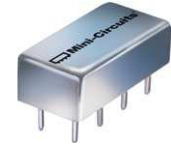


Plug-In Switch

50Ω SPDT Pin Diode Reflective 10 to 2500 MHz

PSW-1211



CASE STYLE: A06
PRICE: \$35.20 ea. QTY (1-9)

Maximum Ratings

| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| Power | +20 dBm |
| Control Current | 5mA |

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

Pin Connections

| | |
|-----------|-------|
| RF IN | 5 |
| RF OUT 1 | 2 |
| RF OUT 2 | 8 |
| CONTROL 1 | 1 |
| CONTROL 2 | 7 |
| GROUND | 3,4,6 |
| CASE GND | 3,6 |

Features

- wideband, 10 to 2500 MHz
- hermetic, metal case

Applications

- military, hi-rel application
- antenna switching
- UHF/VHF
- satellite communications
- test set-ups

Switch Electrical Specifications

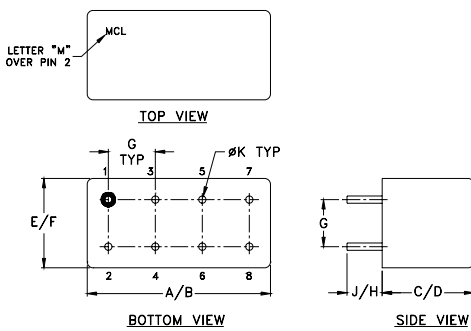
| MODEL NO. | FREQ. (MHz) | | INSERTION LOSS (dB) | | | | IN-OUT ISOLATION (dB) | | | | | |
|-----------|-------------|-------|---------------------|------|-----------------|------|-----------------------|------|------|------|------|------|
| | f_L | f_U | Low band lw | | Upper band U | | Frequency Band | | | | | |
| | | | Typ. | Max. | Typ. | Max. | L | | M | | U | |
| | | | | | | | Typ. | Min. | Typ. | Min. | Typ. | Min. |
| PSW-1211 | 10 | 2500 | 1.1 | 1.9 | 1.9 | 2.7 | 50 | 40 | 35 | 28 | 28 | 22 |

L= low range(f_L to 10 f_L)

M=mid range(10 f_L to $f_U/2$)
lw=low band (f_L to $f_L/2$)

U=upper range ($f_U/2$ to f_U)

Outline Drawing



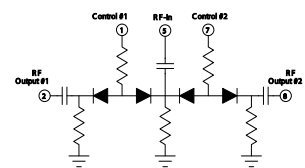
Outline Dimensions (inch/mm)

| A | B | C | D | E | F |
|-------|-------|------|------|------|-------|
| .770 | .800 | .285 | .310 | .370 | .400 |
| 19.56 | 20.32 | 7.24 | 7.87 | 9.40 | 10.16 |

| G | H | J | K | wt |
|------|------|------|------|-------|
| .200 | .20 | .14 | .031 | grams |
| 5.08 | 5.08 | 3.56 | 0.79 | 5.2 |

| Additional Specifications | |
|---------------------------|--|
| VSWR ("ON" STATE) | 1.7 MAX. |
| SWITCHING TIME (μSEC) | 4 MAX. |
| RISE TIME (μSEC) | 2 TYP. |
| CONTROL VOLTAGE | ON condition +5V OFF condition 0V |
| 1 dB COMPRESSION | 10 to 200 MHz +6 increasing to +19 dBm Above 200 MHz +19 dBm min. |

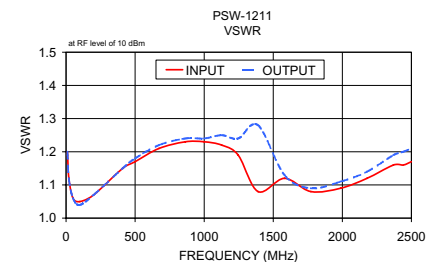
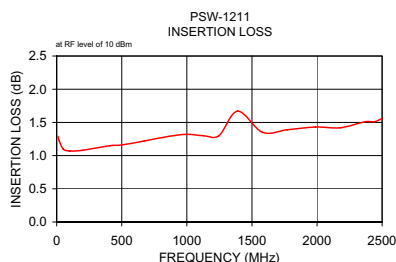
Control Logic



| | CONTROL 1 | CONTROL 2 | RF OUT 2 | RF OUT 1 |
|----------|-----------|-----------|----------|----------|
| State 1: | 0V | +5V | ON | OFF |
| State 2: | +5V | 0V | OFF | ON |

