

# **SURFACE MOUNT**

# RF Transformer

50Ω 500 to 2500 MHz

- TC4-25+
- \*Addition of Top Hat® feature Benefits
- · Allows faster pick-and-place
- · Enables visual identification marking



Generic photo used for illustration purposes only CASE STYLE: AT224-1A

+RoHS Compliant
The +Suffix identifies RoHS Compliance.
ee our website for methodologies and qualification

#### **FEATURES**

- Wideband, 500-2500 MHz
- · Balanced transmission line with secondary center tap
- Good return loss
- · Plastic base with leads
- Aqueous washable

#### **APPLICATIONS**

- PCS
- Cellular

#### **ELECTRICAL SPECIFICATIONS AT 25°C**

Parameter	Condition	Min.	Тур.	Max.	Unit
Impedance Ratio (secondary / primary)			4		
Frequency Range		500		2500	MHz
	500-2500		3.0		
Insertion Loss*	700-1500		2.0		dB
	750-1200		1.0		

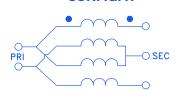
<sup>\*</sup> Insertion Loss is referenced to mid-band loss, 0.2 dB typ.

### **MAXIMUM RATINGS**

Parameter	Ratings	
Operating Temperature	-40°C to 85°C	
Storage Temperature	-55°C to 100°C	
RF Power	0.25W	
DC Current	30mA	

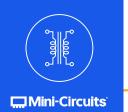
Permanent damage may occur if any of these limits are exceeded.





REV. C ECO-015303 TC4-25+ MCL NY 220913





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50Ω

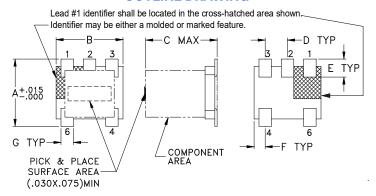
500 to 2500 MHz

## **PIN CONNECTIONS**

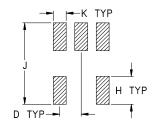
PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	3
SECONDARY	1
SECONDARY CT	2

# **PRODUCT MARKING: NA**

### **OUTLINE DRAWING**



### **PCB Land Pattern**



Suggested Layout, Tolerance to be within±.002

# OUTLINE DIMENSIONS (Inch )

F	Е	D	С	В	Α
.025	.040	.050	.160	.150	.150
0.64	1.02	1.27	4.06	3.81	3.81
					_
wt		K	J	Н	G
grams		.030	.190	.065	.028
0.15		0.76	4.83	1.65	0.71

## **TAPE & REEL INFORMATION: F17**



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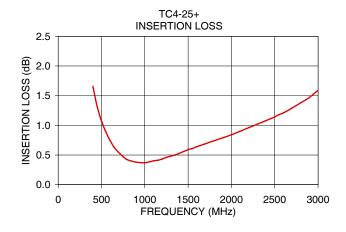
TC4-25+

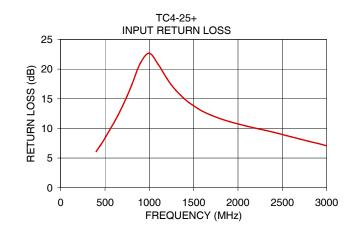
50Ω

500 to 2500 MHz

## **TYPICAL PERFORMANCE DATA**

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
500.00	1.07	8.37
1000.00	0.37	22.67
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





#### NOTES

- 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/terms/viewterm.html

