成都恒利泰科技有限公司
Chengdu HenryTech Technology co., Ltd

LTCC 巴伦变压器（RF Transformer）　HT-TCW1-2700+

Features

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

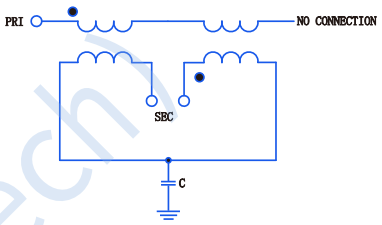
Applications

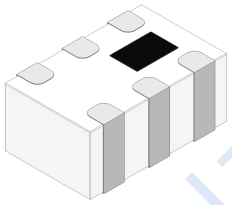
- WLAN
- WiFi
- Cellular
- A/D conversion
- Transmitters and receivers

Pad Connections

PRIMARY DOT	1
GND or DC feed + RF	2
SECONDARY DOT	3
SECONDARY	4
NO CONNECTION	6
NOT GND	5

Functional Schematic





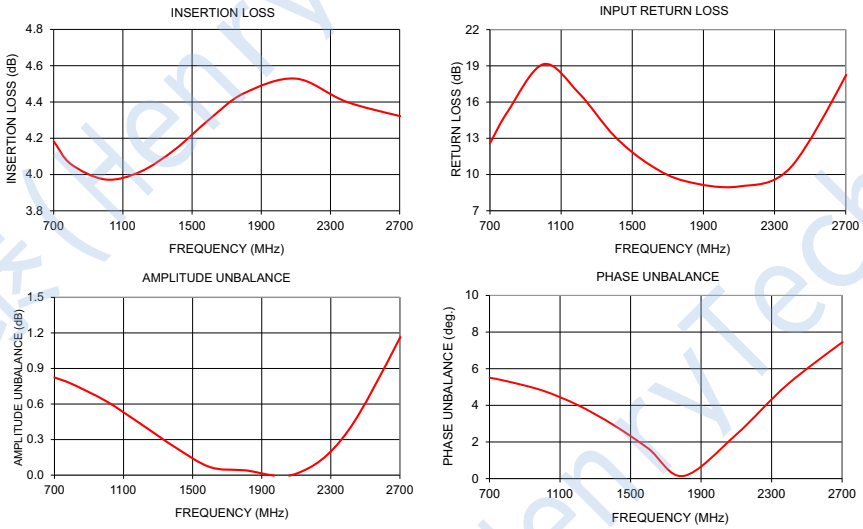
50Ω 1:1 Ratio
700MHz to 2700MHz

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio (Secondary/Primary)			1		
Frequency Range		700		2700	MHz
Avg.Insertion Loss[1]	700 - 2700	—	1.4	2.0	dB
Amplitude Unbalance	700 - 2700	—	1	2	dB
Phase Unbalance[2]	700 - 2700	—	12	15	Degree

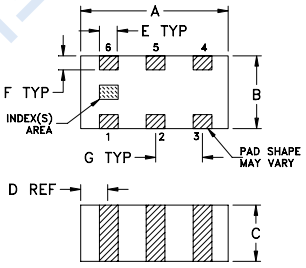
(1)Relative to 180°

Typical Performance Data at 25°C

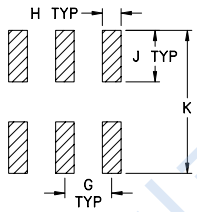


Notes
a. The specifications are tested at 25℃±5℃, relative humidity 55~75%.
b. Other quality and characteristic not specify in this datasheet.

Outline Drawing



PCB Land Pattern



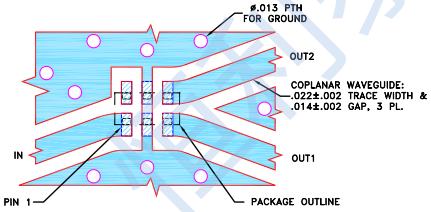
Suggested Layout,
Tolerance to be within ±.002

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

Suggested PCB Layout



1. 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.
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*	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.

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