The **W Series** features SMA connectors and a frequency range of DC to 18 GHz.

This series is available with latching self cut-off or normally open functions with terminations.

**RF Impedance:** 50 ohms nominal  
**Temperature Range:** -35°C to +85°C ambient  
**Operating Life:** 1,000,000 cycles min.  
**Switching Time:** 15 mSec max.  
**Switching Sequence:** Break Before Make  
**Environmental:** Designed in Accordance to MIL-DTL-3928 (Testing and Operation Modes)

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Frequency</th>
<th>VSWR</th>
<th>Insertion Loss</th>
<th>Isolation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-3 GHz</td>
<td>1.20</td>
<td>0.20</td>
<td>80</td>
</tr>
<tr>
<td>3-8 GHz</td>
<td>1.30</td>
<td>0.30</td>
<td>70</td>
</tr>
<tr>
<td>8-12.4 GHz</td>
<td>1.40</td>
<td>0.40</td>
<td>60</td>
</tr>
<tr>
<td>12.4-15.5 GHz</td>
<td>1.50</td>
<td>0.50</td>
<td>60</td>
</tr>
<tr>
<td>15.5-18 GHz</td>
<td>1.80</td>
<td>0.80</td>
<td>55</td>
</tr>
</tbody>
</table>

### AVAILABLE OPTIONS

<table>
<thead>
<tr>
<th>OPTION 2 RF CONNECTORS</th>
<th>OPTION 4 VOLTAGE</th>
<th>OPTION 5 ACTUATOR</th>
<th>OPTION 6 FREQUENCY</th>
<th>OPTION 7 POLARITY</th>
<th>OPTION 8 SPECIAL OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - SMA</td>
<td>6 Vdc +/- 10%</td>
<td>Latching Self Cut-Off</td>
<td>DC to 18 GHz</td>
<td>Not Applicable, USB</td>
<td>L - TTL (High)</td>
</tr>
<tr>
<td>2 - 12 Vdc +/- 10%</td>
<td>(USB Optional)</td>
<td>D - Diodes</td>
<td>LL - TTL (Low)</td>
<td>B - Bracket</td>
<td></td>
</tr>
<tr>
<td>3 - 24-30 Vdc</td>
<td></td>
<td>E - Diodes, Indicators</td>
<td>F - Flange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - 48 Vdc +/- 10%</td>
<td>(USB Optional)</td>
<td></td>
<td>R - Reset (Latching Only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 110 Vac +/- 10%</td>
<td></td>
<td></td>
<td>C - BCD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 - 12-15 Vdc (USB option)</td>
<td>(USB Optional)</td>
<td></td>
<td>T - Terminated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 - 16-20 Vdc</td>
<td></td>
<td></td>
<td>U - USB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 - 20-24 Vdc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please Note: USB integration can only be applied to Voltage Options 12Vdc, & 15Vdc, Polarity Option # 3, and Terminals Option # 3.

The switch has a mini-USB socket on the enclosure interface which provides communication between switch and computers. Additionally, the enclosure also has a Molex socket for 12Vdc connection, which is required to power RF switch. The switch is accompanied with a CD driver, a 3 ft. USB cable and a 12 Vdc AC/DC adapter.
W SERIES
1P8T to 1P10T MULTI POSITION
50 OHM TERMINATED SWITCH
DC-18 GHz  ♦ SMA

DC TERMINAL FUNCTION

LATCHING | NORMALLY OPEN
---|---
| D | D | E | E | J | K | J, K | G | H | G, H |
| D w/ TTL | E w/ TTL | J w/ TTL | K w/ TTL | H w/ TTL |
1 | NOTE #1 | NOTE #1 | NOTE #1 | N/A | N/A | N/A | N/A | N/A | N/A |
2 | COM+/+ | +A | +A | COM+/+ | COM | +A | COM+/+ | +A |
3 | 1+/+ | -A | 1+/+ | -A | 1 | 1 | 1 | 1 |
4 | 2+/+ | 2 | 2 | 2 | 2 | 1 | 2 | 1 |
5 | 3+/+ | 3 | 3 | 3 | 3 | 2 | 3 | 2 |
6 | 4+/+ | 4 | 4 | 4 | 4 | 3 | 4 | 3 |
7 | 5+/+ | 4 | 5 | 5 | 5 | 4 | 5 | 4 |
8 | 6+/+ | 5 | 6 | 6 | 6 | 6 | 6 | 6 |
9 | 7+/+ | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
10 | 8+/+ | 7 | 8 | 8 | 8 | 8 | 8 | 8 |
11 | 9+/+ | 8 | 9 | 9 | 9 | 9 | 9 | 9 |
12 | 10+/+ | 9 | 10 | 10 | 10 | 10 | 10 | 10 |
13 | N/A | 10 | N/A | 10 | N/A | 10 | N/A | 10 |
A | N/A | N/A | COM | COM | N/A | N/A | N/A | COM | COM |
B | N/A | N/A | 1 | 1 | N/A | N/A | 1 | 1 | 1 |
C | N/A | N/A | 2 | 2 | N/A | N/A | 2 | 2 | 2 |
D | N/A | N/A | 3 | 3 | N/A | N/A | 3 | 3 | 3 |
E | N/A | N/A | 4 | 4 | N/A | N/A | 4 | 4 | 4 |
F | N/A | N/A | 5 | 5 | N/A | N/A | 5 | 5 | 5 |
G | N/A | N/A | 6 | 6 | N/A | N/A | 6 | 6 | 6 |
H | N/A | N/A | 7 | 7 | N/A | N/A | 7 | 7 | 7 |
I | N/A | N/A | 8 | 8 | N/A | N/A | 8 | 8 | 8 |
J | N/A | N/A | 9 | 9 | N/A | N/A | 9 | 9 | 9 |
K | N/A | N/A | 10 | 10 | N/A | N/A | 10 | 10 | 10 |

NOTE #1: RESET IF (R) OPTION IS SELECTED, OTHERWISE N/A

SCHEMATICS

Pages 139-143

FIG.
25 26 25 26 29 29 30 29 29 30

OUTLINE DRAWING DIMENSION "A"

2.60" 2.98" 2.60" 2.98" 2.10" 2.10" 2.36" 2.10" 2.10" 2.36"