

Surface Mount Power Splitter/Combiner

SP-2W+

2 Way-0° 50Ω 3300 to 3800 MHz



Generic photo used for illustration purposes only

CASE STYLE: CA531

Maximum Ratings

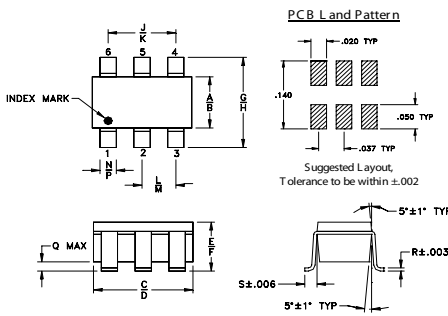
Operating Temperature	-40°C to 85°C
Storage Temperature	-65°C to 150°C
Power Input (as a splitter)	0.75W max.
Internal Dissipation	0.375W max.

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

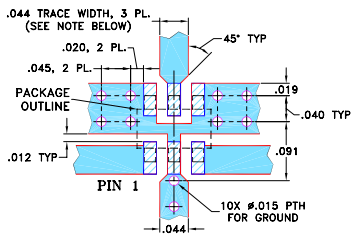
Outline Drawing



Outline Dimensions (inch/mm)

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

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

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

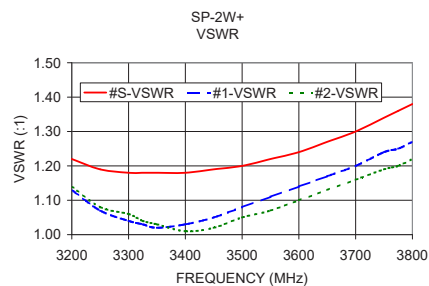
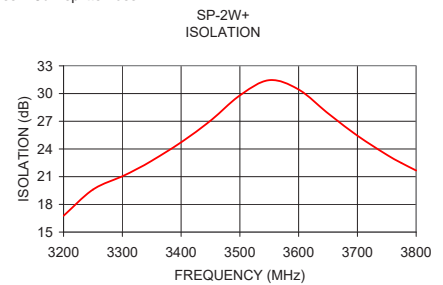
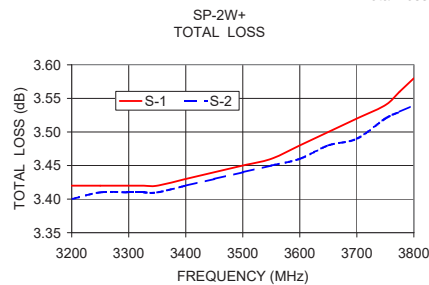
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)	
	Typ.	Min.	Typ.	Max.			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.



electrical schematic

