

Surface Mount High Power Splitter

SYPJ-2-5W-52+

2 Way-180° 50Ω 10 to 520 MHz



CASE STYLE: AH202-1
PRICE: \$49.95 ea. QTY (1-9)

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

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	5.0W max.
Internal Dissipation	1.0W max.

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

SUM PORT	8
PORT 1 (0°)	5
PORT 2 (180°)	4
GROUND	1,2,3,6,7

Features

- wideband, 10 to 500 MHz
- low phase unbalance, 2 deg. typ.
- low amplitude unbalance, 0.1 dB typ.
- high isolation, 23 dB typ.
- high input power as a splitter, 5.0 W

Applications

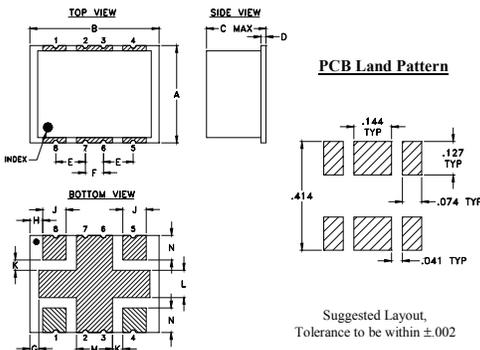
- VHF/UHF
- communication systems
- receivers & transmitters

- instrumentation
- CATV

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency		10		520	MHz
Insertion Loss (above theoretical 3.0 dB)	10 - 250 250 - 520	—	0.5 0.9	0.9 1.5	dB
Isolation	10 - 250 250 - 520	18 19	22 24	—	dB
Phase Unbalance	10 - 250 250 - 520	—	2.0 2.0	8.0 10	Degree
Amplitude Unbalance	10 - 250 250 - 520	—	0.05 0.1	0.2 0.3	dB
VSWR (Port S)	10 - 250 250 - 520	—	1.4 1.5	1.55 1.95	:1
VSWR (Port 1-2)	10 - 250 250 - 520	—	1.35 1.6	1.65 2.3	:1
Input Power					
as splitter	10 - 520	—	—	5.0	W
as combiner	10 - 520	—	—	1.0	W

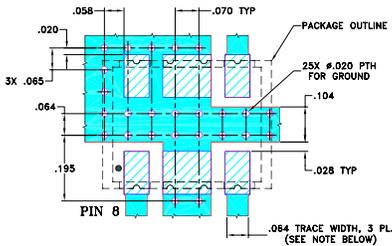
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.38	.50	.25	.020	.115	.070	.035
9.65	12.70	6.35	0.51	2.92	1.78	0.89
H	J	K	L	M	N	wt
.050	.090	.040	.105	.140	.095	grams
1.27	2.29	1.02	2.67	3.56	2.41	0.80

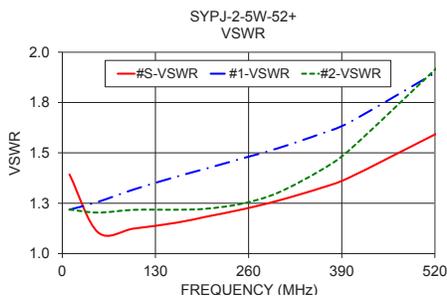
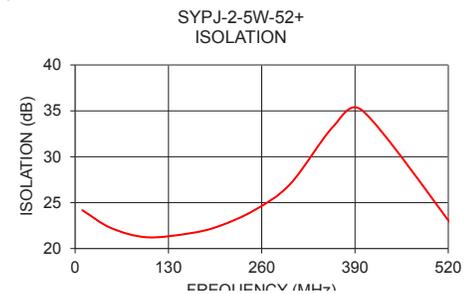
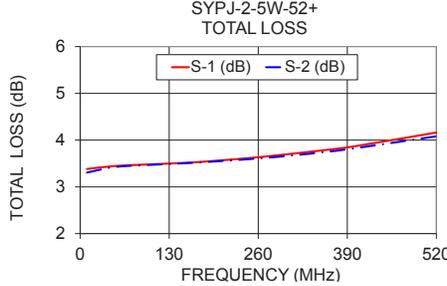
Demo Board MCL P/N: TB-427+ Suggested PCB Layout (PL-274)



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						
10	3.38	3.31	0.08	24.18	179.96	1.39	1.22	1.22
50	3.45	3.42	0.02	22.24	179.43	1.10	1.26	1.20
100	3.48	3.47	0.01	21.23	179.08	1.12	1.32	1.22
160	3.52	3.51	0.01	21.67	178.76	1.15	1.38	1.22
200	3.56	3.55	0.01	22.43	178.60	1.18	1.42	1.22
250	3.62	3.60	0.02	24.19	178.48	1.22	1.47	1.25
300	3.69	3.66	0.04	27.05	178.46	1.26	1.52	1.30
360	3.79	3.75	0.04	33.32	178.69	1.32	1.59	1.41
400	3.87	3.82	0.04	35.05	179.07	1.38	1.65	1.51
525	4.17	4.09	0.08	22.57	178.05	1.60	1.91	1.93

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



Electrical Schematic



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.
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