

top hat®

# Surface Mount RF Transformer

50Ω

800 to 1900 MHz

TCML1-19X+

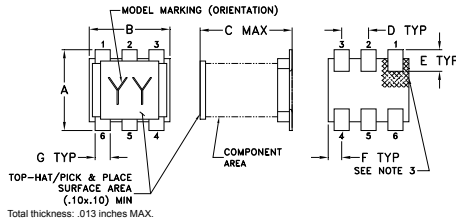
## Maximum Ratings

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.	

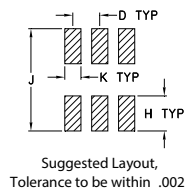
## Pin Connections

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

## Outline Drawing



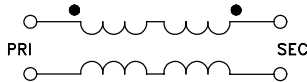
## PCB Land Pattern



## Outline Dimensions (inch)

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	

## Config. G

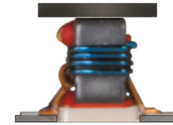


## Features

- wideband, 800 to 1900 MHz
- balanced transmission line
- plastic base with solder plated leads
- aqueous washable

## Applications

- cellular
- PCN
- GPS
- baluns
- impedance matching



CASE STYLE: DB1627

**+RoHS Compliant**

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

Reel Size	Available Tape and Reel at no extra cost
7"	20, 50, 100, 200, 500
13"	1000, 2000

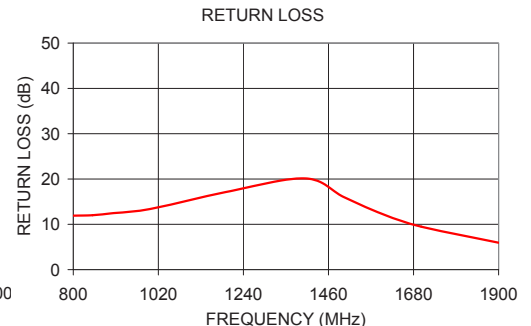
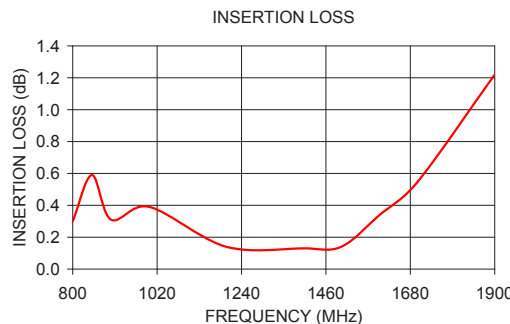
## Electrical Specifications

Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
1	800-1900	800-1900	—	800-1400

\* Insertion Loss is referenced to mid-band loss, 0.2 dB typ.

## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
800.00	0.30	11.91
850.00	0.59	12.02
900.00	0.31	12.44
1000.00	0.39	13.40
1200.00	0.14	17.22
1400.00	0.13	20.13
1500.00	0.14	16.01
1600.00	0.34	12.26
1700.00	0.55	9.49
1900.00	1.22	5.94



## 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-Circuit's applicable established test performance criteria and measurement instructions.
- 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](http://www.minicircuits.com/MCLStore/terms.jsp)



[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. A  
M151107  
TCML1-19X+  
ED-7875/10  
IG/TD/CP/AM  
151012  
Page 1 of 1