SURFACE MOUNT top hat®

RF Transformer

TCM4-1WX+

50Ω 3 to 800 MHz

FEATURES

- Wide Bandwidth, 3 to 800 MHz
- Good Return Loss
- Plastic Base with Solder Plated Leads
- Aqueous Washable



Generic photo used for illustration purposes only

CASE STYLE: DB1627

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

APPLICATIONS

- CATV
- VHF/UHF
- Balanced Amplifier
- Impedance Matching

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio (Secondary/Primary)			4		
Frequency Range		3		800	MHz
Insertion Loss[1]	3-800 4-400 10-100			3.0 2.0 1.0	dB
Phase Unbalance	3-100		2		Degree

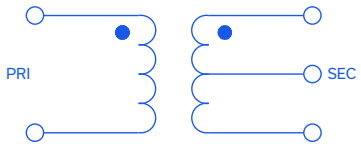
1. Insertion Loss is referenced to mid-band loss, 0.8 dB typ.

ABSOLUTE MAXIMUM RATINGS

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

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

CONFIGURATION A



REV. E
ECO-027946
TCM4-1WX+
MCL NY
260205

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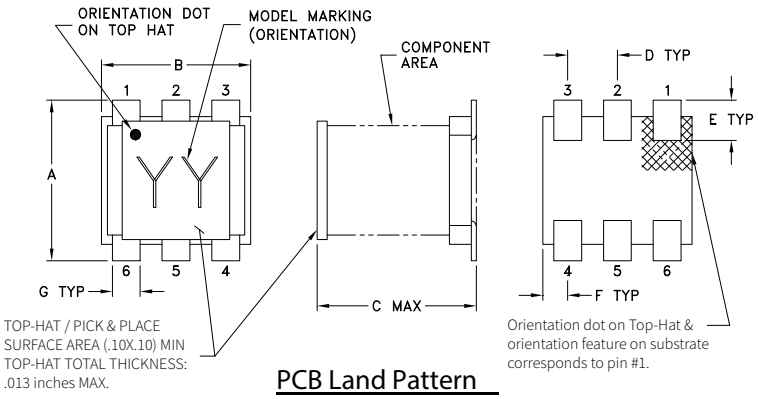
PIN CONNECTIONS

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

PRODUCT MARKING: AQ

DEMO BOARD MCL P/N: TB-TCM4-1WX+

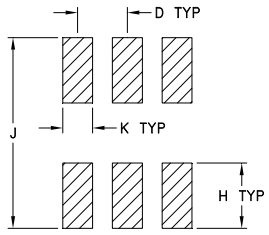
OUTLINE DRAWING



TOP-HAT / PICK & PLACE SURFACE AREA (.10X.10) MIN
TOP-HAT TOTAL THICKNESS: .013 inches MAX.

Orientation dot on Top-Hat & orientation feature on substrate corresponds to pin #1.

PCB Land Pattern



SUGGESTED LAYOUT
TOLERANCE TO BE WITHIN ±.002

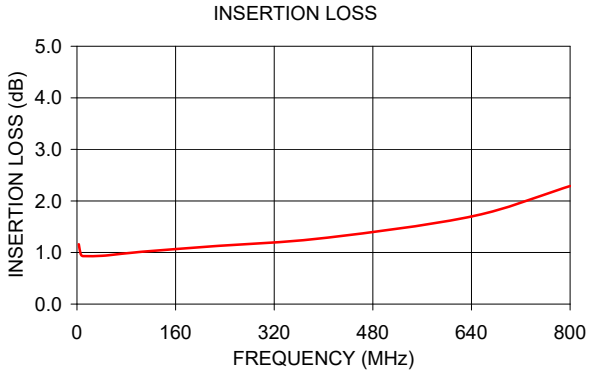
OUTLINE DIMENSIONS (Inches / mm)

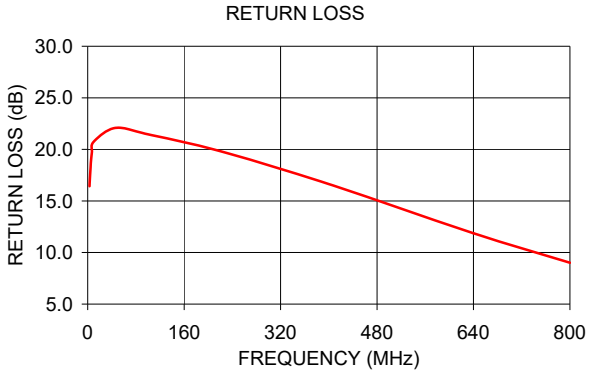
A	B	C	D	E	F
.160	.150	.160	.050	.040	.025
4.06	3.81	4.06	1.27	1.02	0.64
G	**H**	**J**	**K**		**wt**
.028	.065	.190	.030		grams
0.71	1.65	4.83	0.76		0.15

TAPE & REEL INFORMATION: F47

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
3	1.16	16.43
5	1.02	18.47
7	0.95	19.69
10	0.93	20.74
46	0.94	22.08
100	1.01	21.46
220	1.12	19.83
400	1.28	16.64
640	1.70	11.87
800	2.29	9.01





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