## Aethercomm

 High Power, Symmetrical SPDT RF SwitchSSHPS 0.005-0.050-500

This high power RF switch, SSHPS 0.005-0.050-500, is employed in communication and Electronic Warfare (EW) systems where high power, low loss and excellent isolation are required. Peak power out is 1.0 kW maximum. This switch operates from +28 Vdc supply with 550 mA maximum current draw. See SCD 70313-001 for all operating parameters. Unit operates from $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ up to 35,000 feet altitude. This switch meets the conditions specified in MIL-STD202G, Method 213, Test Condition J (30G, 11mS, 18 Shocks - 3 in each of 6 axes). This unit meets the conditions specified in MIL-STD-202G, Method 214A, Test Condition 1 and C. MIL-STD- 810F, Method 500.4, Low Pressure MIL-TL-5541, Class 3, Type 1, Color Yellow. MIL-STD-202G, Test Method Standard Electronic and Electrical Components.

- 500 Watt CW switch
- 5-50 MHz minimum operation
- 50 dB typical isolation
- 6-8 uSec maximum Switching Speed
- Operates from a +28 Vdc supply


This is an example of an Aethercomm standard product. Aethercomm designs and manufactures high performance, high power CW or pulsed SSPA's for commercial, military and satellite communications customer.

Aethercomm Inc. reserves the right to make changes without further notice. Aethercomm recommends that before these items herein are specified into a system or critical application that the performance characteristics be verified by contacting the factory.

| Parameter | Frequency ( MHz ) | Min | Typ | Max | Units |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Insertion Loss | 5 |  | 0.10 | 0.44 |  |
|  | 15 |  | 0.12 | 0.44 |  |
|  | 30 |  | 0.12 | 0.44 |  |
|  | 50 |  | 0.17 | 0.44 |  |
| Isolation | 5-50 | 45 | 50 |  | dB |
| Return Loss | 5 | 15.0 | 22.70 |  | dB |
|  | 15 | 15.0 | 31.30 |  |  |
|  | 30 | 15.0 | 30.30 |  |  |
|  | 50 | 15.0 | 26.30 |  |  |
| Switching Speed | 5-50 |  | 6 | 8 | uSec |
| Power Handling, <br> CW (All VSWR Conditions) | 5-50 |  |  | 500 | W Avg. |
| Power Handling, PW = 80 $\mu \mathrm{s}, 10$ \% DC (All VSWR Conditions) | 5-50 |  |  | 1.0 | kWPrk. |
| Supply Current | 5-50 |  | 450 | 550 | mA |
| Test Conditions - $\mathrm{Ta}=+25^{\circ} \mathrm{C}$, Supply Voltage $=+28 \mathrm{Vdc}$ |  |  |  |  |  |

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