



CERAMIC BALUN

RF Transformer

TCW1-392+



50Ω 3300 to 3900 MHz 1:1 Ratio

FEATURES

- Miniature size 0603 (1.6x0.8mm)
- LTCC construction
- Low cost



Generic photo used for illustration purposes only

CASE STYLE: JC0603C

+RoHS Compliant

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

APPLICATIONS

- LTE
- 5G
- A/D conversion

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio		1			
Frequency Range		3300	—	3900	MHz
Avg. Insertion Loss ¹	3300-3900	—	0.8	1.5	dB
Amplitude Unbalance	3300-3900	—	0.6	1.5	dB
Phase Unbalance ²	3300-3900	—	5	15	Degree
VSWR	3300-3900	—	1.7	—	(:1)

1. Reference demo board TB-828+.

2. Relative to 180°

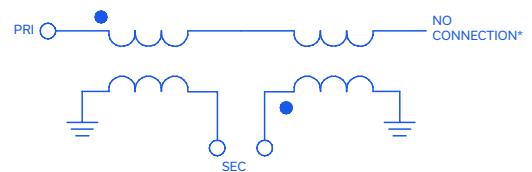
MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power ³	1W

3. Passband rating.

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

CONFIGURATION J



*Internal open circuit



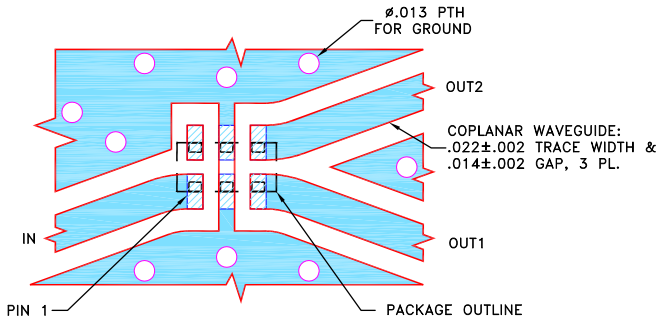


PAD CONNECTIONS

PRIMARY DOT	1
PRIMARY	2
SECONDARY DOT	4
SECONDARY	3
NO CONNECTION	6
NOT USED	5

PRODUCT MARKING: N/A

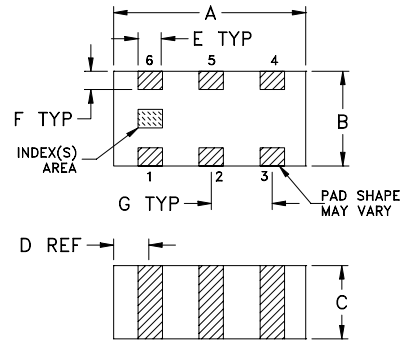
DEMO BOARD MCL P/N: TB-828+ SUGGESTED PCB LAYOUT (PL-513)



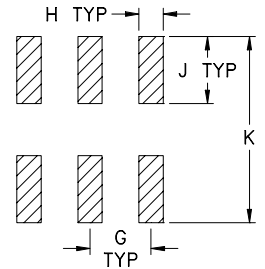
- TRACE WIDTH AND GAP PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010"±.001". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

OUTLINE DRAWING



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

OUTLINE DIMENSIONS (Inches/mm)

A	B	C	D	E	F
.063	.031	.024	.012	.008	.006
1.60	0.79	0.61	0.30	0.20	0.15
G	H	J	K	wt	
.020	.010	.022	.053	grams	
0.51	0.25	0.56	1.35	0.005	

TAPE & REEL INFORMATION: F114