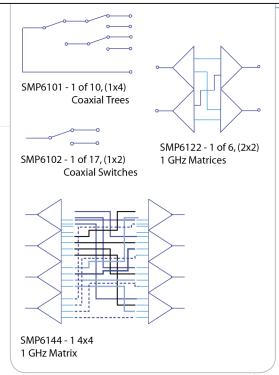


SMP6101/6102/6122/6144



Features

SMP6101 10 1x4 Coaxial Trees >1.3 GHz SMP6102 17 1x2 Coaxial Switches >1.3 GHz SMP6122 6 2x2 Matrices >1 GHz

SMP6144 1 4x4 Matrix >1 GHz

Highest Density RF Switches & Matrices

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 and Total System Bandwidths > 1 GHz

No Unterminated Stub Effects

Excellent Crosstalk and Isolation

Coaxial Switches > 1.3 GHz

N verview

The SMP6100 series of high-density RF switch modules is designed for high-fidelity RF switching applications up to 1.3 GHz. Excellent crosstalk and isolation is maintained by using RF relays with bandwidths in excess of 2.0 GHz, along with short low-loss coaxial runs from the connector directly to the relays. All modules are also configured to avoid any unterminated stub effects, improving overall signal integrity and allowing for high frequency matrix designs and larger multiplexer configurations while maintaining bandwidth and VSWR. The front panel contains two high-density, 26-pin coaxial connectors designed for high reliability and superior signal integrity.

The SMP6100 Series is part of the SMIP/I[™] family and can be mixed and matched with other SMIP/I[™] 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):

SMP6101/6102 SMP6144/6122

> 1.3 GHz >1.0 GHz

Insertion Loss:

 SMP6101/6102
 SMP6144/6122

 100 MHz:
 <0.2 dB</td>
 <0.4 dB</td>

 500 MHz:
 <0.5 dB</td>
 <1.0 dB</td>

 1 GHz:
 <2.0 B</td>
 <3.0 dB</td>

Crosstalk:

10 MHz: <-70 dB <-70 dB 100 MHz: <-65 dB <-65 dB 500 MHz: <-60 dB <-60 dB 1.3 GHz <-55 dB <-55 dB

Isolation:

10 MHz: <-80 dB <-80 dB 100 MHz: <-70 dB <-70 dB 500 MHz: <-65 dB <-65 dB 1.3 GHz <-55 dB <-55 dB

VSWR:

100 MHz: <1.2:1 <1.2:1 1.3 GHz: <1.5:1 <1.5:1

Rated Switch Operations:

Mechanical: 5×10^6

Electrical: 1 x 10⁵ at full load

Switching Time: <5 ms