

LTCC 功分器/合路器 (Power Splitter/Combiner) HT-SCG-2-592+

Features

- isolation resistoror, external 100 ohms.
- low insertion loss.
- excellent amplitude unbalance.
- excellent phase unbalance.
- high isolation.
- excellent power handing.
- temperature stable LTCC.

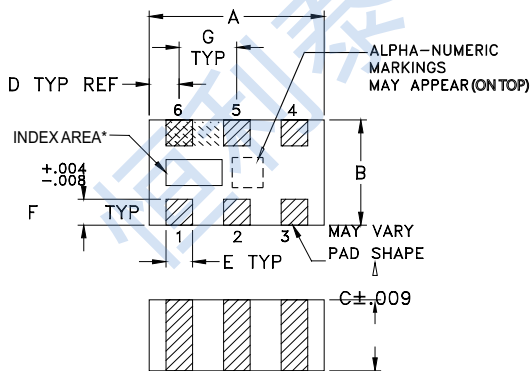
Applications

- ISM
- WLAN
- Cellular

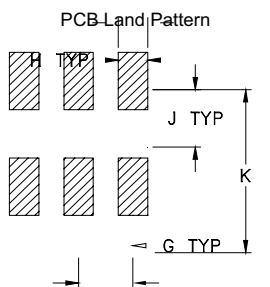
Pad Connections

SUM PORT	2
PORT 1	6
PORT 2	4
GROUND	1,3,5
PORT 1-2	resistor external 100 ohms

Outline Drawing



*Shape of index marking may vary

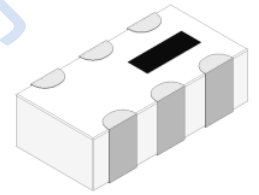
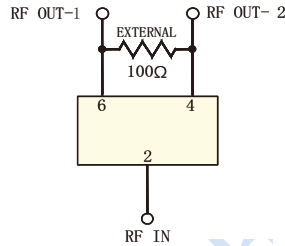


Suggested Layout,
Tolerance to be within ± 0.002

Outline Dimensions : inch

A	B	C	D	E	F
.079	.049	.033	.014	.012	.012
2.01	1.24	0.84	0.36	0.30	0.30
G	H	J	K	L	M
.026	.014	.039	.110	.012	.012
0.66	0.36	1.00	2.80	.008	.008

Functional Schematic

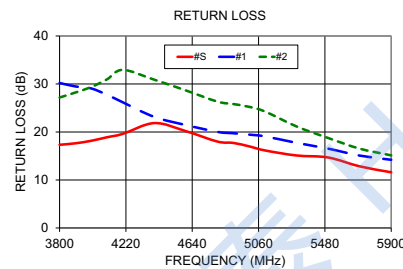
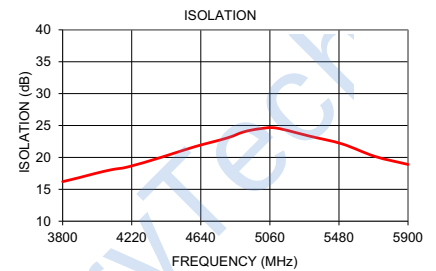
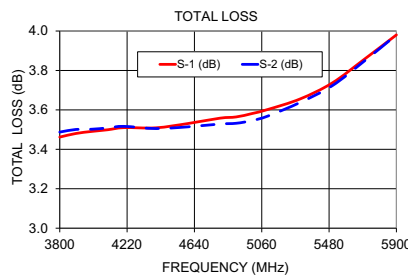


2Way-0° 50 Ω
3800MHz to 5900MHz

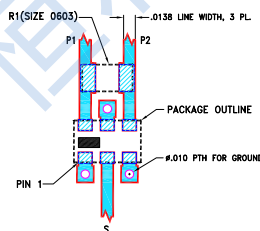
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		3800		5900	MHz
Insertion Loss, above 3.0 dB	3800 - 5900	—	0.8	1.4	dB
Isolation	3800 - 5900	11	15	—	dB
Phase Unbalance	3800 - 5900	—	1.5	7.0	Degree
Amplitude Unbalance	3800 - 5900	—	0.1	0.5	dB
Return Loss (Input)	3800 - 5900	—	16	—	dB
Return Loss (Output)	3800 - 5900	—	20	—	dB

Typical Performance Data at 25°C



Suggested PCB Layout



- NOTES:
1. LINE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .0066±.0007, COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS LINE WIDTH MAY NEED TO BE MODIFIED.
 2. UNIT FOOT PRINT IS OPTIMIZED FOR PERFORMANCE AND IS DIFFERENT FROM CASE STYLE GE080SC-1 RECOMMENDATIONS.
 3. CHIP COMPONENT FOOT PRINT IS SHOWN FOR REFERENCE. FOR COMPONENT VALUE REFER TO TB-1043+.
 4. 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 +85°C
Storage Temperature	-55°C to +85°C
RF Power Input*	2W at 25°C

*Derate linearly to 0.7W at 85°C ambient, power input as combiner is limited by rating of external resistor 100Ω resistor. Permanent damage may occur if any of these limits are exceeded.