RF Transformer

50Q 0.5 to 550 MHz

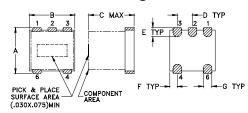
Maximum Ratings

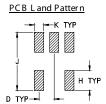
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	250mW
DC Current	30mA
Permanent damage may occur if any	of these limits are exceeded.

Pin Connections

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

Outline Drawing AT224-3



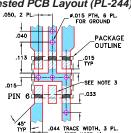


Suggested Layout, Tolerance to be within +.002

Outline Dimensions (inch)

Α	В	С	D	Е	F
.150	.150	.150	.050	.030	.025
3.81	3.81	3.81	1.27	0.76	0.64
G	Н	J	K		wt
G .028	H .065	J .190	K .030		wt grams

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 0Z. ON EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFED. 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)

MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- suitable for tin/lead and RoHS solder systems
- low insertion loss, 0.4 dB typ.in 1 dB Bandwidth
- excellent return loss, 25 dB typ. in 1 dB Bandwith
- aqueous washable

Applications

- impedance matching, 50 to 75 ohms
- balanced amplifier

TC1.5-52TG2+



CASE STYLE: AT224-3 PRICE: \$2.79 ea. QTY (20) \$1.79 ea. QTY (100)

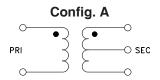
+RoHS Compliant

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

Transformer Electrical Specifications

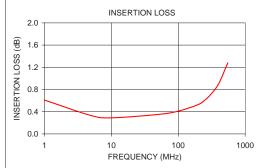
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	3 dB MHz	INSERTION LOSS* 2 dB MHz	1 dB MHz
1.5	0.5-550	0.5-550	1-350	2-200

* Insertion Loss is referenced to mid-band loss, 0.4 dB tvp.



Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	
	(05)	(05)	
0.50	0.82	15.72	
1.00	0.61	19.84	
5.00	0.33	28.81	
10.00	0.29	32.35	
50.00	0.35	28.60	
100.00	0.41	23.52	
200.00	0.53	18.07	
250.00	0.61	16.13	
300.00	0.70	14.71	
400.00	0.90	12.52	
550.00	1.28	10.19	





- 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 Claudia popularity and the state of the state
- Electrical specifications and performance data contained in this specification document are hardened to be excluded and of the first part of this specification. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

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