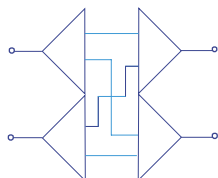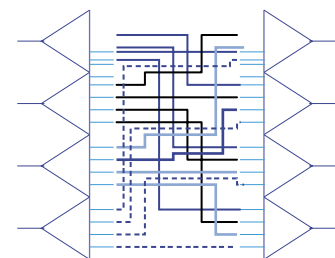SMP6101 - 1 of 10, (1x4)
Coaxial Trees

SMP6102 - 1 of 17, (1x2)
Coaxial Switches

SMP6122 - 1 of 6, (2x2)
1 GHz Matrices

SMP6144 - 1 4x4
1 GHz Matrix

Coaxial Switches >1.3 GHz

Overview

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//™ 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):

	SMP6101/6102	SMP6144/6122
	> 1.3 GHz	>1.0 GHz

Insertion Loss:

	SMP6101/6102	SMP6144/6122
100 MHz:	<0.2 dB	<0.4 dB
500 MHz:	<0.5 dB	<1.0 dB
1 GHz:	<2.0 B	<3.0 dB

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:	1×10^5 at full load

Switching Time:	<5 ms

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