

**SPECIFICATION SHEET**

**JFW MODEL 50S-1603+XX-TTL**

**1P2T FAILSAFE SELF TERMINATING ELECTROMECHANICAL  
RF SWITCH**

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

Frequency Range	DC-18 GHz
Configuration	1P2T Failsafe Self Terminating
Impedance	50 Ohms nominal
VSWR	1.2:1 maximum DC-4 GHz 1.3:1 maximum 4-8 GHz 1.4:1 maximum 8-12 GHz 1.5:1 maximum 12-18 GHz
Insertion Loss	0.2 dB maximum DC-4 GHz 0.3 dB maximum 4-8 GHz 0.4 dB maximum 8-12 GHz 0.5 dB maximum 12-18 GHz
Isolation	70 dB minimum DC-4 GHz 65 dB minimum 4-8 GHz 60 dB minimum 8-12 GHz 60 dB minimum 12-18 GHz
Switching Speed	20 milliseconds
RF Input Power*	500 Watts average DC-100 MHz 400 Watts average 100-200MHz 300 Watts average 200-500MHz 200 Watts average 500-1000MHz 100 Watts average 1-4 GHz 90 Watts average 4-8 GHz 70 Watts average 8-12 GHz 60 Watts average 12-18 GHz *2 Watts average for self terminations
DC Supply	+XX is either +12, +15,+24 or +28: ----- +12Vdc @ 450 mA nominal (11-14Vdc) +15Vdc @ 400 mA nominal (13-17Vdc) +24Vdc @ 225 mA nominal (20-28Vdc) +28Vdc @ 200 mA nominal (24-32Vdc)  Unit if fail-safe NC to COM +Vdc on control pin for NO to COM

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Control (1 line) TTL "Low" for Com to NC (failsafe)  
TTL "High" for Com to NO  
"low" (0-0.8Vdc) "high" (2.0-5.0Vdc)

RF Connector SMA female

Operating Temperature Range -25°C to +65°C

Lifetime (typical) 5 million operations

Physical Size See outline drawing 092-4298

Add (-NR) for NON-RoHS version. (I.e. 50S-1603+12-TTL-NR SMA)



ECR/ECN #	DATE	REV	APPR / DATE	ECR/ECN #	DATE	REV	APPR / DATE
	04/17/2007		CLK 04/17/2007				
16223	08/15/2008	A	CLK 08/15/2008				
24842	01/07/2015	B	BAC 01/07/2015				