

# Surface Mount RF Transformer

50Ω

10 to 1900 MHz

## TCM4-19+



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

### Features

- wide bandwidth, 10 to 1900 MHz
- balanced transmission line with secondary center tap
- plastic base with solder plated leads
- aqueous washable

### Applications

- PCS
- cellular

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

### Electrical Specifications

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary/primary)			4		Ohm
Frequency Range		10		1900	MHz
Insertion Loss*	10 - 1900		3		dB
	20 - 1000		2		
	30 - 700		1		
Phase Unbalance	30 - 700		4		Deg.
	20 - 1000		6		
Amplitude Unbalance	30 - 700		0.3		dB
	20 - 1000		0.5		

\* Insertion Loss is referenced to mid-band loss, 1.0 dB typ. Measure back to back

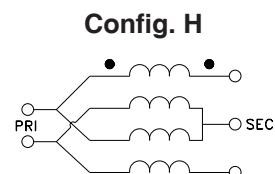
### Maximum Ratings

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

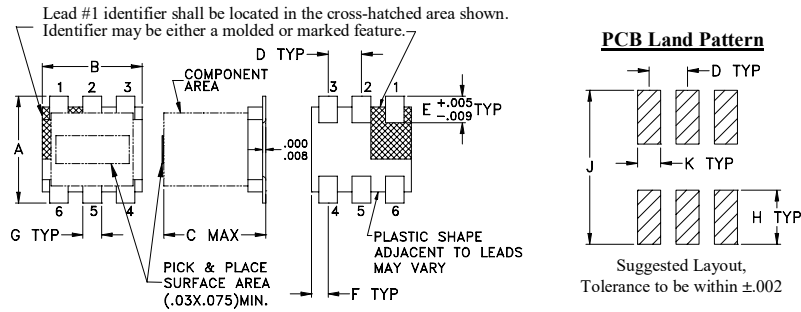
Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

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



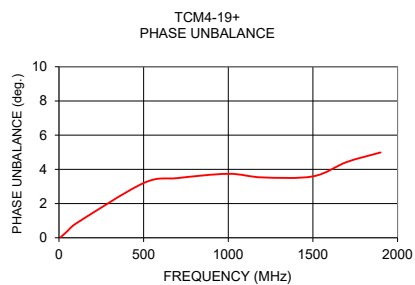
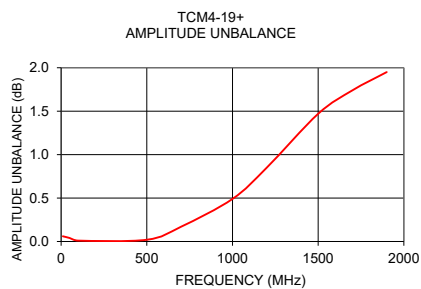
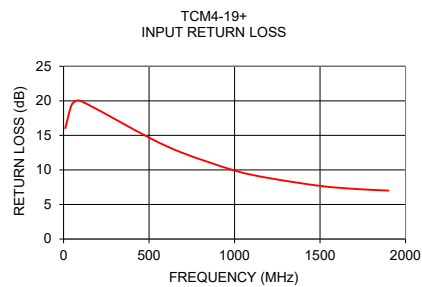
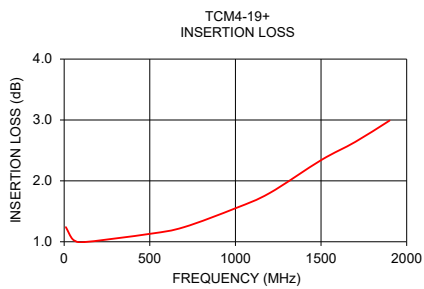
## Outline Drawing



## Outline Dimensions (Inch/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	

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



### Additional 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.
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