SURFACE MOUNT top hat

RF Transformer

TC4-19X+

50Ω 10 to 1900 MHz

FEATURES

- Wideband, 10 to 1900 MHz
- Balanced Transmission Line with Secondary Center Tap
- Plastic Base with Leads
- Aqueous Washable

Generic photo used for illustration purposes only

CASE STYLE: AT1521

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

APPLICATIONS

- PCS
- Cellular

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (Secondary/Primary)			4		
Frequency Range		10		1900	MHz
Insertion Loss[1]	10-1900			3	dB
	20-1000			2	
	30-700			1	
Amplitude Unbalance	30-700		0.3		dB
	20-1000		0.5		
	10-1900		1.2		
Phase Unbalance	20-1000		6		Degree
	30-700		4		
	10-1900		11		

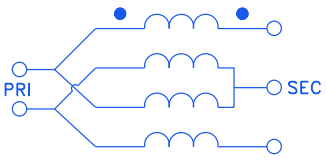
1. Insertion Loss is referenced to mid-band loss, 1.0 dB typ.

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 Current	30 mA

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

CONFIG. H



REV. C
ECO-027946
TC4-19X+
MCL NY
260205

SURFACE MOUNT top hat

RF Transformer

TC4-19X+

50Ω 10 to 1900 MHz

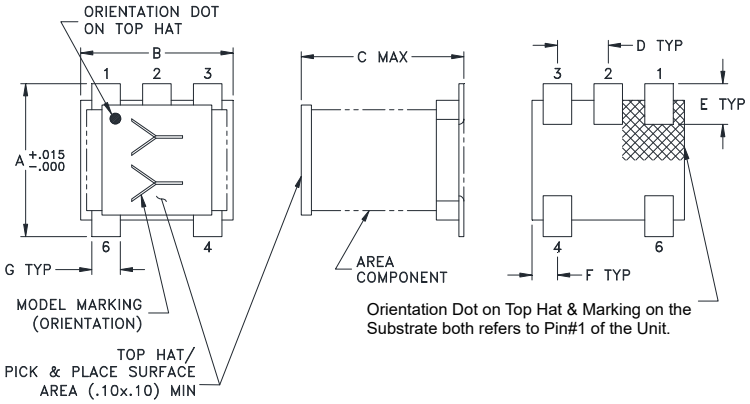
PIN CONNECTIONS

PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	3
SECONDARY	1
SECONDARY CT	2

PRODUCT MARKING: AD

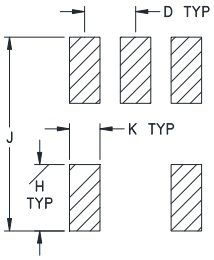
DEMO BOARD MCL P/N: TB-TC4-19X+

OUTLINE DRAWING



Top-hat total thickness: .013 inches MAX.

PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002 in

OUTLINE DIMENSIONS (Inch / mm)

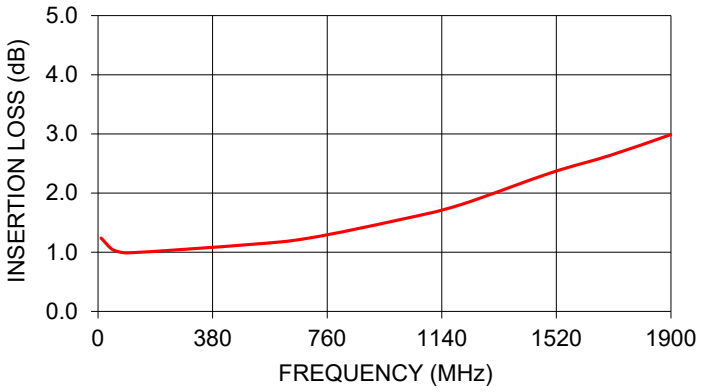
A	B	C	D	E	F	G	H	J	K
.150	.150	.160	.050	.040	.025	.028	.065	.190	.030
3.81	3.81	4.06	1.27	1.02	0.64	0.71	1.65	4.83	0.76

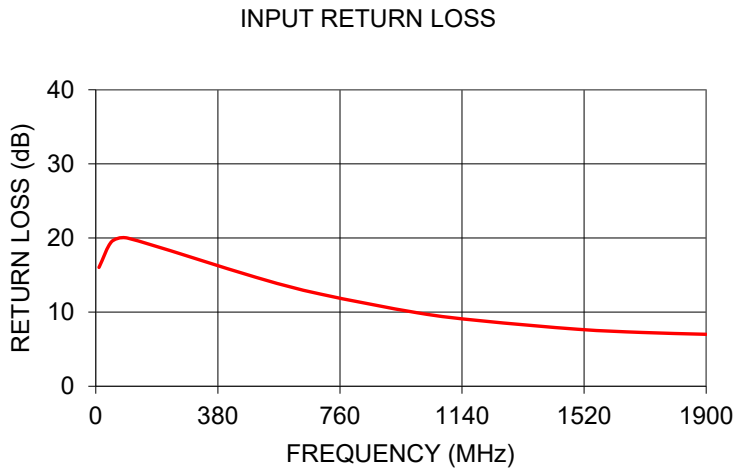
Weight: 0.15 grams

TAPE & REEL INFORMATION: F17

TYPICAL PERFORMANCE DATA

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (deg.)
10	1.24	16.03	0.06	0.03
50	1.04	19.54	0.04	0.39
100	0.99	19.98	0.01	0.83
500	1.13	14.68	0.02	3.20
700	1.24	12.43	0.17	3.49
1000	1.55	9.92	0.49	3.74
1200	1.80	8.83	0.85	3.53
1500	2.34	7.69	1.47	3.59
1700	2.64	7.26	1.74	4.43
1900	2.99	7.01	1.95	4.99





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