THIS MODEL IS A REFERENCE DESIGN FOR TRIQUINT TAT3814 MODEL

Surface Mount

RF Transformer

ADT2-32-1+

75Ω 5 to 300 MHz

CASE STYLE: CD542
PRICE: Contact Sales Dept.

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

Maximum Ratings

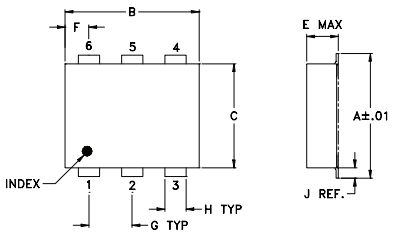
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	26 dBm(0.40W)
DC Current(Into Secondary CT)	300mA

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

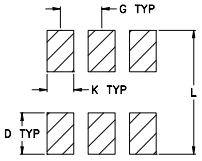
Pin Connections

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

Outline Drawing



PCB Land Pattern



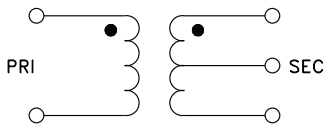
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.112	.055	.100
6.91	7.87	5.59	2.54	2.84	1.40	2.54

H	J	K	L	wt
.030	.026	.065	.300	grams
0.76	0.66	1.65	7.62	0.20

Config. A



Features

- excellent return loss, 25 dB typ.
- excellent amplitude unbalance, 0.6 dB typ. and phase unbalance, 4 deg typ.
- aqueous washable
- protected under US patent 6,133,525

Applications

- impedance matching
- balanced amplifier

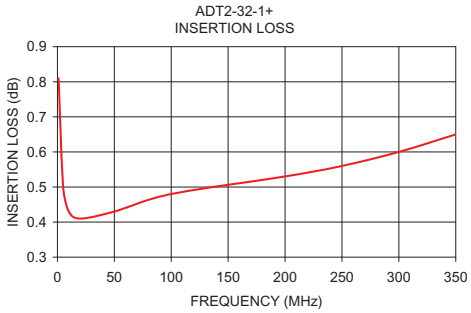
Electrical Specifications at 25°C

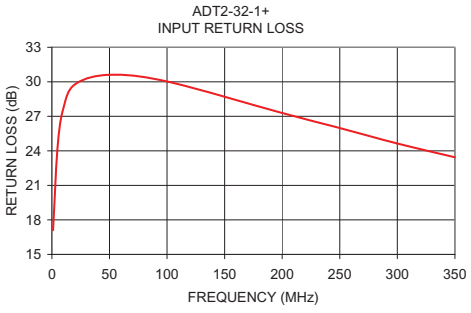
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary/primary)			2		Ohm
Frequency Range		5		300	MHz
Insertion Loss*	5-300		0.4	0.6	dB
Amplitude Unbalance	5-300		0.8	0.9	dB
Phase Unbalance	5-300		4	9	Degree
Return Loss	5-300	16			dB
IP3 (6 MHz Tone spacing at 6dBm)	16 50 150 200 250 300	50			dBm

* 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.)
1.0	0.81	17.11	0.13	0.27
5.0	0.50	24.38	0.07	0.33
10.0	0.43	27.70	0.02	0.25
20.0	0.41	29.78	0.01	0.11
50.0	0.43	30.61	0.03	0.90
100.0	0.48	30.03	0.08	1.96
200.0	0.53	27.29	0.26	3.91
250.0	0.56	25.98	0.40	4.78
300.0	0.60	24.64	0.58	5.60
350.0	0.65	23.44	0.79	6.33





Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. **2.** Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. **3.** The parts covered by this specification sheet 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.

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