

LTCC 巴伦变压器 (RF Transformer)

HT-TCN2-14+

Features

- Multilayer LTCC Technology
- Miniatured Size
- Low Insertion Loss reduces power consumption
- Low inband Amplitude and Phase imbalance
- Single ended 50 ohm differential 100 ohm

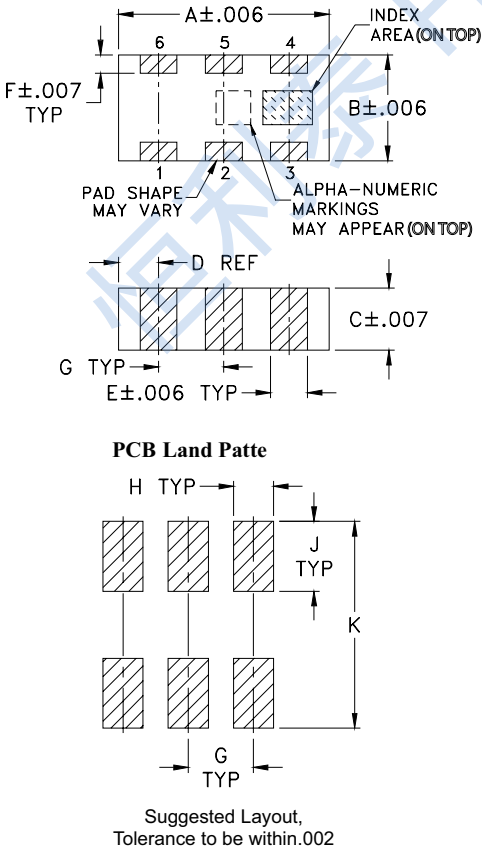
Applications

- GSM
- TDMA、CDMA
- WIN
- TACS
- PDC
- AMPS、NAMPS

Pad Connections

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

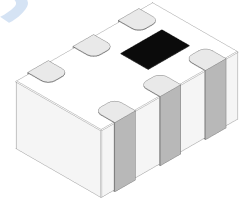
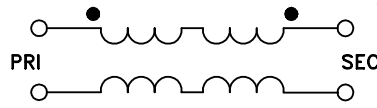
Outline Drawing



Outline Dimensions : inch mm

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

Functional Schematic



50 Ω 1:2 Ratio
700MHz to 1400MHz

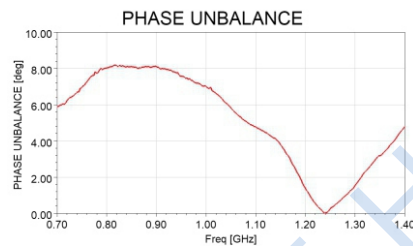
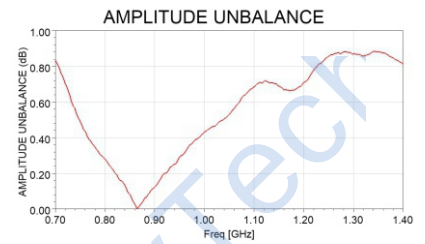
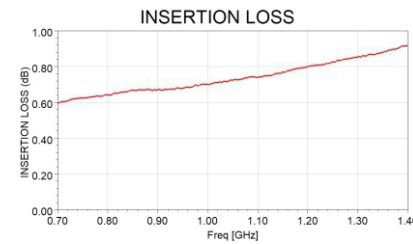
Electrical Specifications(1,2) at 25°C

Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION* LOSS (dB)	PHASE UNBALANCE* (Deg.) Typ.	AMPLITUDE UNBALANCE (dB) Typ.
2	700-1400	0.9	8.0	0.8
	800-1000	0.7	8.0	0.35

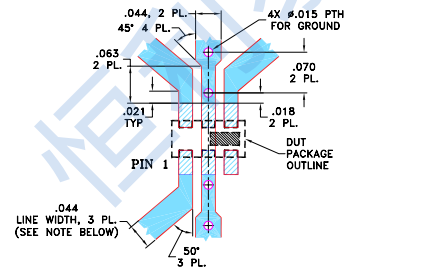
(1) Insertion Loss is referenced to mid-band loss, 1.0 dB.

(2) Relative to 180°

Typical Performance Data at 25°C



Suggested PCB Layout



NOTE:

1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" $\pm$.0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. 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

Maximum Ratings

Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C
RF Power Input*	5W at 25°C

*Permanent damage may occur if any of these limits are exceeded.
From 85°C derate linearly to 2.5W at 100°C.