

RF Transformer

50Ω 600 to 1200 MHz

Maximum Ratings

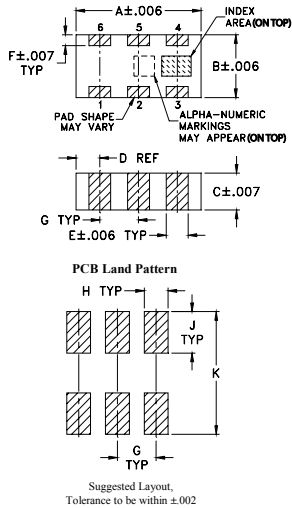
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Input RF Power	3W

Pad Connections

PRIMARY DOT (Unbalanced Port)	5
PRIMARY (GND)	4,6
SECONDARY DOT (Balanced)	3
SECONDARY (Balanced)	1
NO CONNECTION	2

Pads 1,3,4,6 are DC-connected internally

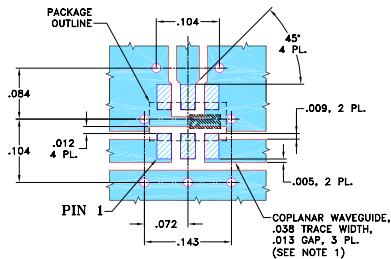
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K		wt
.039	.024	.042	.123		grams
0.99	0.61	1.07	3.12		.020

Demo Board MCL P/N: TB-417+
Suggested PCB Layout (PL-265)



NOTES:

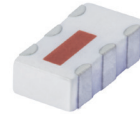
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" $\pm$.0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
-  DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
-  DENOTES COPPER LAYER PATTERN FREE OF SOLDER MASK

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-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

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TCN2-122+



Generic photo used for illustration purposes only

CASE STYLE: FV1206-1

+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"	20, 50, 100, 200, 500, 1000, 3000

Electrical Specifications (T_{AMB}=25°C)

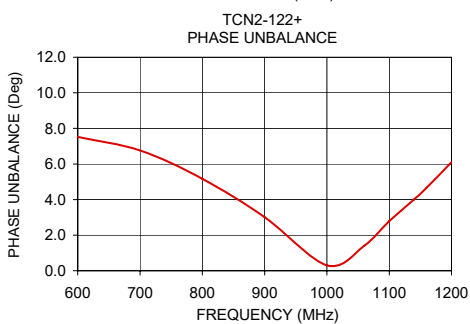
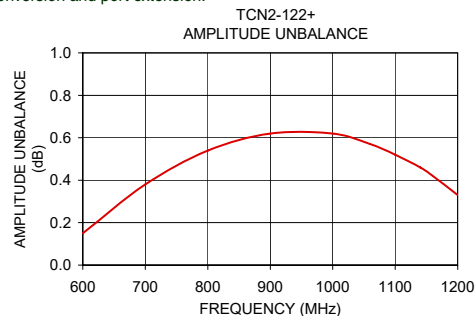
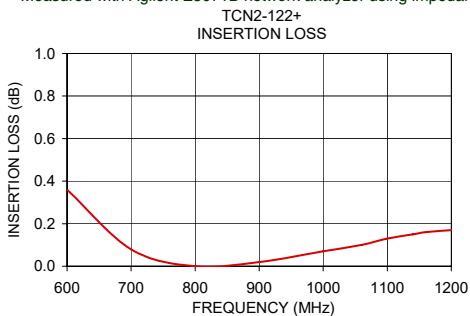
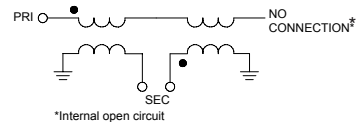
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION* LOSS (dB)	PHASE UNBALANCE† (Deg.) Typ.	AMPLITUDE UNBALANCE (dB) Typ.
2	600-1200	1.0	4	0.3

† Relative to 180°

Typical Performance Data at 25°C**

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
600.00	0.36	11.90	0.15	7.52
700.00	0.08	17.72	0.38	6.76
800.00	0.00	27.57	0.54	5.17
900.00	0.02	27.76	0.62	3.01
1000.00	0.07	21.96	0.62	0.30
1060.00	0.10	20.45	0.57	1.40
1100.00	0.13	19.81	0.52	2.79
1140.00	0.15	19.40	0.46	4.01
1160.00	0.16	19.32	0.42	4.66
1200.00	0.17	19.29	0.33	6.10

TCN2-122+

**configuration J**

*Internal open circuit

REV. D
M160980
TCN2-122+
ED-12817/34B1
RS/CP/AM
170321

Mouser Electronics

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