Ceramic

RF Transformer

50Ω 680 to 1050 MHz

New! **TCN1-10+**
TCN1-10

CASE STYLE: FV1206-1
PRICE: $ 1.99 ea. QTY (10-49)
$ 1.69 ea. QTY (100)

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

See our web site for RoHS Compliance methodologies and qualifications.

Maximum Ratings

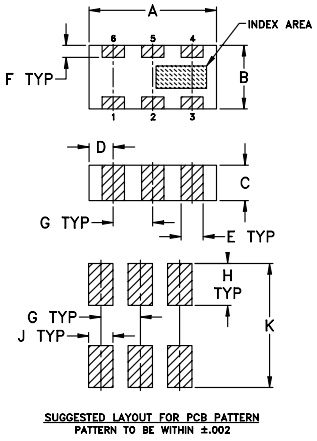
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Input RF Power**	5W

** derate linearly to 2.5 W at 100°C

Pin Connections

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

Outline Drawing

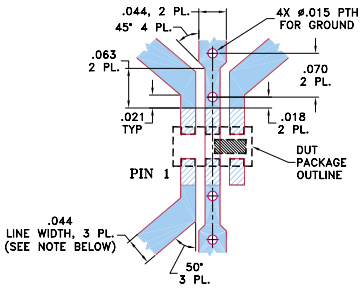


Outline Dimensions (inch / mm)

A	B	C	D	E	F
.126	.063	.037	.024	.022	.012
3.20	1.60	0.94	0.61	0.56	0.30

G	H	J	K		wt
.039	.042	.024	.123		grams
0.99	1.07	0.61	3.12		.020

Demo Board MCL P/N: TB-287
Suggested PCB Layout (PL-163)



NOTE: . TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .020 ± .0015. COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT

DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Features

- wideband, 680 to 1050 MHz
- miniature size .12"x.06"x.035
- LTCC construction
- low cost

Applications

- TDMA, CDMA
- GSM
- PDC
- WAN
- TACS
- AMPS, NAMPS

Electrical Specifications (T_{AMB}=25°C)

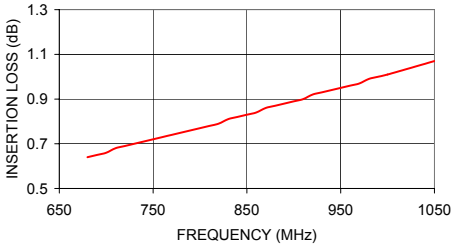
Ω RATIO	FREQUENCY (MHz)	INSERTION* LOSS (dB)	PHASE UNBALANCE (Deg.) Typ.	AMPLITUDE UNBALANCE (dB) Typ.
1	680-1050	0.9	4.0	0.7
	800-900	0.7	1.0	0.25

* Insertion Loss is referenced to mid-band loss, 0.6 dB

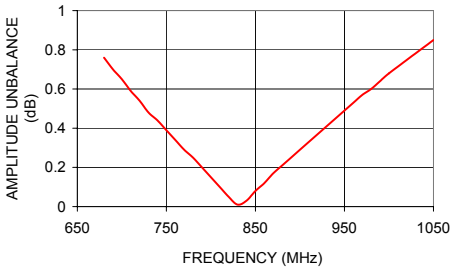
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (deg.)
680.00	0.64	14.50	0.76	6.82
700.00	0.66	14.07	0.65	5.94
750.00	0.72	13.10	0.39	3.94
800.00	0.77	12.43	0.15	2.29
850.00	0.83	11.83	0.08	0.97
900.00	0.89	11.36	0.29	0.23
950.00	0.95	10.99	0.49	1.01
990.00	1.00	10.71	0.64	1.48
1000.00	1.01	10.64	0.68	1.54
1050.00	1.07	10.39	0.85	1.78

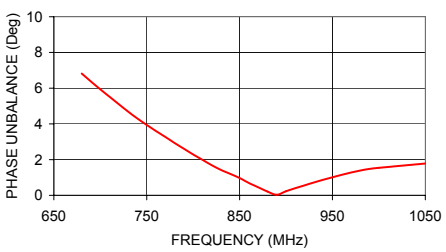
TCN1-10
INSERTION LOSS



TCN1-10
AMPLITUDE UNBALANCE



TCN1-10
PHASE UNBALANCE



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