SURFACE MOUNT top hat

RF Transformer

TCM1-1X+

50Ω 1.5 to 500 MHz

FEATURES

- Excellent amplitude unbalance. 0.2 dB typ.
- Excellent phase unbalance, 4 deg. typ. in 1 dB bandwidth
- 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

- Impedance matching
- Balanced to unbalanced transformation
- Push-pull amplifier

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio			1		Ohm
Frequency Range		1.5		500	MHz
Insertion Loss*	1.5 - 500		3		dB
	2.5 - 400		2		
	5 - 350		1		

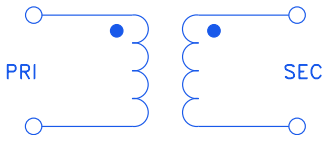
* Insertion Loss is referenced to mid-band loss, 0.9 dB typ.

MAXIMUM RATINGS

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

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

CONFIGURATION C



SURFACE MOUNT top hat

RF Transformer

TCM1-1X+

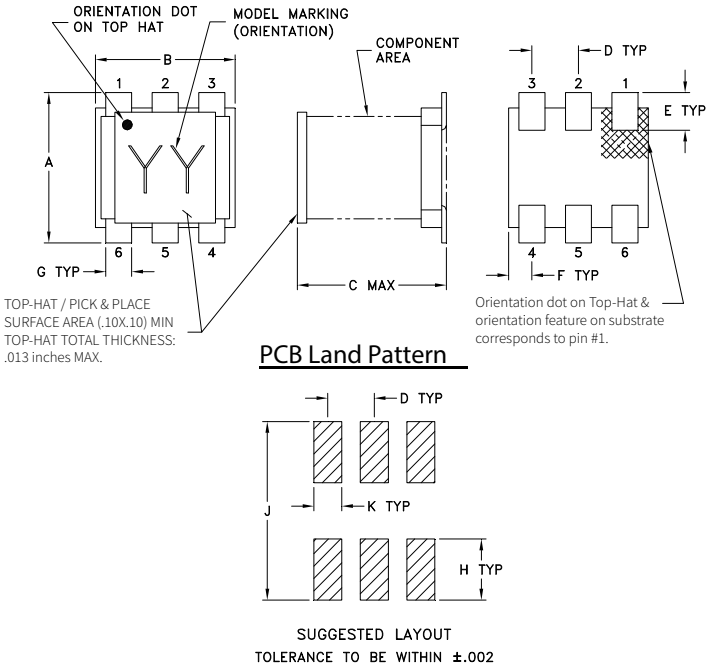
50Ω 1.5 to 500 MHz

PIN CONNECTIONS

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

PRODUCT MARKING: AP

OUTLINE DRAWING



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

SURFACE MOUNT top hat

RF Transformer

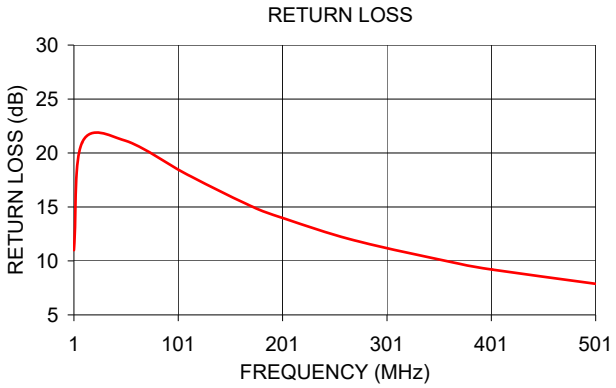
TCM1-1X+

50Ω 1.5 to 500 MHz

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
1.00	1.93	11.00
8.80	0.88	20.96
50.00	0.99	21.15
110.00	1.15	17.98
170.00	1.29	15.11
200.00	1.40	14.01
270.00	1.59	11.90
369.00	1.95	9.77
402.00	2.04	9.20
501.00	2.38	7.88





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