

Surface Mount Power Splitter/Combiner

SYPS-3-12W+

3 Way-0° 50Ω 20 to 1200 MHz



CASE STYLE: AH202
PRICE: \$ 9.95 ea. QTY (1-9)

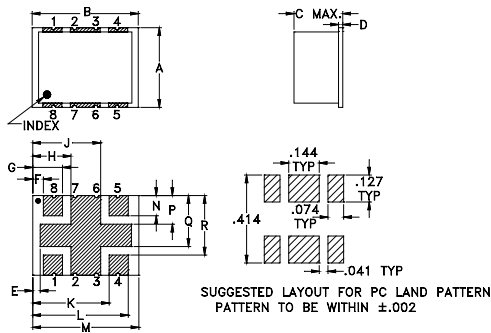
Maximum Ratings

| | |
|-----------------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 1W max. |
| Internal Dissipation | 0.15W max. |

Pin Connections

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

Outline Drawing



Outline Dimensions (Inch)

| A | B | C | D | E | F | G | H | |
|------|-------|-------|------|------|------|------|------|-------|
| .375 | .500 | .25 | .020 | 0.35 | .050 | .140 | .180 | |
| 9.53 | 12.70 | 6.35 | 0.51 | 8.89 | 1.27 | 3.56 | 4.57 | |
| J | K | L | M | N | P | Q | R | wt |
| .320 | .360 | .450 | .320 | .360 | .135 | .240 | .280 | grams |
| 8.13 | 9.14 | 11.43 | 8.13 | 9.14 | 3.43 | 6.10 | 7.11 | 0.80 |

Features

- low insertion loss 1.0 dB typ.
- wide frequency band, 20 to 1200 MHz, usable 5 to 1250 MHz
- low amplitude unbalance, 0.1 dB typ.

Applications

- VHF/UHF CATV
- cellular

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

The +suffix has been added in order to identify RoHS Compliance. There has been no change to the model's material, form, fit, or function. See our web site for RoHS Compliance methodologies and qualifications.

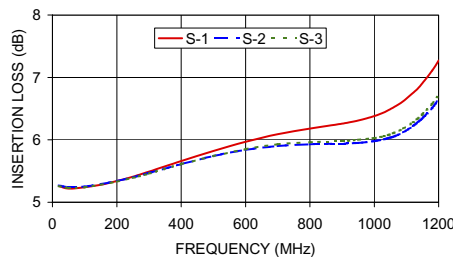
Splitter Electrical Specifications

| FREQUENCY (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 4.8 dB | | PHASE UNBALANCE (deg.) | AMPLITUDE UNBALANCE (dB) |
|-----------------|----------------|------|----------------------------------|------|------------------------|--------------------------|
| | Typ. | Min. | Typ. | Max. | Max. | Max. |
| 20-500 | 24 | 16 | 0.7 | 1.4 | 2 | 0.3 |
| 500-1000 | 20 | 15 | 1.2 | 2.0 | 4 | 0.7 |
| 1000-1200 | 24 | 16 | 1.7 | 2.9 | 6 | 0.9 |

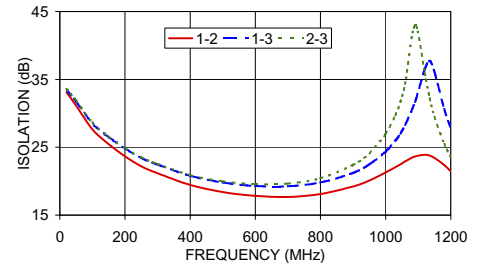
Typical Performance Data

| FREQ. (MHz) | INSERTION LOSS (dB) | | | AMPLITUDE UNBALANCE (dB) | ISOLATION (dB) | | | PHASE UNBALANCE (deg.) | VSWR | | | |
|-------------|---------------------|------|------|--------------------------|----------------|-------|-------|------------------------|------|------|------|------|
| | S-1 | S-2 | S-3 | | 1-2 | 1-3 | 2-3 | | S | 1 | 2 | 3 |
| 20.00 | 5.26 | 5.27 | 5.26 | 0.01 | 33.11 | 33.43 | 33.56 | 0.08 | 1.14 | 1.18 | 1.17 | 1.17 |
| 50.00 | 5.22 | 5.24 | 5.23 | 0.01 | 31.13 | 31.72 | 31.88 | 0.10 | 1.13 | 1.17 | 1.16 | 1.16 |
| 100.00 | 5.24 | 5.25 | 5.24 | 0.01 | 27.63 | 28.50 | 28.60 | 0.18 | 1.16 | 1.16 | 1.15 | 1.16 |
| 200.00 | 5.34 | 5.34 | 5.33 | 0.01 | 23.67 | 24.84 | 24.91 | 0.32 | 1.25 | 1.15 | 1.15 | 1.16 |
| 300.00 | 5.49 | 5.47 | 5.46 | 0.03 | 21.17 | 22.46 | 22.54 | 0.44 | 1.35 | 1.14 | 1.15 | 1.16 |
| 400.00 | 5.66 | 5.61 | 5.61 | 0.05 | 19.44 | 20.80 | 20.90 | 0.52 | 1.44 | 1.13 | 1.14 | 1.17 |
| 500.00 | 5.82 | 5.74 | 5.74 | 0.09 | 18.40 | 19.82 | 19.98 | 0.56 | 1.51 | 1.12 | 1.14 | 1.16 |
| 600.00 | 5.97 | 5.84 | 5.85 | 0.13 | 17.84 | 19.31 | 19.56 | 0.52 | 1.54 | 1.11 | 1.12 | 1.15 |
| 700.00 | 6.09 | 5.90 | 5.93 | 0.18 | 17.68 | 19.24 | 19.63 | 0.40 | 1.54 | 1.11 | 1.11 | 1.14 |
| 800.00 | 6.18 | 5.93 | 5.96 | 0.25 | 18.11 | 19.80 | 20.45 | 0.19 | 1.47 | 1.10 | 1.08 | 1.11 |
| 900.00 | 6.26 | 5.94 | 5.98 | 0.32 | 19.22 | 21.23 | 22.40 | 0.19 | 1.36 | 1.09 | 1.05 | 1.06 |
| 1000.00 | 6.38 | 5.98 | 6.03 | 0.41 | 21.28 | 24.38 | 27.02 | 0.71 | 1.18 | 1.09 | 1.04 | 1.04 |
| 1090.00 | 6.62 | 6.12 | 6.18 | 0.50 | 23.65 | 31.70 | 42.96 | 1.40 | 1.04 | 1.08 | 1.08 | 1.11 |
| 1150.00 | 6.91 | 6.35 | 6.41 | 0.56 | 23.44 | 36.09 | 29.45 | 1.96 | 1.20 | 1.08 | 1.13 | 1.18 |
| 1200.00 | 7.27 | 6.65 | 6.72 | 0.62 | 21.47 | 27.81 | 23.54 | 2.56 | 1.39 | 1.08 | 1.17 | 1.25 |

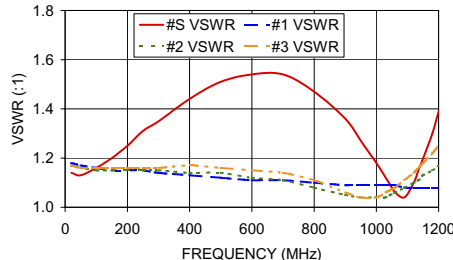
SYPS-3-12W
INSERTION LOSS



SYPS-3-12W
ISOLATION



SYPS-3-12W
VSWR



electrical schematic

