



SURFACE MOUNT

RF Transformer

TC4-1TG2+

Mini-Circuits

50Ω 0.5 to 300 MHz

THE BIG DEAL

- Suitable for Tin/Lead and RoHS Solder Systems
- Wideband 0.5 to 300 MHz, Usable Over 0.2 to 450 MHz
- Good Return Loss
- Impedance Matching
- Aqueous Washable



Generic photo used for illustration purposes only

CASE STYLE: AT224-3

+RoHS Compliant

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

APPLICATIONS

- CATV

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (Secondary/Primary)			4		
Frequency Range		0.5		300	MHz
Insertion Loss ¹	0.5-300			2.0	dB
	1.5-100			1.0	
Phase Unbalance	0.5-300		4		Degree
	1.5-100		1		

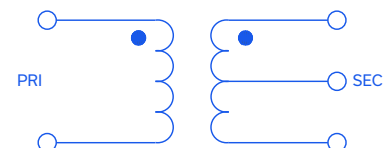
1. Insertion Loss is referenced to mid-band loss, 0.3 dB typ.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-20°C to +85°C
Storage Temperature	-55°C to +100°C
RF Power	0.25 W
DC Current	30 mA

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

CONFIG. A



REV. D
ECO-027946
TC4-1TG2+
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Mini-Circuits

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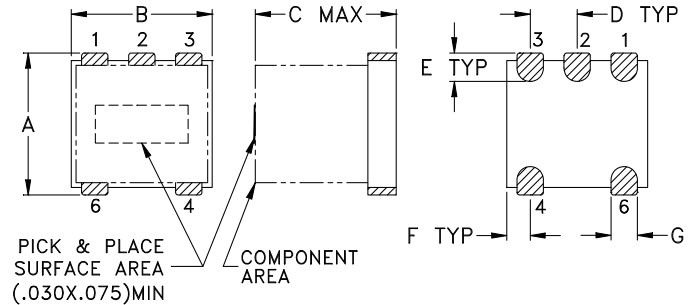
PIN CONNECTIONS

PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3
SECONDARY CT	2

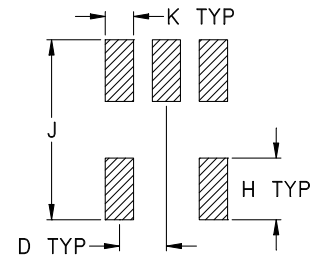
PRODUCT MARKING: N/A

DEMO BOARD MCL P/N: TB-TC4-1G2+

OUTLINE DRAWING



PCB Land Pattern



Suggested Layout,
Tolerance to be within $\pm .002$

OUTLINE DIMENSIONS (Inch mm)

A	B	C	D	E	F
.150	.150	.150	.050	.030	.025
3.81	3.81	3.81	1.27	0.76	0.64
G	H	J	K		wt
.028	.065	.190	.030		grams
0.71	1.65	4.83	0.76		0.10

TAPE & REEL INFORMATION: F17



SURFACE MOUNT

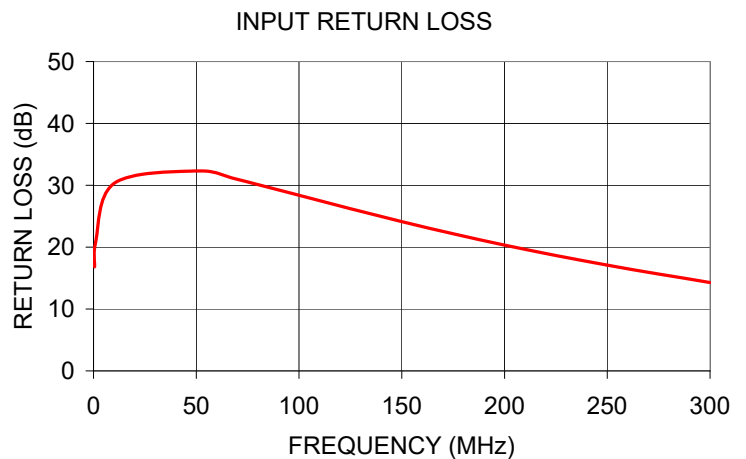
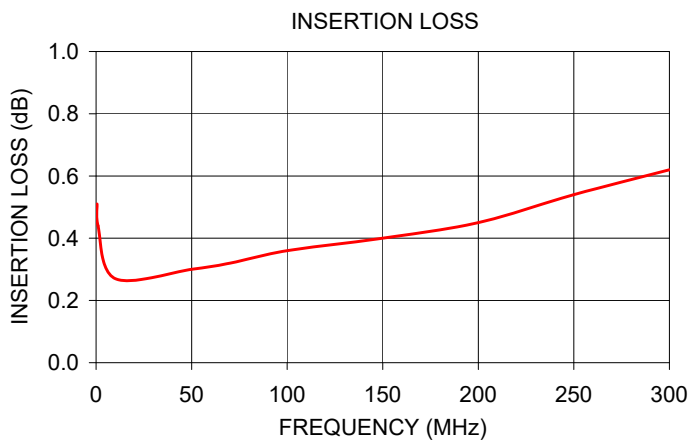
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TYPICAL PERFORMANCE DATA

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
0.5	0.51	16.81
1.0	0.44	20.73
10.0	0.27	30.31
50.0	0.30	32.32
70.0	0.32	30.95
100.0	0.36	28.39
150.0	0.40	24.12
200.0	0.45	20.32
250.0	0.54	17.09
300.0	0.62	14.29



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

