SPECIFICATION SHEET

JFW MODEL 50MS-367

4 X 4 BLOCKING ELECTRO-MECHANICAL MATRIX SWITCH

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

Frequency Range	DC-40 GHz	
Configuration	4 x 4 Blocking Matrix (Unused Input Ports self-terminating) (Unused Output Ports self-terminating) (See Block Diagram 092-7300)	
Startup/Default States (configurable)	ALL PORTS OFF (see MATRIX startup command) DHCP enabled (see NET command) 4 Ethernet users (see NET USERS command) Prompts off (see PROMPT command)	
Impedance	50 Ohms nominal	
VSWR	1.30:1 typical DC-8 GHz 1.60:1 typical 8-18 GHz 1.90:1 typical 18-26.5 GHz 2.00:1 typical 26.5-40 GHz	
	1.60:1 maximum DC-8 GHz 2.25:1 maximum 8-18 GHz 2.50:1 maximum 18-26.5 GHz 2.75:1 maximum 26.5-40 GHz	
Insertion Loss	1.25 dB typical @ 4.0 GHz 1.75 dB typical @ 8.0 GHz 3.00 dB typical @ 18.0 GHz 4.00 dB typical @ 26.5 GHz 4.50 dB typical @ 33.0 GHz 5.50 dB typical @ 40.0 GHz	
	2.50 dB maximum DC-8 GHz 3.75 dB maximum 8-18 GHz 4.75 dB maximum 18-26.5 GHz 6.50 dB maximum 26.5-40 GHz	
Isolation	Input to Input: 100 dB typical @ 8 GHz 80 dB typical @ 40 GHz 60 dB minimum DC-40 GHz	
	Output to Output: 100 dB typical @ 8 GHz 80 dB typical @ 40 GHz 60 dB minimum DC-40 GHz	
	Input to Output: 100 dB typical @ 8 GHz 95 dB typical @ 40 GHz 85 dB minimum DC-40 GHz	

--CONTINUED--

Page 1 of 2 JFW FORM E-7-F REV F

SPECIFICATION SHEET

JFW MODEL 50MS-367

4 X 4 BLOCKING ELECTRO-MECHANICAL MATRIX SWITCH

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

RF Input Power* 25 Watts average average DC-18 GHz

15 Watts average 18-26.5 GHz 8 Watts average 26.5-40 GHz

*Self-terminations rated at 1 Watt max.

Switching Speed 20 milliseconds

(after command is received & processed)
(3 milliseconds typical processing time)

AC Supply 100-240 VAC @ 47-63 Hz

4 Amp 5x20mm "Slo-Blo" AC fuse Littelfuse #215-004, JFW #025-018

Manual Control 20-Button Keypad and LCD display (IP Address configurable via keypad)

(Net mask configurable via keypad) (Gateway configurable via keypad) (Baud rate configurable via keypad)

Remote Control Ethernet (DHCP, TCP/IP, 10/100, up to 12 users)

RS-232 (up to 115200 Baud)

Remote Commands Matrix Commands:

Set Output, Read Output, Read All Outputs

System Commands:

Help, Identification, Store, Recall, Pause, Net,

Serial, Close, Disconnect, MOTD, Date,

Message, Restrict, IDENT, Name, Show Users, Reboot,

Uptime, Prompt

RF Connector 2.92MM female

Operating Temperature Range 0°C to +50°C

Physical Size See outline drawing 092-6835-01

ECR/ECN # DATE	REV APPR / DATE	ECR/ECN # DATE	REV APPR / DATE
03/30/2017	BAC 03/30/2017		

Page 2 of 2 JFW FORM E-7-F REV F