

Power Splitter/Combiner

SP-2W+

2 Way-0° 50Ω

3300 to 3800 MHz



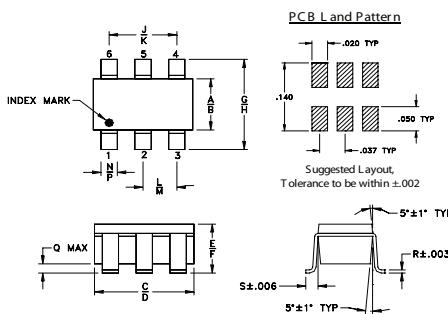
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-65°C to 150°C
Power Input (as a splitter)	0.75W max.
Internal Dissipation	0.375W max.
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

SUM PORT	5
PORT 1	1
PORT 2	3
GROUND	2,4,6

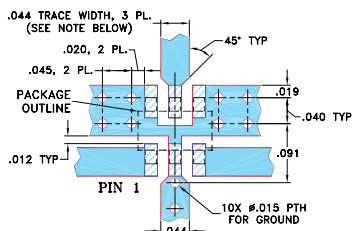
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J
.052	.067	.106	.122	.035	.064	.087	.118	.067
1.32	1.70	2.69	3.10	0.89	1.63	2.21	3.00	1.70
K	L	M	N	P	Q	R	S	wt
.083	.033	.042	.012	.020	.012	.006	.018	grams
2.11	0.84	1.07	0.30	0.51	0.30	0.15	0.46	0.020

Demo Board MCL P/N: TB-374 Suggested PCB Layout (PL-232)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" ± .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

Features

- low insertion loss, 0.5 dB typ.
- good isolation, 25 dB typ.
- good output VSWR, 1.1:1 typ.
- small size
- aqueous washable

Applications

- WIMAX
- defense radar
- fixed satellite service

CASE STYLE: CA531

PRICE: \$ 0.96 ea. QTY (20)

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Available Tape and Reel
at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000

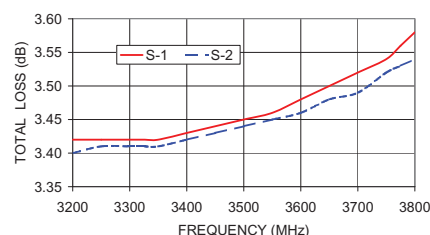
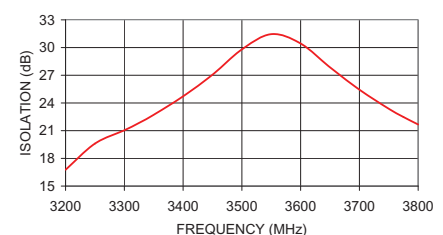
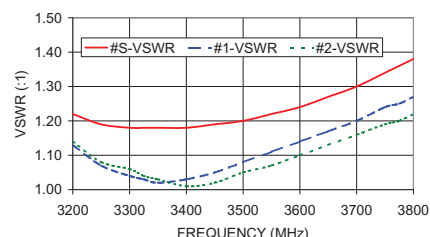
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)	
	Typ.	Min.	Typ.	Max.	Max.	Max.	S-Port Typ.	Output Ports Typ.
3300-3800	25	16	0.5	0.9	7	0.2	1.2	1.1

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
3125.00	3.42	3.40	0.02	16.77	1.28	1.22	1.13	1.14
3250.00	3.42	3.41	0.01	19.60	1.27	1.19	1.07	1.08
3300.00	3.42	3.41	0.01	21.04	1.26	1.18	1.04	1.06
3325.00	3.42	3.41	0.01	21.84	1.26	1.18	1.03	1.04
3350.00	3.42	3.41	0.01	22.72	1.25	1.18	1.02	1.03
3400.00	3.43	3.42	0.01	24.72	1.24	1.18	1.03	1.01
3450.00	3.44	3.43	0.01	27.06	1.23	1.19	1.05	1.02
3500.00	3.45	3.44	0.01	29.80	1.21	1.20	1.08	1.05
3550.00	3.46	3.45	0.01	31.45	1.19	1.22	1.11	1.07
3600.00	3.48	3.46	0.02	30.44	1.17	1.24	1.14	1.10
3650.00	3.50	3.48	0.02	27.86	1.17	1.27	1.17	1.13
3700.00	3.52	3.49	0.03	25.44	1.16	1.30	1.20	1.16
3750.00	3.54	3.52	0.02	23.37	1.17	1.34	1.24	1.19
3775.00	3.56	3.53	0.03	22.48	1.16	1.36	1.25	1.20
3800.00	3.58	3.54	0.03	21.67	1.15	1.38	1.27	1.22

1. Total Loss = Insertion Loss + 3dB splitter loss.

SP-2W+
TOTAL LOSSSP-2W+
ISOLATIONSP-2W+
VSWR

electrical schematic



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