



SURFACE MOUNT

RF Transformer

TRS1.33-1T-75+

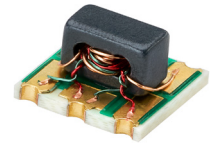
75Ω to 100Ω 1 to 400 MHz

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



Generic photo used for illustration purposes only

CASE STYLE: AT577-1

+RoHS Compliant

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

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	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	Deg.
	5 - 200		2	7	

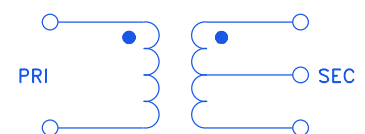
1. Insertion Loss is referenced to mid-band loss, 0.4 dB typ.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA

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

CONFIG. A



REV. C
ECO-024671
TC1.33-1T-75+
MCL NY
240808



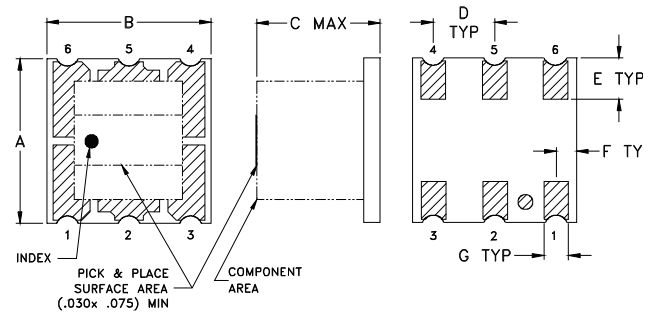


PIN CONNECTIONS

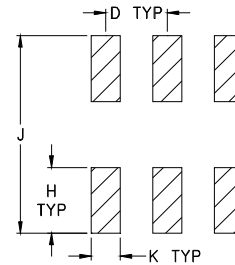
PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3
SECONDARY CT	2
NOT USED	5

PRODUCT MARKING: N/A

OUTLINE DRAWING



PCB Land Pattern



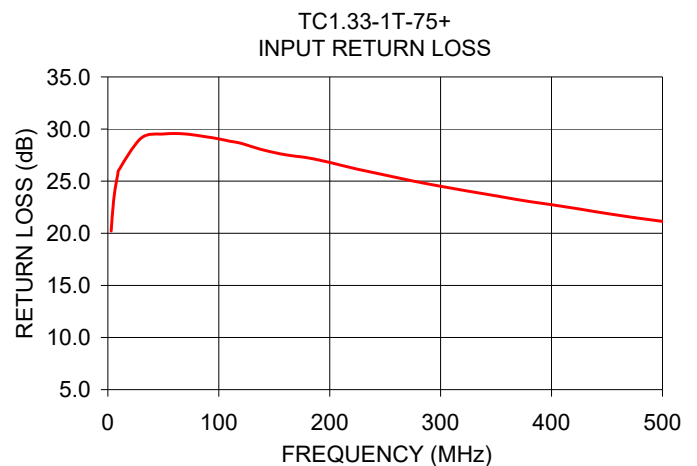
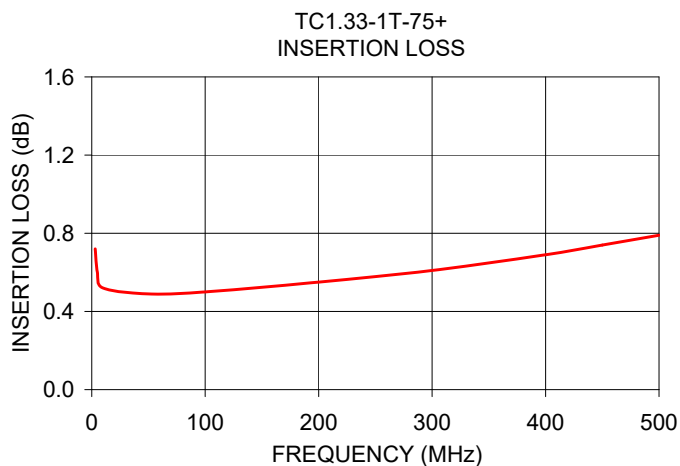
OUTLINE DIMENSIONS (Inch mm)

A	B	C	D	E	F
.200	.200	.15	.075	.050	.025
5.08	5.08	3.81	1.91	1.27	0.64
G	H	J	K		wt
.030	.080	.240	.035		grams
0.76	2.03	6.10	0.89		0.15



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



NOTES

- A. 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.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. 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/terms/viewterm.html