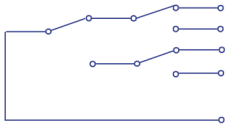
VXI Technology™

Coaxial Switches >900 MHz



SMP6001 - 1 of 10, Coaxial Trees

SMP6002 - 1 of 17, (1x2) Coaxial Switches

Overview

The SMP6001 high-density (1x4) coaxial tree and SMP6002 high-density (1x2) coaxial switch modules are designed for general purpose RF switching. The front panel contains two high-density, 26-pin coaxial connectors designed for high reliability and superior signal integrity. Excellent crosstalk and isolation is maintained by using RF relays, along with short low-loss coaxial runs from the connector directly to the relays. Both modules are also configured to avoid any unterminated stub effects.

The SMP6001 and SMP6002 are part of the SMIP//™ family and can be mixed and matched with other SMIP//™ modules to configure high-density switching systems.

Specifications

Maximum Switching Voltage: 100 V

Maximum Switching Current: 0.5 A

Maximum Switching Power: 10 W

Path Resistance: <1 Ω

Bandwidth (-3 dB): > 900 MHz

Insertion Loss:
- 100 MHz: <0.2 dB
- 500 MHz: <0.5 dB

Crosstalk:
- 10 MHz: <-70 dB
- 100 MHz: <-65 dB
- 500 MHz: <-60 dB

Isolation:
- 10 MHz: <-80 dB
- 100 MHz: <-70 dB
- 500 MHz: <-65 dB

VSWR:
- 100 MHz: <1.2:1
- 900 MHz: <1.5:1

Rated Switch Operations:
- Mechanical: 5×10^6
- Electrical: 1×10^5 at full load

Switching Time: <5 ms

Features

SMP6001 10 1x4 Coaxial Trees >900 MHz
SMP6002 17 1x2 Coaxial Switches >900 MHz

- Greater than 900 MHz Bandwidths with Excellent Crosstalk and Isolation
- 10 W Maximum Switching Power
- Can be Mixed and Matched to Create Application Specific Configurations
- Ideal for General Purpose RF Switching with High Signal Fidelity
- No Unterminated Stub Effects