



## 3 or 6 SPDT and 2 SP6T Latching Terminated 20 GHz Relays

### Overview

The SM7013L and the SM7016L are part of the SMIP//™ family, offering the extensive control and interfacing features provided by SMIP//™. Microwave relay technology has been pioneered to offer density, modularity and cost benefits.

The SM7013L houses three latching, self-terminated 20 GHz microwave SPDT relays. The SM7016L houses six 20 GHz latching, self-terminated SPDT relays. Both models have the option of adding up to two SP6T 20GHz latching, self-terminated switches. In order to drive additional RF/Microwave components, such as attenuators, 32 SPST relays (non-latching) are also provided per SM7013L and SM7016L.

Each switch includes isolated indicator circuitry, allowing the status of the relays to be read directly via the VXI backplane. Even after power is cycled, this allows users to determine the relay position.

For applications where a higher mixture of self-terminated SPDT and multiposition switches are needed, we recommend the SM7001L and SM7012L modules.

### Specifications

**Maximum Power Handling (CW):** < 100 W @ 3 GHz  
< 40 W @ 20 GHz  
< 1 W into termination

**Switching Time:** <15 ms

**RF Impedance:** 50 Ω

**Connectors:** SMA

Frequency (GHz)	dc-3	3-8	8-12.4	12.4-20
Isolation (dB min)	80	70	60	60
Insertion Loss (dB max)	0.2	0.3	0.4	0.5
VSWR min	1.2:1	1.3:1	1.4:1	1.5:1

## Features

dc to 20 GHz

Designed for Applications (i.e. Space, Communications) that Require Continuous Signal During Power Cycles

3 SPDT and Up to 2 SP6T Latching Self-terminated 20 GHz Relays per SM7013L

6 SPDT and Up to 2 SP6T Latching Self-terminated 20 GHz Relays per SM7016L

Switches Include Indicator Circuitry for Real-time Status FeedBack

An Additional 32 SPST Relays are Provided to Drive External Devices such as Attenuators

Non-latching versions available

### Ordering Information

<b>SM7013L</b>	3 SPDT 20 GHz latching, self-terminated relays
<b>SM7013</b>	3 SPDT 20 GHz self-terminated relays
<b>SM7016L</b>	6 SPDT 20 GHz latching, self-terminated relays
<b>SM7016</b>	6 SPDT 20 GHz self-terminated relays
<b>7374L</b>	SP6T 20 GHz latching, self-terminated relay
<b>7374</b>	SP6T 20 GHz self-terminated relays

SM7013L/16L