

SPECIFICATION SHEET
JFW MODEL 50S-1821
1P2T SOLID STATE RF SWITCH

JFW Industries, Inc.
Phone: 317-887-1340
sales@jfwindustries.com
www.jfwindustries.com

| | |
|-----------------------------------|--|
| Frequency Range | 800-3000 MHz |
| Configuration | 1P2T |
| Impedance | 50 Ohms nominal |
| VSWR | 1.4:1 maximum |
| Insertion Loss | 0.60 dB typical 800-2000 MHz 1.00 dB maximum 800-2000 MHz 0.90 dB typical 2000-3000 MHz 1.30 dB maximum 2000-3000 MHz |
| Isolation | 75 dB typical 800-2000 MHz 65 dB minimum 800-2000 MHz 65 dB typical 2000-3000 MHz 55 dB minimum 2000-3000 MHz |
| Switching Speed | 10 microseconds maximum 6 microseconds typical (50% TTL to 10% or 90% RF) |
| Switching Transients | < 1.0 Vpk-pk typical < 2.0 Vpk-pk maximum (for any rep rate) |
| RF Input Power (Cold Switched) | 75 Watts average (-20°C to +50°C) 50 Watts average (+50° to +70°C) |
| RF Input Power (Hot Switched) | 30 Watts average (-20°C to +70°C) |
| Spurious Noise (Out-of-Band) | This switch shall produce: < -73dBm (100-800MHz) < -50dBm (1-100MHz) |
| | This is to be tested on the common port with J1 and J2 terminated into 50 Ohms. |
| Control (1 line) | TTL "Low" Common to J1 TTL "High" Common to J2 |
| DC Supply | +15 Vdc @ 80 mA nominal and +5 Vdc @ 40 mA nominal |
| RF Connector | BNC, SMA, TNC or N female |

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Operating Temperature Range -20°C to +70°C

Storage Temperature Range -55°C to +85°C

Shock This unit is designed to meet MIL-STD-202G, Method 213, Test Condition J (30g's, 11ms, 18 shocks in each axis)

(Verification of this specification is to be confirmed by the customer. JFW does not test for this specification.)

Vibration This unit is designed to meet MIL-STD-202G, Method 214A, Condition 1, Test Condition Letter C.

Verification of this specification is to be confirmed by the customer. JFW does not test for this specification.

Physical Size See outline drawing 092-5197



| ECR/ECN # | DATE | REV | APPR / DATE | ECR/ECN # | DATE | REV | APPR / DATE |
|-----------|------------|-----|----------------|-----------|------|-----|-------------|
| | 03/04/2009 | | BAC 03/04/2009 | | | | |
| 17072 | 04/10/2009 | A | BAC 04/10/2009 | | | | |
| 17589 | 08/20/2009 | B | BAC 08/20/2009 | | | | |