# **RF Transformer**

CASE STYLE: AT224-1A

### \*Addition of Top hat™ feature

- Benefits Allows faster pick-and-place

#### +RoHS Compliant

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

#### 50Q 0.4 to 500 MHz

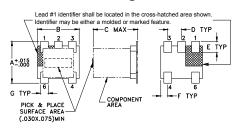
#### **Maximum Ratings**

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 o	of these limits are exceeded

#### Pin Connections

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

### **Outline Drawing AT224-1A**

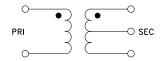




## Outline Dimensions (inch)

0 .025	<b>E</b>	<b>D</b>	C	<b>B</b>	<b>A</b>
	. <b>040</b>	. <b>050</b>	.160	. <b>150</b>	. <b>150</b>
	1.02	1.27	4.06	3.81	3.81
wt		<b>K</b>	J	H	<b>G</b>
grams		. <b>030</b>	. <b>190</b>	. <b>065</b>	. <b>028</b>
0.15		0.76	4.83	1.65	0.71

### Config. A



#### **Features**

- usable over 0.4-500 MHz
- excellent amplitude unbalance, 0.1 dB typ.
- and phase unbalance, 2 deg typ. in 1 dB bandwidth
- good return loss
- · plastic base with leads
- aqueous washable

### **Applications**

- VHF/UHF receivers/transmitters
- push-pull amplifiers

### **Electrical Specifications**

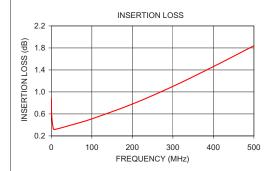
Ω RATIO	FREQUENCY (MHz)	INSI 3 dB MHz	ERTION LO	PSS* 1 dB MHz	UNBAI (De	ASE LANCE eg.) /p. 2 dB bandwidth	(d	ANCE
1	0.4-500	0.4-500	0.5-300	1-100	2	5	0.1	0.6

<sup>\*</sup> Insertion Loss is referenced to mid-band loss, 0.35 dB typ.

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)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.30	0.88	15.46	0.06	0.03
1.00	0.57	21.01	0.04	0.05
5.00	0.33	27.35	0.02	0.01
10.00	0.32	28.55	0.02	0.15
50.00	0.40	23.46	0.02	0.63
100.00	0.51	18.34	0.06	1.24
200.00	0.78	13.01	0.21	2.57
300.00	1.10	10.06	0.47	3.99
400.00	1.46	8.16	0.82	5.66
500.00	1.84	6.90	1.26	7.50





- 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/MCLStore/terms.jsp