

Power Splitter/Combiner

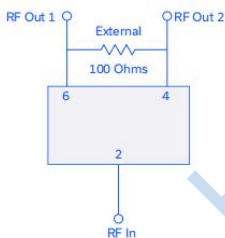
Features

- isolation resistor, external 100 ohms
- low insertion loss, 0.4 dB typ.
- excellent amplitude unbalance, 0.4 dB typ.
- excellent phase unbalance, 2.5 deg. typ.
- high isolation, 23 dB typ.
- excellent power handling, 20W as splitter
- small size, 0.12"×0.06"×0.035"
- ESD non-sensitive
- temperature stable LTCC technology
- wrap around terminations for excellent solderability
- low cost

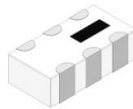
Applications

- ISM
- MMDS
- WLAN

ELECTRICAL SCHEMATIC



HT-SCN-2-27+



2 Way-0° 50Ω 2225 to 2700 MHz

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

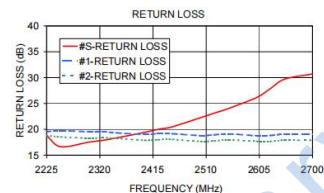
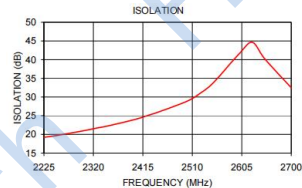
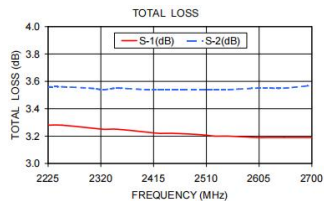
SUM PORT	2
PORT 1	6
PORT 2	4
GROUND	1,3,5
PORT 1-2	resistor external 100 OHMS

Electrical Specifications at 25°C_o

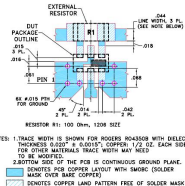
Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range	2225			2700	MHz
Insertion Loss, above 3.0 dB	2225-2700 2325-2600		0.5 0.4	1.1 1.0	dB
Isolation	2225-2700 2325-2600	17 20	21 23		dB
Phase Unbalance	2225-2700 2325-2600		3.5 2.5	6.0 6.0	Degree
Amplitude Unbalance	2225-2700 2325-2600		0.6 0.4	0.8 0.7	dB
Return Loss (Input)	2225-2700 2325-2600		19 17		dB
Return Loss (Output)	2225-2700 2325-2600		20 17		dB

TYPICAL PERFORMANCE DATA

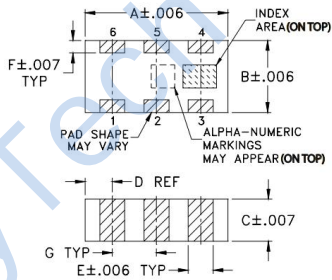
Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)	
	S-1	S-2				S	2
2225.00	3.28	3.56	0.28	19.22	1.19	18.80	19.57
2250.00	3.28	3.56	0.28	19.72	1.20	16.63	19.71
2300.00	3.26	3.55	0.29	20.95	1.23	17.52	19.55
2325.00	3.25	3.54	0.29	21.66	1.25	17.87	19.57
2350.00	3.25	3.55	0.30	22.34	1.26	18.35	19.32
2400.00	3.23	3.54	0.31	24.00	1.29	19.42	19.03
2425.00	3.22	3.54	0.32	25.09	1.31	20.01	19.18
2450.00	3.22	3.54	0.32	26.24	1.32	20.51	19.15
2500.00	3.21	3.54	0.33	28.89	1.35	22.26	18.78
2525.00	3.20	3.54	0.34	30.99	1.36	23.15	18.95
2550.00	3.20	3.54	0.34	33.77	1.38	24.04	19.11
2600.00	3.19	3.55	0.36	41.56	1.40	26.15	18.77
2625.00	3.19	3.55	0.36	44.63	1.41	27.91	18.81
2650.00	3.19	3.55	0.36	40.07	1.44	29.70	19.08
2700.00	3.19	3.57	0.38	32.50	1.46	30.72	19.11



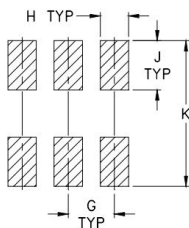
Suggested PCB Layout



Outline Drawing



PCB Land Pattern



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