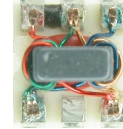


# Surface Mount RF Transformer

50Ω 10 to 1900 MHz

## TCM4-19+ TCM4-19



CASE STYLE: DB714  
PRICE: \$1.09 ea. QTY (100)

+ RoHS compliant in accordance  
with EU Directive (2002/95/EC)

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

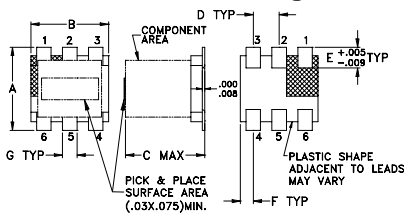
### Maximum Ratings

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

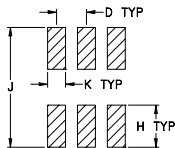
### Pin Connections

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

### Outline Drawing



### PCB Land Pattern



Suggested Layout,  
Tolerance to be within ±.002

### 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	

### 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

### Transformer Electrical Specifications

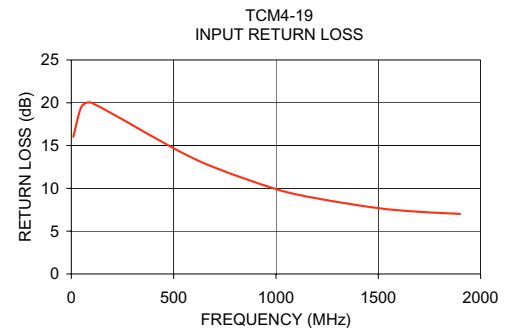
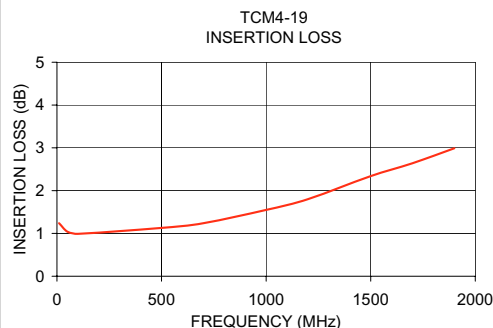
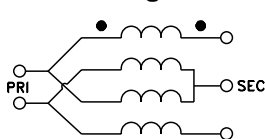
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
4	10-1900	10-1900	20-1000	30-700	4	6	0.3	0.5

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

### Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
10.00	1.24	16.03	0.06	0.03
50.00	1.04	19.54	0.04	0.39
100.00	0.99	19.98	0.01	0.83
500.00	1.13	14.68	0.02	3.20
700.00	1.24	12.43	0.17	3.49
1000.00	1.55	9.92	0.49	3.74
1200.00	1.80	8.83	0.85	3.53
1500.00	2.34	7.69	1.47	3.59
1700.00	2.64	7.26	1.74	4.43
1900.00	2.99	7.01	1.95	4.99

### Config. H



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RF/IF MICROWAVE COMPONENTS

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080219