



top hat  
SURFACE MOUNT  
**RF Transformer**

**TC4-1WX+**

50Ω 3 to 800 MHz

**FEATURES**

- Wideband, 3-800 MHz
- Good return loss
- Plastic base with leads
- Aqueous washable



*Generic photo used for illustration purposes only*

CASE STYLE: AT1521

**+RoHS Compliant**

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

**APPLICATIONS**

- Impedance matching
- Push-pull amplifiers

**ELECTRICAL SPECIFICATIONS AT 25°C**

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary /primary)			4		
Frequency Range		3		800	MHz
Insertion Loss*	3-800		3.0		dB
	5-400		2.0		
	10-100		1.0		

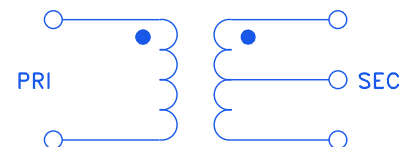
\* Insertion Loss is referenced to mid-band loss, 0.8 dB typ.

**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.

**CONFIG. A**



REV. C  
ECO-014884  
TC4-1WX+  
IG/TD/CP/AM  
230808





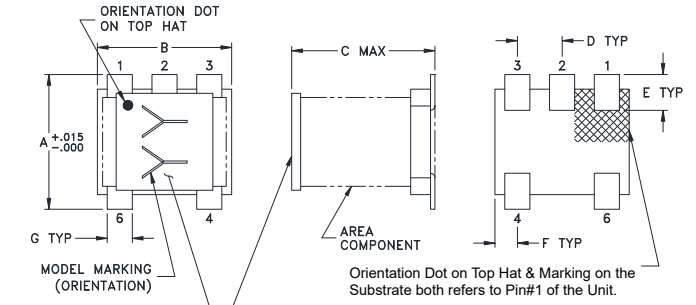
50Ω 3 to 800 MHz

### PIN CONNECTIONS

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

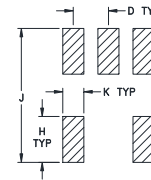
**PRODUCT MARKING:** FM

### OUTLINE DRAWING



Top-hat total thickness: .013 inches MAX.

### PCB Land Pattern



Suggested Layout,  
Tolerance to be within  $\pm 0.02$

### OUTLINE DIMENSIONS (Inch mm)

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

Weight: 0.15 grams

**TAPE & REEL INFORMATION:** F17



### TYPICAL PERFORMANCE DATA

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
3.00	1.09	11.58
4.00	0.98	12.35
5.00	0.93	13.11
7.50	0.86	14.21
10.00	0.83	14.49
100.00	0.88	15.77
250.00	0.96	16.17
400.00	1.13	16.72
600.00	1.36	15.59
800.00	2.21	9.07



**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](http://www.minicircuits.com/terms/viewterm.html)