

# Surface Mount RF Transformer

50Ω

3 to 800 MHz

**TCM4-1WX+**  
Upgraded Version\*

\*Addition of Top-hat® feature

**Benefits**

- Allows faster pick-and-place
- Enables visual identification marking

**TCM4-1W+**



Generic photo used for illustration purposes only

CASE STYLE: DB714

**+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

**Features**

- wide bandwidth. 3 to 800 MHz
- good return loss
- plastic base with solder plated leads
- aqueous washable

**Applications**

- CATV
- VHF/UHF
- balanced amplifier
- impedance matching

**Electrical Specifications at 25°C**

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (Secondary/Primary)			4		Ohm
Frequency Range		3		800	MHz
Insertion Loss*	3 - 800		3		dB
	4 - 400		2		
	10 - 100		1		

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

**Maximum Ratings**

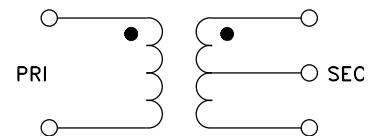
Parameter	Ratings
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA

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

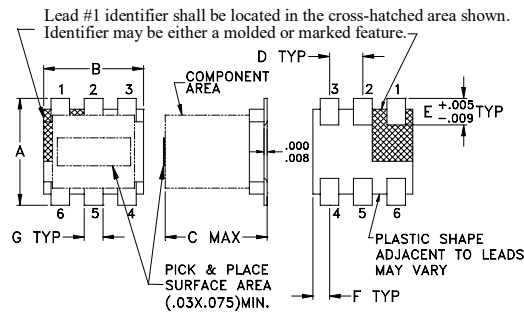
**Pin Connections**

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

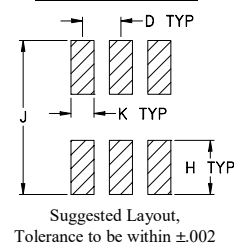
**Config. A**



## Outline Drawing



## PCB Land Pattern

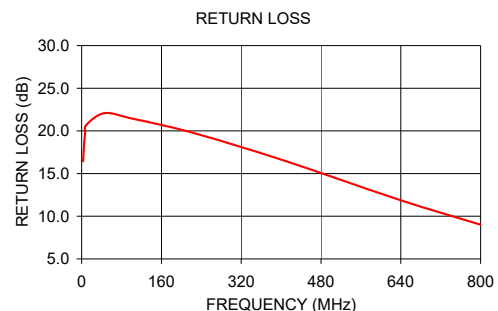


## Outline Dimensions (inch/mm)

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

## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
3.00	1.16	16.43
5.00	1.02	18.47
7.00	0.95	19.69
10.00	0.93	20.74
46.00	0.94	22.08
100.00	1.01	21.46
220.00	1.12	19.83
400.00	1.28	16.64
640.00	1.70	11.87
800.00	2.29	9.01



## Additional Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
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