

Surface Mount

Power Splitter/Combiner

SYPS-2-282-75+

2 Way-0° 75Ω 5 to 2750 MHz



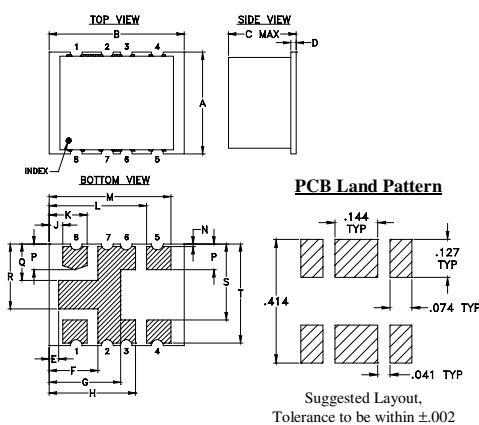
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.05W max.
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

SUM PORT	8
PORT 1	4
PORT 2	5
GROUND	1,2,3,6,7

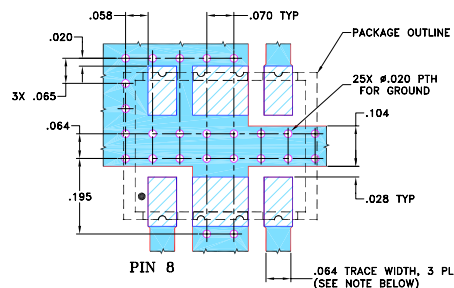
Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	K
.38	.50	.25	.020	.035	.180	.265	.320	.050	.140
9.65	12.70	6.35	0.51	0.89	4.57	6.73	8.13	1.27	3.56
L	M	N	P	Q	R	S	T	wt	
.360	.450	.010	.095	.135	.240	.280	.365	grams	
9.14	11.43	0.25	2.41	3.43	6.10	7.11	9.27	0.52	

Demo Board MCL P/N: TB-426+ Suggested PCB Layout (PL-268)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .060" ± .004"; 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.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
□ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- wideband, 5 to 2750 MHz. useable 0.5 to 3000 MHz
- low insertion loss, 0.8 dB typ.
- high isolation, 25 dB typ.

Applications

- VHF/UHF
- communications systems
- receivers & transmitters
- instrumentation
- CATV

CASE STYLE: AH202-2
PRICE: \$19.95 ea. QTY. (10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

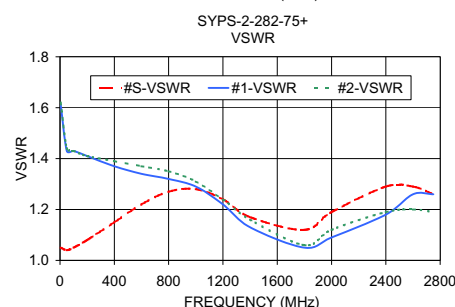
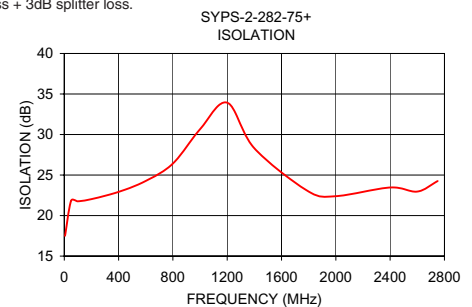
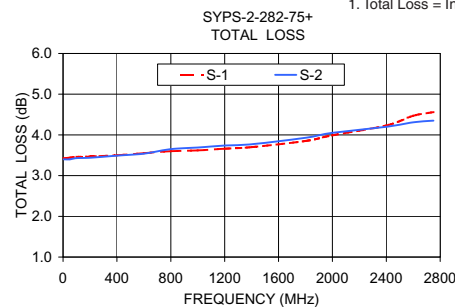
FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 3.0 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L	M	U	L	M	U	L	M	U	L	M	U
f_L - f_U	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-2750	20	12	25	18	22	13	0.5	0.7	0.8	1.1	1.5	2.7

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

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						
5.00	3.43	3.40	0.03	17.50	0.12	1.05	1.61	1.62
50.00	3.44	3.40	0.04	21.82	0.01	1.04	1.43	1.44
100.00	3.46	3.43	0.03	21.76	0.06	1.05	1.43	1.43
200.00	3.47	3.44	0.03	22.03	0.23	1.08	1.41	1.41
400.00	3.50	3.49	0.02	22.92	0.48	1.15	1.37	1.39
600.00	3.55	3.54	0.02	24.27	0.70	1.22	1.34	1.37
800.00	3.60	3.65	0.05	26.42	0.83	1.27	1.32	1.35
1000.00	3.62	3.69	0.07	30.66	0.96	1.28	1.29	1.31
1200.00	3.66	3.74	0.08	33.93	1.24	1.24	1.22	1.24
1400.00	3.70	3.77	0.06	28.30	0.92	1.17	1.13	1.16
1800.00	3.85	3.93	0.08	22.96	0.63	1.12	1.05	1.06
2000.00	3.99	4.05	0.06	22.39	0.42	1.19	1.09	1.12
2400.00	4.23	4.20	0.04	23.46	0.16	1.29	1.18	1.19
2600.00	4.47	4.31	0.16	22.96	0.39	1.29	1.26	1.20
2750.00	4.56	4.35	0.21	24.26	0.54	1.26	1.26	1.19

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



electrical schematic



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For detailed performance specs & shipping online see web site

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