**Maximum Ratings** 

Operating Temperature

**Pin Connections** 

Storage Temperature

# **RF Transformer**

# $50\Omega$

RF Power

DC Current

**PRIMARY** 

PRIMARY DOT

SECONDARY

SECONDARY DOT

SECONDARY CT

#### 500 to 2500 MHz

-40°C to 85°C

0.25 W

30 mA

6

1

2

-55°C to 100°C

### **Features**

- wideband, 500-2500 MHz
- balanced transmission line with secondary center tap

- aqueous washable

- good return loss
- plastic base with leads

### **Applications**

- cellular



Generic photo used for illustration purposes only

CASE STYLE: AT224-1

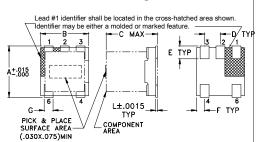
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



#### 4 3 • PCS

### Outline Drawing AT224-1

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



#### **PCB Land Pattern**

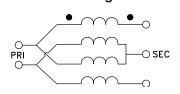


Suggested Layout, Tolerance to be within ±.002

#### Outline Dimensions (inch)

F	E	D	С	В	Α
.025	.040	.050	.160	.150	.150
0.64	1.02	1.27	4.06	3.81	3.81
4		1/			_
		• • •	J	Н	G
grams	.007	.030	.190	.065	.028
0.15	0.18	0.76	4.83	1.65	0.71

## Config. H



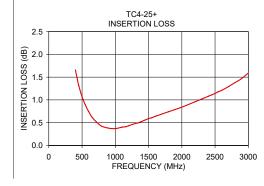
#### **Transformer Electrical Specifications**

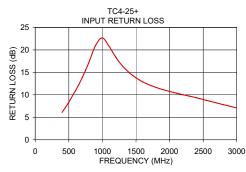
Ω <b>RATIO</b> (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
4	500-2500	500-2500	700-1500	750-1200

\* Insertion Loss is referenced to mid-band loss, 0.2 dB typ.

#### **Typical Performance Data**

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	
400.00	1.66	6.09	
500.00	1.07	8.37	
600.00	0.74	10.92	
700.00	0.54	13.81	
800.00	0.42	17.29	
900.00	0.38	21.02	
1000.00	0.37	22.67	
1100.00	0.40	20.79	
1200.00	0.43	18.40	
1300.00	0.48	16.41	
1400.00	0.53	14.94	
1500.00	0.59	13.79	
1600.00	0.64	12.90	
1800.00	0.74	11.65	
2000.00	0.84	10.75	
2200.00	0.96	10.03	
2400.00	1.08	9.35	
2500.00	1.14	8.96	
2800.00	1.38	7.82	
3000.00	1.59	7.06	





- 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