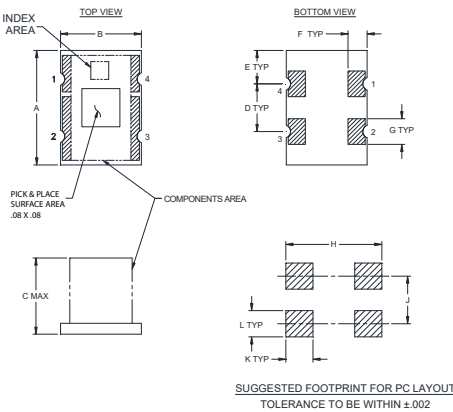
Operating Temperature	-40°C to 100°C
Storage Temperature	-55°C to 125°C
RF Power	1W
DC Current	30mA

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

Pin Connections

PRIMARY DOT	1
PRIMARY	2
SECONDARY DOT	3
SECONDARY	4

Outline Drawing

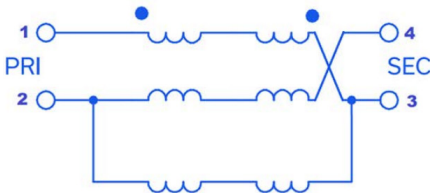


Outline Dimensions (inch/mm)

A	B	C	D	E	F
.240	.170	.160	.100	.070	.040
6.10	4.32	4.06	2.54	1.78	1.02
G	H	J	K	L	wt.
.054	.202	.100	.057	.055	grams
1.37	5.13	2.54	1.45	1.40	2.8

Test board for TRS1-182-75-7+ is TB-875+

Electrical Schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification occurrence.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

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



Generic photo used for illustration purposes only

CASE STYLE: TT1618-2

+RoHS Compliant

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

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio			1		:1
Frequency Range		10		1800	MHz
Insertion Loss ¹	50 - 1200		0.6	1	dB
	10 - 1800		0.9	2	
Amplitude Unbalance	50 - 1000		0.3	0.7	dB
	1000 - 1200		0.5	1.1	
	10 - 1800		0.7	1.5	
Phase Unbalance	50 - 1000		2	4	Deg.
	1000 - 1200		3	6	
	10 - 1800		7.5	15	
Primary Return Loss	50 - 500	16	22		dB
	500 - 1000	13	20		
	1000 - 1200	12	20		
	10 - 1800	8	12.5		

1. Insertion Loss is referenced to mid-band loss, 0.25 dB typ.

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
10	0.40	12.17	0.62	8.22
50	0.33	26.38	0.21	1.41
100	0.34	31.22	0.20	0.64
200	0.34	35.82	0.16	0.12
400	0.37	33.92	0.07	0.19
500	0.39	30.13	0.00	0.14
600	0.41	27.88	0.08	0.12
1000	0.50	23.13	0.44	0.91
1200	0.55	22.28	0.66	1.87
1800	0.68	22.28	1.14	7.84

