# Surface Mount **RF** Transformer

### 50Q

## 0.5 to 300 MHz

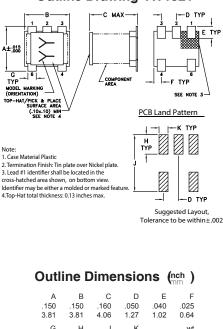
### **Maximum Ratings**

Operating Temperature	-20°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.				

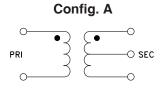
#### **Pin Connections**

PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3
SECONDARY CT	2
NOT USED	5

### Outline Drawing AT1521



#### G н к wt 1 .028 .065 .190 .030 grams 0.71 1.65 4.83 0.76 0.15



Notes

### **Features**

- wide band 0.5-300 MHz,
- usable over 0.2-450 MHz
- good return loss
- impedance matching
- plastic base with leads
- aqueous washable

#### **Applications**

catv





	CASE STYLE: AT1521				
+RoHS Compliant The +Suffix identifies RoHS Compliance. See our we for RoHS Compliance methodologies and qualification					
	Available Tape and Reel at no extra cost				

13"

20, 50, 100, 200, 500 1000, 2000

## **Transformer Electrical Specifications**

Ω	FREQUENCY	INSERTION LOSS*		
RATIO (Secondary/Primary)	(MHz)	3 dB MHz	2 dB MHz	1 dB MHz
4	0.5-300	—	0.5-300	1.5-100

\* Insertion Loss is referenced to mid-band loss, 0.3 dB typ.

#### **Typical Performance Data** FREQUENCY INSERTION INPUT (MHz) LOSS R. LOSS (dB) (dB) 0.50 0.51 16.81 1.00 0.44 20.73 0 27 10.00 30.31 50.00 0.30 32.32 70.00 0.32 30.95 100.00 0.36 28.39 150.00 0.40 24.12 200.00 0.45 20.32 250.00 0.54 17.09 300.00 0.62 14.29 INSERTION LOSS INPUT RETURN LOSS 1.0 50 (dB) 0.8 (dB) 40 **NSERTION LOSS** RETURN LOSS 0.6 30 20 0.4

10

0

0

50

100

150

FREQUENCY (MHz)

200

50

0.2

0.0

0

100

150

FREQUENCY (MHz)

200

250

300

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



250

300

## Mini-Circuits

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