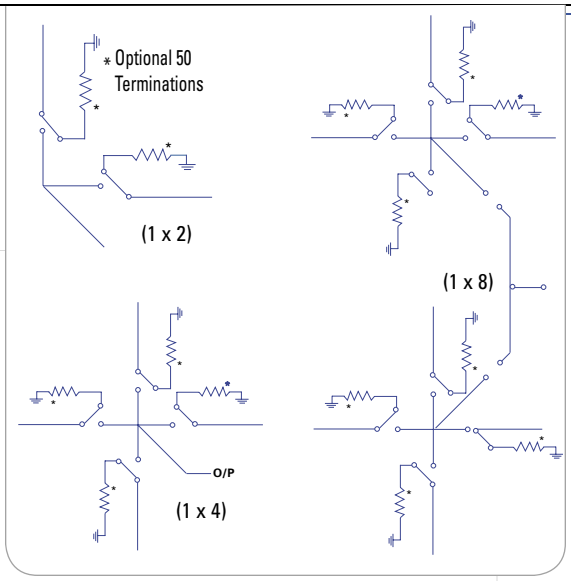
SMP6004/6005



500 MHz Coaxial Stars

Overview

The SMP6004 and SMP6005 are RF switch modules designed as star configurations. A star switch allows any channel to be connected to any other channel. This configuration approach also allows for the creation of simple matrices (i.e. 4 x 1 x 4).

For applications that require unswitched signal sources to be terminated into 50 Ω, optional 1/2 watt 50 Ω terminations can be provided. Both modules are configured to avoid any unterminated stub effects, and utilize high bandwidth RF relays.

The SMP6004 and SMP6005 are part of the SMIP//™ family and can be mixed and matched with other SMIP//™ modules to configure high-density switching systems.

Features

SMP6004 3 1x8 and 3 1x2 Coaxial Stars
SMP6005 8 1x4 Coaxial Stars

- Greater than 500 MHz Bandwidths with Excellent Crosstalk and Isolation
- 10 W Maximum Switching Power
- Star Configurations Allow any Channel to be Connected to any other Channel
- Ideal for General Purpose RF Switching with High Signal Fidelity
- Optional 50 Ω Terminations (1/2 Watt)

Specifications

Maximum Switching Voltage:	100 V
Maximum Switching Current:	0.5 A
Maximum Switching Power:	10 W (1/2 watt into 50 Ω terminations)
Path Resistance:	<1 Ω
Bandwidth (-3 dB):	>500 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
500 MHz	<1.5:1
Rated Switch Operations:	
Mechanical:	5×10^6
Electrical:	1×10^5 at full load
Switching Time:	<5 ms