# **RF Transformer**

TC4-11G2+

# $50\Omega$

# 2 to 1100 MHz

#### **Maximum Ratings**

Operating Temperature	-20°C to 85°C		
Storage Temperature	-55°C to 100°C		
RF Power	0.25W		
DC Current	30mA		

#### **Pin Connections**

PRIMARY DOT	6
PRIMARY	3
SECONDARY DOT	1
SECONDARY	3

#### **Features**

- wideband, 2 to 1100 MHz
- good return loss
- step-down autotransformer
- aqueous washable
- leadless surface mount

### **Applications**

• cellular



CASE STYLE: AT224-3

#### +RoHS Compliant

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

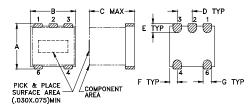


#### **Transformer Electrical Specifications**

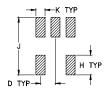
Ω <b>RATIO</b> (Primary/Secondary)	FREQUENCY (MHz)	3 dB MHz	INSERTION LOSS*  2 dB MHz	1 dB MHz
50/12.5	2-1100		2-1100	5-700

Insertion Loss is referenced to mid-band loss, 0.4 dB typ. Stepdown, 50 ohm primary, 5.2 pF across secondary

## **Outline Drawing AT224-3**



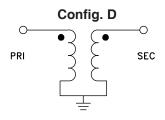
#### PCB Land Pattern



Suggested Layout, Tolerance to be within ±002

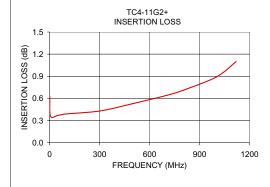
### Outline Dimensions (inch )

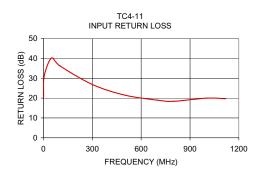
F	Е	D	С	В	Α
.025	.030	.050	.150	.150	.150
0.64	0.76	1.27	3.81	3.81	3.81
wt		K	J	Н	G
grams		.030	.190	.065	.028
0.10		0.76	4.83	1.65	0.71



### **Typical Performance Data**

FREQUENCY (MHz) USS (dB) INPUT R. LOSS (dB)  1.00 0.63 20.35 5.00 0.36 31.19 50.00 0.37 40.18 100.00 0.39 36.30 300.00 0.43 26.86 500.00 0.53 21.49 700.00 0.64 18.96 800.00 0.71 18.37 1000.00 0.89 19.97 1120.00 1.10 19.69				
5.00     0.36     31.19       50.00     0.37     40.18       100.00     0.39     36.30       300.00     0.43     26.86       500.00     0.53     21.49       700.00     0.64     18.96       800.00     0.71     18.37       1000.00     0.89     19.97		LOSS	R. LOSS	
50.00     0.37     40.18       100.00     0.39     36.30       300.00     0.43     26.86       500.00     0.53     21.49       700.00     0.64     18.96       800.00     0.71     18.37       1000.00     0.89     19.97				
300.00 0.43 26.86 500.00 0.53 21.49 700.00 0.64 18.96 800.00 0.71 18.37 1000.00 0.89 19.97				
500.00     0.53     21.49       700.00     0.64     18.96       800.00     0.71     18.37       1000.00     0.89     19.97	100.00	0.39	36.30	
700.00 0.64 18.96 800.00 0.71 18.37 1000.00 0.89 19.97	300.00	0.43	26.86	
800.00 0.71 18.37 1000.00 0.89 19.97	500.00	0.53	21.49	
1000.00 0.89 19.97	700.00	0.64	18.96	
	800.00	0.71	18.37	
1120.00 1.10 19.69	1000.00	0.89	19.97	
	1120.00	1.10	19.69	





- 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