

**SPECIFICATION SHEET**

**JFW MODEL 50S-2145**

**1P8T SELF TERMINATING SOLID STATE RF SWITCH**

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

Frequency Range 20-8400 MHz

Configuration 1P8T Self Terminating

Impedance 50 Ohms nominal

VSWR 1.3:1 typical 20-4000MHz  
1.5:1 typical 4000-8400MHz  
1.8:1 maximum 20-8400MHz

Insertion Loss 1.4 dB typical @ 20 MHz  
1.8 dB typical @ 2000 MHz  
2.2 dB typical @ 4000 MHz  
2.7 dB typical @ 6000 MHz  
3.9 dB typical @ 8400 MHz  
4.5 dB maximum 20-8400 MHz

Isolation 110 dB typical @ 20 MHz  
81 dB typical @ 2000 MHz  
72 dB typical @ 4000 MHz  
69 dB typical @ 6000 MHz  
57 dB typical @ 8400 MHz  
50 dB minimum 20-8400MHz

Switching Speed 10 microseconds maximum  
7.0 usec typical OFF to ON  
0.3 usec typical ON to OFF  
(50% TTL to 10% or 90% RF)

RF Input Power +26 dBm maximum (all ports)

TTL Control Logic (4 Lines) Binary Coded TTL Lines

C1	C2	C3	C4	Path
0	0	0	0	= COM to J1
1	0	0	0	= COM to J2
0	1	0	0	= COM to J3
1	1	0	0	= COM to J4
0	0	1	0	= COM to J5
1	0	1	0	= COM to J6
0	1	1	0	= COM to J7
1	1	1	0	= COM to J8
0	0	0	1	= All Ports OFF

DC Supply +5 Vdc @ 2.7mA nominal

DC Connector MOLEX #22-11-2062

(Recommended Mating Connector = Molex #22-01-3067 with Molex #08-56-0109 contacts)

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RF Connector SMA female

Operating Temperature Range -40C to +85C

Storage Temperature Range -55C to +90C

Mounting This switch can be mounted flat, on edge or panel mounted  
See drawing 092-9740-01 for recommended panel mounting patten

Physical Size See outline drawing 092-9740



ECR/ECN #	DATE	REV	APPR / DATE	ECR/ECN #	DATE	REV	APPR / DATE
	01/31/2022		BAC 01/31/2022	32691	07/06/2023	C	BAC 07/06/2023
31579	02/02/2022	A	BAC 02/02/2022				
32684	06/28/2023	B	BAC 06/28/2023				