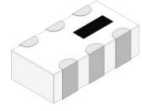


Power Splitter/Combiner

HT-SCN-2-11+



2 Way-0° 50Ω 800 to 1175 MHz

Features

- isolation resistor, external 100 ohms
- low insertion loss
- excellent amplitude unbalance
- excellent phase unbalance
- high isolation
- excellent power handing, 20W as splitter
- ESD non- sensitive

Applications

- GSM
- ISM
- cellular

Electrical Specifications at 25 °C

FREQUENCY (MHz)	INSERTION LOSS (dB) ABOVE 3.0 dB		ISOLATION (dB)		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		RETURN LOSS (dB)	
	Typ.	Max.	Typ.	Min.	Typ.	Max.	Typ.	Max.	INPUT Typ.	OUTPUT Typ.
800-1175	0.5	0.8	20	15	0.25	1.0	0.05	0.1	14	18
875-1125	0.5	0.8	22	18	0.25	1.0	0.05	0.1	16	22

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)	
	S-1	S-2				S	1 2
800	3.34	3.34	0.01	15.74	0.13	16.20	28.69 29.81
825	3.33	3.33	0.00	16.76	0.14	17.10	29.02 30.19
850	3.31	3.31	0.00	17.89	0.16	18.23	29.85 31.22
875	3.30	3.30	0.01	19.19	0.15	19.64	30.79 32.56
900	3.28	3.29	0.01	20.76	0.16	21.43	32.06 34.54
925	3.28	3.29	0.01	22.58	0.14	23.82	24.09 37.39
950	3.27	3.28	0.01	24.77	0.18	27.26	37.86 41.82
975	3.28	3.29	0.01	27.29	0.17	32.29	45.71 43.35
1000	3.28	3.30	0.02	29.37	0.19	33.41	50.89 37.20
1025	3.29	3.31	0.02	28.96	0.18	27.76	37.03 32.25
1050	3.31	3.33	0.02	26.76	0.21	23.51	31.91 28.95
1100	3.38	3.40	0.02	22.07	0.23	18.01	25.49 23.99
1125	3.43	3.46	0.02	20.26	0.25	16.08	23.27 22.00
1150	3.49	3.52	0.02	18.75	0.22	14.43	21.32 20.28
1175	3.57	3.60	0.02	17.47	0.25	13.01	19.63 18.77

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

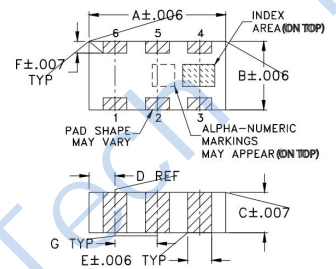
RF Power Input* 20W max.

*Derate linearly to 6W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

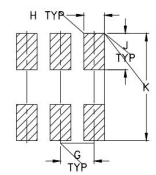
Pin Connections

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

Outline Drawing



PCB Land Pattern

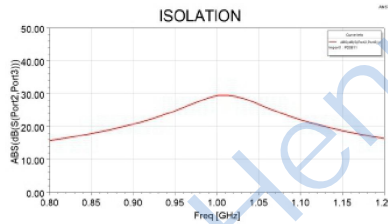
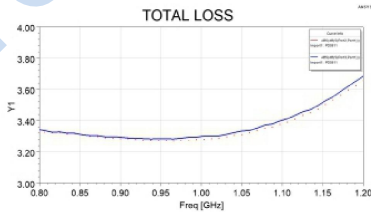
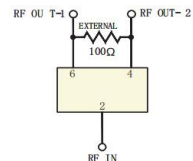


Suggested Layout
Tolerance to be within ±0.05

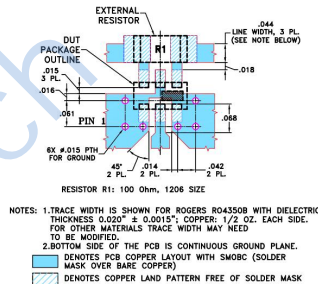
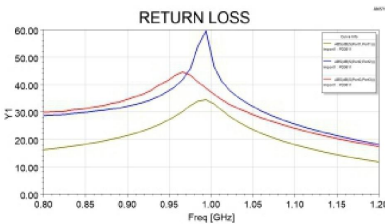
Outline Dimensions: Unit (mm)

A	3.20	B	1.60	C	0.89
D	0.61	E	0.56	F	0.28
G	0.99	H	0.61	J	1.07
K	3.12	wt			0.02g

electrical schematic



Suggested PCB Layout



NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.0207 ± 0.0015". 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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK