Surface Mount **RF Transformer**

50Ω 350 to 1500 MHz

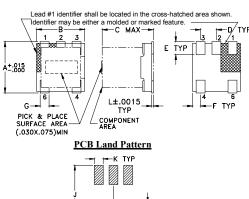
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA
Permanent damage may occur if any	of these limits are exceeded.

Pin Connections

PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	
SECONDARY	3
NOT USED	2

Outline Drawing AT224-1



н түр D TYP-Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

F	E	D	C	B	A
.025	.040	.050	.160	. 150	. 150
0.64	1.02	1.27	4.06	3.81	3.81
wt	L	K	J	H	G
grams	.007	.030	. 190	. 065	.028
0.15	0.18	0.76	4.83	1.65	0.71

Config. G Ο PRI SEC \cap \cap

Features

- wideband, 350 to 1500 MHz
- · balanced transmission line
- good return loss
- plastic base with leads
- · aqueous washable

Applications

- PCS
- cellular
- impedance matching
- balanced amplifier
- baluns





CASE STYLE: AT224-1

*Addition of Top hat™ feature

Benefits Allows faster pick-and-place

Enables visual identification marking

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

Electrical Specifications

MODEL	Ω	FREQUENCY	INSERTION LOSS*			
	NO.	RATIO	(MHz)	3 dB MHz	2 dB MHz	1 dB MHz
	TC1-15+	1	350-1500	—	350-1500	800-1500

* Insertion Loss is referenced to mid-band loss, 0.35 dB tvp.

	Available Tape and Reel at no extra cost
Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500
13"	1000, 2000

Typical Performance Data

	FREQUENCY (MHz)	INSERTION LOSS (dB)	1	INPUT R. LOSS (dB)			
	350.00	0.46		8.47			
	360.00	0.56		8.38			
	470.00	0.71		7.92			
	580.00	0.86		7.58			
	690.00	0.59		8.03			
	800.00	0.60		8.62			
	975.00	0.48		11.81			
	1150.00	0.38		19.36			
	1325.00	0.43		29.22			
	1500.00	0.50		30.48			
1.0	INSERTION LOSS		40.0	INPUT R	ETURN L	oss	
			35.0				
0.8		(gp	30.0				
0.6		ss (25.0				
0.0		RETURN LOSS (dB)	20.0				
0.4		- JRN	15.0		_		
			10.0		\checkmark		
0.2		CC	5.0				
0.0			0.0				
300 600	900 1200	1500	300	600	900	1200	
	FREQUENCY (MHz)	1500	300		JENCY (M		

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-Circuit's website at www.minicircuits.com/WCLStore/terms.jsp



REV. D M151107 TC1-15+ IG/TD/CP/AM 151019 Page 1 of 1