

Surface Mount RF Transformer

TC16-161T+

50Ω 0.6 to 160 MHz

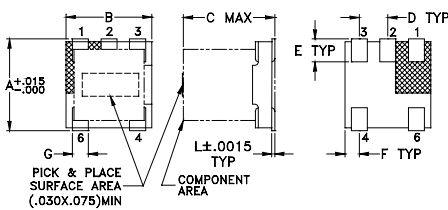
Maximum Ratings

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

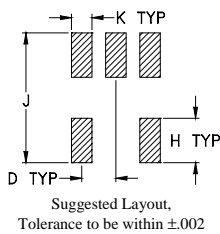
Pin Connections

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

Outline Drawing AT224-1



PCB Land Pattern



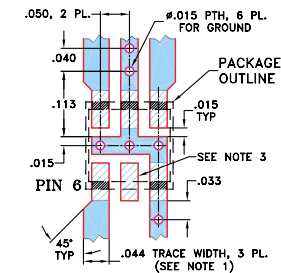
Outline Dimensions (inch)

A	B	C	D	E	F
.150	.150	.160	.050	.040	.025
3.81	3.81	4.06	1.27	1.02	0.64

G	H	J	K	L	wt
.028	.065	.190	.030	.007	grams
0.71	1.65	4.83	0.76	0.18	0.15

Demo Board MCL P/N: TB-145

Suggested PCB Layout (PL-244)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" ± .0015"; COPPER: 1/2 OZ. ON EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
3. THIS PAD IS NOT REQUIRED FOR AT224 CASE STYLE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- plastic base with solder plated leads
- excellent amplitude unbalance, 0.1dB typ. and phase unbalance, 0.5 deg. typ.

Applications

- impedance matching
- balanced amplifier



CASE STYLE: AT224-1
PRICE: \$1.59 ea. QTY (100)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

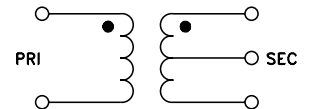
The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Transformer Electrical Specifications

Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
16	0.6-160	0.6-160	1.5-120	3-80

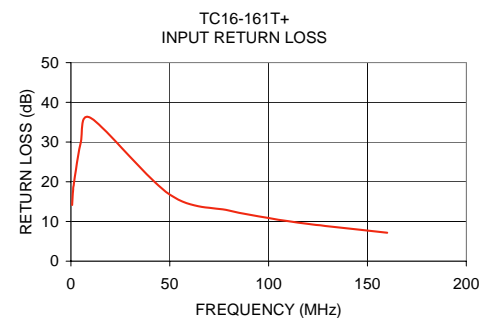
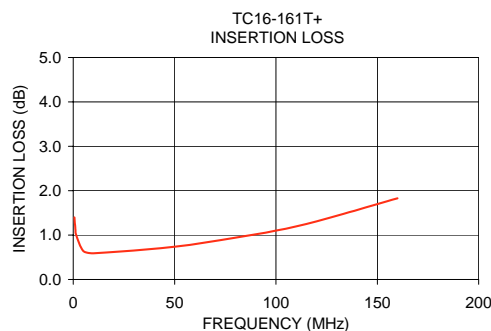
* Insertion Loss is referenced to mid-band loss, 0.6 dB typ.

Config. A



Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
0.60	1.40	14.15
1.00	1.16	17.14
1.50	0.99	19.51
5.00	0.64	29.93
10.00	0.59	36.06
50.00	0.74	16.77
80.00	0.94	12.74
100.00	1.10	10.87
120.00	1.31	9.38
160.00	1.83	7.18



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RF/IF MICROWAVE COMPONENTS

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