

Ceramic Balun RF Transformer

50Ω 1300 to 2300 MHz

TCN1-23+
TCN1-23



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)

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

Maximum Ratings

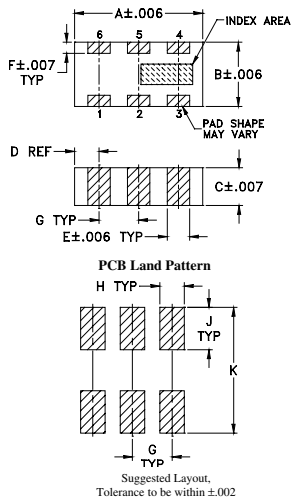
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Input RF Power**	5W

**From 85°C 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

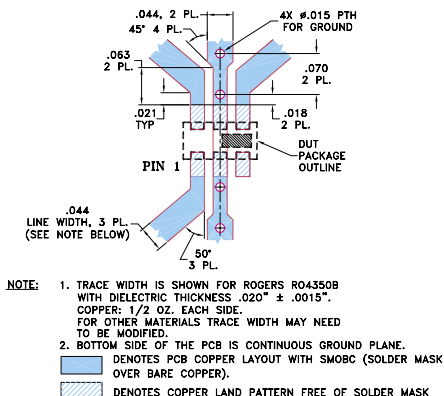
Outline Drawing



Outline Dimensions (Inch/mm)

A	B	C	D	E	F	G	H	J	K	wt
.126	.063	.035	.024	.022	.011	.039	.024	.042	.123	grams
3.20	1.60	0.89	0.61	0.56	0.28	0.99	0.61	1.07	3.12	.020

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



Features

- wideband, 1300 to 2300 MHz
- miniature size, 0.12"x.06"x.037"
- LTCC construction
- low cost
- aqueous washable

Applications

- DECT
- PCS
- PHS
- PDS
- PDC

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

Ω RATIO	FREQUENCY (MHz)	INSERTION* LOSS (dB)	PHASE UNBALANCE † (Deg.) Typ.	AMPLITUDE UNBALANCE (dB) Typ.
1	1300-2300	0.7	5.0	0.7
	1800-2000	0.6	4.0	0.5

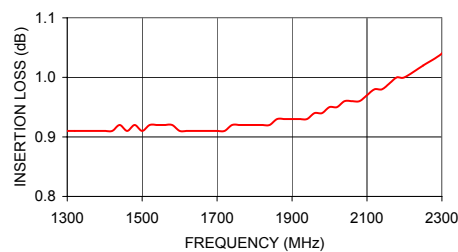
* Insertion Loss is referenced to mid-band loss, 0.8 dB

† Relative to 180°

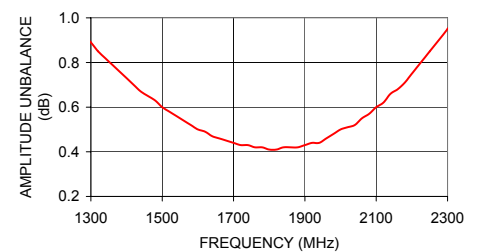
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
1300.00	0.91	15.33	0.89	1.52
1500.00	0.91	16.32	0.60	1.46
1600.00	0.91	17.14	0.50	1.81
1700.00	0.91	18.31	0.44	2.34
1800.00	0.92	19.68	0.41	3.09
1900.00	0.93	21.20	0.43	3.82
2000.00	0.95	22.85	0.50	4.57
2100.00	0.97	24.40	0.60	5.34
2200.00	1.00	25.70	0.75	6.05
2300.00	1.04	26.43	0.95	6.61

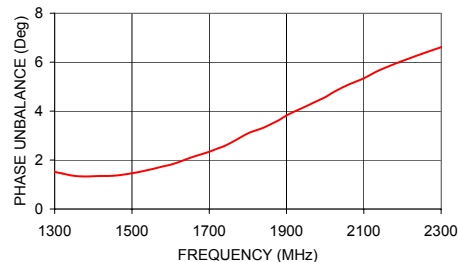
TCN1-23
INSERTION LOSS



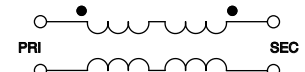
TCN1-23
AMPLITUDE UNBALANCE



TCN1-23
PHASE UNBALANCE



configuration G



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RF/IF MICROWAVE COMPONENTS

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