Typical Performance Data

| Freq. (MHz) | ON INSERTION LOSS (dB) | | | | OFF ISOLATION (dB) | | | | VSWR | | |
|-------------|------------------------|----------|-----------|----------|--------------------|----------|-----------|----------|-----------|-----------|-------|
| | IN-OUT | | IN-OUT | | IN-OUT | | IN-OUT | | ON | OFF | |
| | \bar{x} | σ | \bar{x} | σ | \bar{x} | σ | \bar{x} | σ | \bar{x} | \bar{x} | |
| 10.00 | 1.29 | 0.19 | 0.13 | 0.12 | 88.14 | 5.32 | 5.52 | 5.48 | 1.20 | 1.20 | 27.17 |
| 20.00 | 1.22 | 0.14 | 0.09 | 0.06 | 80.95 | 3.49 | 5.99 | 5.45 | 1.12 | 1.12 | 25.49 |
| 50.00 | 1.10 | 0.10 | 0.07 | 0.06 | 66.03 | 2.18 | 0.79 | 0.77 | 1.06 | 1.06 | 26.18 |
| 100.00 | 1.07 | 0.09 | 0.07 | 0.06 | 56.13 | 2.48 | 0.63 | 1.00 | 1.05 | 1.04 | 24.91 |
| 200.00 | 1.08 | 0.09 | 0.06 | 0.05 | 47.23 | 1.83 | 0.65 | 0.71 | 1.07 | 1.07 | 24.71 |
| 409.45 | 1.15 | 0.08 | 0.07 | 0.05 | 40.05 | 1.43 | 0.45 | 0.39 | 1.15 | 1.15 | 23.36 |
| 500.00 | 1.16 | 0.08 | 0.06 | 0.04 | 38.02 | 1.28 | 0.50 | 0.28 | 1.17 | 1.18 | 22.80 |
| 672.45 | 1.22 | 0.08 | 0.06 | 0.04 | 35.50 | 1.05 | 0.49 | 0.36 | 1.21 | 1.22 | 21.45 |
| 863.73 | 1.29 | 0.08 | 0.06 | 0.04 | 33.51 | 0.92 | 0.71 | 0.29 | 1.23 | 1.24 | 19.28 |
| 1000.00 | 1.32 | 0.07 | 0.05 | 0.03 | 29.59 | 0.41 | 3.76 | 0.96 | 1.23 | 1.24 | 19.05 |
| 1126.73 | 1.30 | 0.08 | 0.06 | 0.05 | 30.50 | 0.46 | 2.81 | 0.52 | 1.22 | 1.25 | 17.59 |
| 1246.27 | 1.30 | 0.07 | 0.07 | 0.06 | 30.00 | 0.41 | 3.80 | 0.53 | 1.19 | 1.24 | 17.26 |
| 1389.73 | 1.67 | 0.09 | 0.41 | 0.09 | 29.58 | 0.43 | 1.32 | 1.45 | 1.08 | 1.28 | 15.74 |
| 1581.00 | 1.35 | 0.07 | 0.05 | 0.04 | 29.04 | 0.47 | 0.58 | 0.46 | 1.12 | 1.13 | 14.86 |
| 1772.27 | 1.39 | 0.08 | 0.05 | 0.05 | 27.59 | 0.59 | 1.64 | 0.77 | 1.08 | 1.09 | 13.60 |
| 1987.45 | 1.43 | 0.07 | 0.05 | 0.04 | 27.44 | 0.74 | 2.62 | 0.92 | 1.09 | 1.11 | 12.58 |
| 2178.73 | 1.42 | 0.08 | 0.06 | 0.04 | 27.34 | 0.87 | 3.10 | 1.03 | 1.12 | 1.14 | 14.41 |
| 2370.00 | 1.51 | 0.09 | 0.08 | 0.05 | 26.88 | 1.06 | 3.36 | 1.25 | 1.16 | 1.19 | 12.24 |
| 2441.73 | 1.51 | 0.08 | 0.07 | 0.04 | 27.35 | 1.15 | 3.49 | 1.39 | 1.16 | 1.20 | 10.69 |
| 2500.00 | 1.56 | 0.09 | 0.08 | 0.06 | 26.81 | 1.21 | 3.44 | 1.50 | 1.17 | 1.21 | 11.44 |



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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