

**SPECIFICATION SHEET**  
**JFW MODEL 50S-1820**  
**1P2T SOLID STATE RF SWITCH**

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

Frequency Range	800-2700 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 0.80 dB typical 2000-2700 MHz 1.20 dB maximum 2000-2700 MHz
Isolation	75 dB typical 800-2000 MHz 65 dB minimum 800-2000 MHz 70 dB typical 2000-2700 MHz 60 dB minimum 2000-2700 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)	100 Watts average (-20°C to +50°C) 75 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				