

LTCC 巴伦变压器 (RF Transformer)

HT-TCW2-282+

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

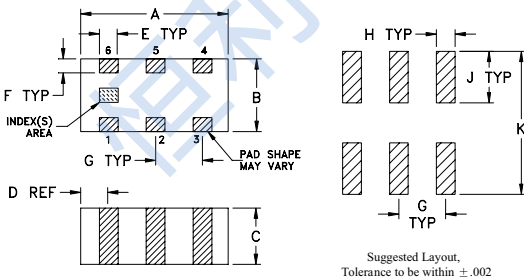
- WLAN
- WiFi
- Cellular
- A/D conversion
- Transmitters and receivers

Pad Connections

PRIMARY DOT (Unbalanced Port)	1
PRIMARY (GND)	2
SECONDARY DOT (Balanced)	3
SECONDARY (Balanced)	4
NO CONNECTION	6
GND	5

Outline Drawing

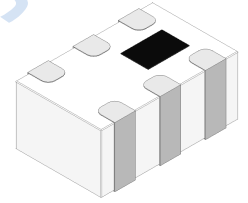
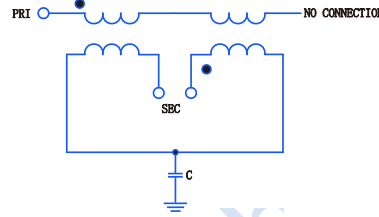
PCB Land Pattern



Outline Dimensions : inch 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

Functional Schematic



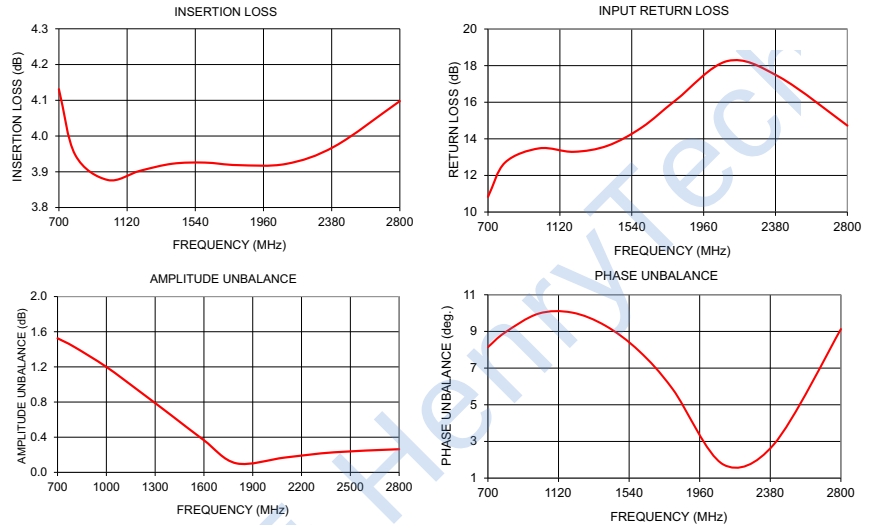
50 Ω 1:2 Ratio
700MHz to 2800MHz

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio (Secondary/Primary)			2		
Frequency Range		700		2800	MHz
Avg. Insertion Loss ¹	700 - 2800	—	1.2	2.0	dB
Amplitude Unbalance	700 - 2800	—	1	2.0	dB
Phase Unbalance ²	700 - 2800	—	13	16	Degree

(1) Relative to 180°

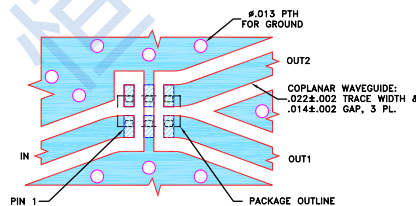
Typical Performance Data at 25°C



Notes

- The specifications are tested at 25°C±5°C, relative humidity 55~75%.
- Other quality and characteristic not specify in this datasheet.

Suggested PCB Layout



- 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.
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Maximum Ratings

Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C
RF Power Input*	0.5W at 25°C

*Permanent damage may occur if any of these limits are exceeded.
Suggestion for T&R unused product storage condition:
+5~+35°C, Humidity 45~75%RH, 12 Month max.