# Surface Mount RF Transformer

TCM4-1WX+ Upgraded Version\*

\*Addition of Top-hat® feature Benefits

Allows faster pick-and-placeEnables visual identification marking

**TCM4-1W+** 

 $50\Omega$ 

3 to 800 MHz

#### **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



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



# Electrical Specifications at 25°C

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

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

## **Maximum Ratings**

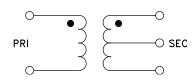
Parameter	Ratings		
Operating Temperature	-20°C to 85°C		
Storage Temperature	-55°C to 100°C		
RF Power	0.25W		
DC Current	30mA		

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

#### **Pin Connections**

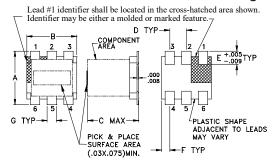
Function	Pin Number
PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3
SECONDARY CT	2
NOT USED	5

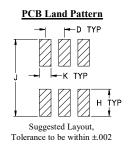






#### **Outline Drawing**





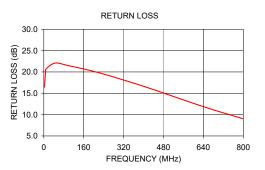
# Outline Dimensions (inch )

F	Е	D	С	В	Α
.025	.040	.050	.160	.150	.160
0.64	1.02	1.27	4.06	3.81	4.06
wt		K	J	Н	G
grams		.030	.190	.065	.028
0 15		0.76	4 83	1 65	0.71

#### **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**

- 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.
- A. Perioritance and quanty attributes and continuous and continuous and expressly stated in it has 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/MCLStore/terms.jsp