

# Surface Mount RF Transformer

## TCL1-11+

50Ω      600 to 1100 MHz

### Maximum Ratings

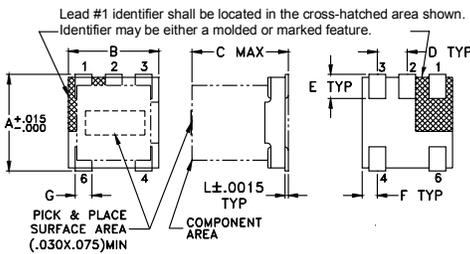
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25 W
DC Current	30 mA

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

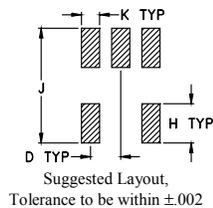
### Pin Connections

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

### Outline Drawing AT224-1



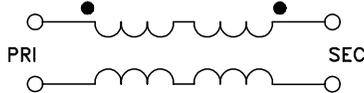
### PCB Land Pattern



### Outline Dimensions (inch/mm)

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

### Config. G

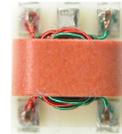


### Features

- wideband, 600 to 1100 MHz
- balanced transmission line
- excellent amplitude unbalance, 0.6 dB typ.
- excellent phase unbalance, 8 deg typ.
- plastic base with leads
- aqueous washable

### Applications

- cellular
- baluns
- impedance matching



CASE STYLE: AT224-1  
PRICE: \$2.09 ea. QTY (20)  
\$1.09 ea. QTY (100)

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

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

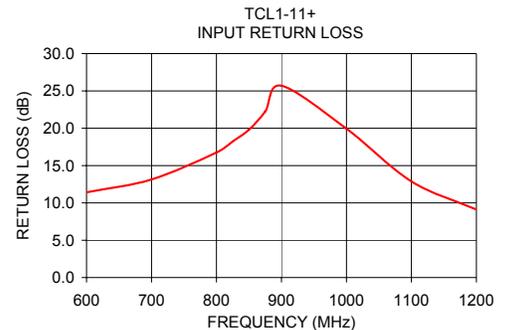
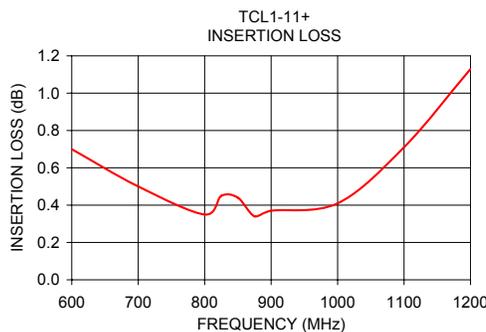
### Transformer Electrical Specifications

MODEL NO.	Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*	
			2 dB MHz	1 dB MHz
TCL1-11+	1	600-1100	600-1100	700-1000

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

### Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
600.00	0.70	11.42
700.00	0.50	13.14
800.00	0.35	16.75
825.00	0.45	18.23
850.00	0.44	19.80
875.00	0.34	22.25
900.00	0.37	25.70
1000.00	0.41	19.94
1100.00	0.71	12.88
1200.00	1.13	9.11



**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).

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