

**SPECIFICATION SHEET****JFW MODEL 50MS-323****BLOCKING SOLID STATE MATRIX SWITCH**

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|                                          |                                                                                                                                                                                                                                                                               |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Range                          | 700-3000 MHz                                                                                                                                                                                                                                                                  |
| Configuration                            | 12 x 12 Blocking Solid-State Matrix<br>(see block diagram 092-8812)<br>(unused input ports are self-terminating)<br>(unused output ports are self-terminating)<br>(all ports are bi-directional)<br>(the ADMIN password is located on rear panel)                             |
| Startup/Default States<br>(configurable) | All ports off at startup (see MATRIX command)<br>DHCP enabled (see NET command)<br>4 Ethernet users (see NET command)<br>Prompts off (see PROMPT command)<br><br>All of these default settings can be changed by user.<br>Unit can be configured for up to 12 Ethernet users. |
| Enclosure Type                           | 19 inch rack mount @ 7RU high                                                                                                                                                                                                                                                 |
| Impedance                                | 50 Ohms nominal                                                                                                                                                                                                                                                               |
| VSWR                                     | 1.5:1 typical / 1.8:1 maximum                                                                                                                                                                                                                                                 |
| Insertion Loss                           | 6 dB typical @ 700MHz<br>8 dB typical @ 3000MHz                                                                                                                                                                                                                               |
| Isolation                                | Input to Input        - 70 dB typical<br>- 60 dB minimum<br><br>Output to Output     - 70 dB typical<br>- 60 dB minimum<br><br>Input to Output       - 70 dB typical<br>- 60 dB minimum                                                                                       |
| RF Input Power                           | +30 dBm average                                                                                                                                                                                                                                                               |
| Switching Speed                          | 50 microseconds<br>(after command is received and processed)<br>(3 milliseconds typical processing time)                                                                                                                                                                      |
| Manual Control                           | 20-Button Keypad and LCD display<br>(IP Address configurable via keypad)<br>(Net mask configurable via keypad)<br>(Gateway configurable via keypad)<br>(Baud rate configurable via keypad)                                                                                    |
| Remote Control                           | Ethernet (DHCP, TCP/IP, 10/100, up to 12 users)<br>RS-232 (up to 115200 Baud)                                                                                                                                                                                                 |

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Remote Command Format

Matrix Commands:

Matrix, Set Input, Set Output, Read Input, Read  
Output, Read All Inputs, Read All Outputs, Read Matrix  
Paths

System Commands:

Help, Identification, Store, Recall, Pause, Net,  
Serial, Close, Disconnect, MOTD, Date, Message,  
Restrict, IDENT, Name, Show Users, Reboot, Uptime,  
Prompt

RF Connector

N female

AC Supply

100-240 VAC @ 47-63 Hz  
4 Amp 5x20mm "Slo-Blo" AC fuse  
Littelfuse #215-004, JFW #025-018

Temperature Ranges

Operating: 0°C to +70°C  
Storage: -55°C to +85°C

Physical Size

See outline drawing 092-7858

| ECR/ECN # | DATE       | REV | APPR / DATE    | ECR/ECN # | DATE | REV | APPR / DATE |
|-----------|------------|-----|----------------|-----------|------|-----|-------------|
|           | 10/30/2013 |     | BAC 10/30/2013 |           |      |     |             |
| 24239     | 07/15/2015 | A   | TRS 07/15/2015 |           |      |     |             |
| 27728     | 04/19/2017 | B   | TRS 04/19/2017 |           |      |     |             |