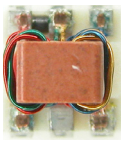
Surface Mount

RF Transformer

TCM4-25+

50Ω 500 to 2500 MHz



CASE STYLE: DB714

+RoHS Compliant

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

Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500
13"	1000, 2000

Maximum Ratings

Operating Temperature	-40°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

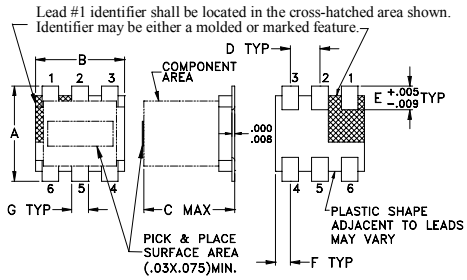
Features

- wide bandwidth, 500 to 2500 MHz
- balanced transmission line with secondary center tap
- good return loss
- plastic base with solder plated leads
- aqueous washable

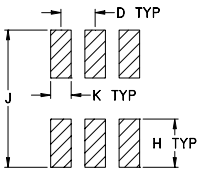
Applications

- PCS
- cellular

Outline Drawing



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

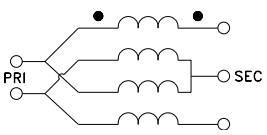
Outline Dimensions (inch / mm)

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

Demo Board MCL P/N: TB-145

Config. H



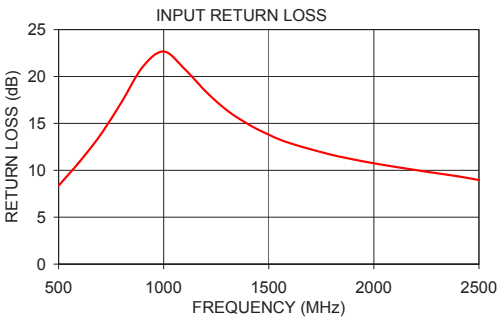
Transformer Electrical Specifications

Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
4	500-2500	500-2500	700-1500	750-1200

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

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
400.00	1.66	6.09
500.00	1.07	8.37
600.00	0.74	10.92
700.00	0.54	13.81
800.00	0.42	17.29
900.00	0.38	21.02
1000.00	0.37	22.67
1100.00	0.40	20.79
1200.00	0.43	18.40
1300.00	0.48	16.41
1400.00	0.53	14.94
1500.00	0.59	13.79
1600.00	0.64	12.90
1800.00	0.74	11.65
2000.00	0.84	10.75
2200.00	0.96	10.03
2400.00	1.08	9.35
2500.00	1.14	8.96
2800.00	1.38	7.82
3000.00	1.59	7.06



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/MCLStore/terms.jsp