

Surface Mount RF Transformer

75Ω 1 to 400 MHz

TRS1.33-1T-75+



Generic photo used for illustration purposes only

CASE STYLE: AT577

+RoHS Compliant

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

Maximum Ratings

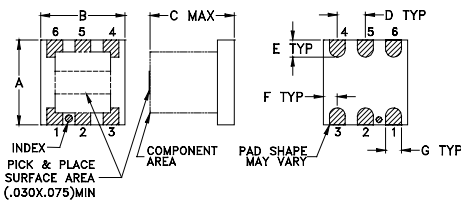
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.75W
DC Current	300mA

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

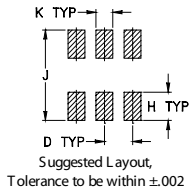
Pin Connections

PRIMARY DOT	1
PRIMARY	3
SECONDARY DOT	6
SECONDARY	4
SECONDARY CT	5
NOT USED	2

Outline Drawing



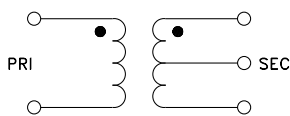
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.200	.200	.200	.075	.050	.025
5.08	5.08	5.08	1.91	1.27	0.64
G	H	J	K		wt
.026	.070	.220	.035		grams
0.66	1.78	5.59	0.89		0.15

Config. A



Features

- wideband, 1 to 400 MHz
- good return loss
- excellent amplitude unbalance and phase unbalance
- DC isolated

Applications

- impedance matching
- balanced to unbalance transformer
- push-pull amplifiers
- CATV

Electrical Specifications at 25°C

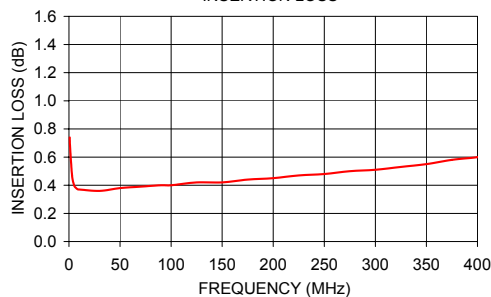
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary/primary)			1.33		Ohm
Frequency Range		1	—	400	MHz
Insertion Loss*	1 - 400	—	0.6	1.2	dB
	5 - 200	—	0.4	0.9	
Amplitude Unbalance	1 - 400	—	1.10	2.0	dB
	5 - 200	—	0.5	0.9	
Phase Unbalance	1 - 400	—	3	8	Degree
	5 - 200	—	2	7	

* Insertion Loss is referenced to mid-band loss, 0.4 dB.

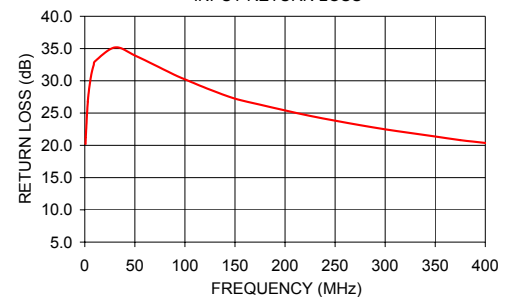
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
1.00	0.68	21.22	0.03	0.01
5.00	0.40	29.54	0.03	0.09
10.00	0.37	33.00	0.03	0.17
50.00	0.38	33.93	0.01	0.68
100.00	0.40	30.23	0.09	1.27
150.00	0.42	27.24	0.22	1.86
200.00	0.45	25.42	0.37	2.23
300.00	0.51	22.48	0.80	2.91
350.00	0.55	21.37	1.08	3.16
400.00	0.60	20.37	1.37	3.35

TRS1.33-1T-75+
INSERTION LOSS



TRS1.33-1T-75+
INPUT RETURN LOSS



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 document.
- 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-Circuits 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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

