The **D3 Series** features SMA connectors and a frequency range of DC to 22 GHz.

This series is available with fail-safe, latching self cut-off or pulse latching functions.

**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)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>VSWR (max.)</th>
<th>Insertion Loss (dB max.)</th>
<th>Isolation (dB min.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-3 GHz</td>
<td>1.20</td>
<td>0.20</td>
<td>60</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>12.4-18 GHz</td>
<td>1.50</td>
<td>0.50</td>
<td>60</td>
</tr>
<tr>
<td>18-22 GHz</td>
<td>1.60</td>
<td>0.60</td>
<td>55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actuator Current (typical)</th>
<th>12Vdc</th>
<th>12-15 Vdc</th>
<th>20-24 Vdc</th>
<th>24-30Vdc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fail-safe</td>
<td>480mA</td>
<td>600mA</td>
<td>400mA</td>
<td>175mA</td>
</tr>
<tr>
<td>Latching</td>
<td>282mA</td>
<td>353mA</td>
<td>218mA</td>
<td>175mA</td>
</tr>
</tbody>
</table>

* If reduced coil current is required, please contact Factory.

**Available Options**

**Option 2 RF Connectors**
- 4 - SMA
- 5 - 110 Vac +/- 10%
- 6 - 12-15 Vdc
- 7 - 18-20 Vdc
- 8 - 20-24 Vdc

**Option 3 Terminals**
- 1 - Solder Terminals
- 2 - D-Shell Connector

**Option 4 Voltage**
- 1 - 6 Vdc +/- 10%
- 2 - 12 Vdc +/- 10%
- 3 - 24/30 Vdc
- 4 - 48 Vdc +/- 10%
- 5 - 110 Vac +/- 10%
- 6 - 12-15 Vdc
- 7 - 18-20 Vdc
- 8 - 20-24 Vdc

**Option 5 Actuator**
- A - Standard
- B - Indicators
- M - Diodes
- G - Diodes, Indicators
- D - Diodes
- E - Diodes, Indicators
- C - Standard
- F - Indicators
- Y - Diodes
- L - Diodes, Indicators
- K - Standard
- H - Indicators
- J - Diodes
- G - Diodes, Indicators

**Option 6 Frequency**
- 1 - DC to 22 GHz

**Option 7 Polarity**
- 0 - Not Applicable
- 8 - Positive Common
- 9 - Negative Common

**Option 8 Special Options**
- L - TTL (High)
- LL - TTL (Low)
- T - External Termination
- OT - Internal Termination
## D3 SERIES: SPDT 50 OHM TERMINATED SWITCH

### DC TERMINAL FUNCTION

<table>
<thead>
<tr>
<th>PIN</th>
<th>FAILSAFE</th>
<th>LATCHING</th>
<th>NORMALLY OPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>M</td>
<td>A, M w/ TTL</td>
</tr>
<tr>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>N/A</td>
<td>N/A</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>+1</td>
<td>-B</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>-2</td>
<td>+A</td>
</tr>
<tr>
<td>5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>7</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### SCHEMATICS

**Fig.**

<table>
<thead>
<tr>
<th>Pages 139-143</th>
</tr>
</thead>
</table>

### OUTLINE DRAWING DIMENSION “A”

|                              | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” | 1.98” |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

### FRONT VIEW

**Internal Terminations**

![Internal Terminations Diagram]

**External Terminations**

![External Terminations Diagram]