SMP6301



Four Self-terminated (1x4) Coaxial Trees > 1.8 GHz

N verview

The SMP6301 is designed with SMB male connectors for applications that require RF signal switching greater than 1.8 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 larger high-frequency multiplexer configurations while maintaining bandwidth and VSWR.

For applications that require self-termination of unused channels, a kit of four 50 Ω terminations is provided as an option. A total of four of these kits (option 79) would be required to self-terminate the complete card.

The SMP6301 is part of the SMIP/ITM family and can be mixed and matched with other SMIP/ITM modules to configure highdensity switching systems. For example, approximately 96 50 Ω coaxial switch points can be switched within a double slot VXI card (SMP1200), providing exceptional density without degrading signal integrity.

Specifications

Maximum Switching Vo	Itage: 100 V
Maximum Switching Cu	irrent: 0.5 A
Maximum Switching Po	wer : 10 W
Bandwidth (-3 dB):	>1.8 GHz
Insertion Loss: 100 MHz: 500 MHz	<0.5 dB <1.0 dB
Crosstalk: 10 MHz: 100 MHz: 500 MHz:	<-100 dB <-90 dB <-65 dB
Isolation: 10 MHz: 100 MHz: 500 MHz:	<-80 dB <-70 dB <-65 dB
VSWR: 100 MHz: 500 MHz: 750 MHz: Rated Switch Operation Mechanical: Electrical:	<1.15:1 <1.5:1 <2.0:1 s: 5 x 10 ⁶ 1 x 10 ⁵ at full load
Switching Time:	<5 ms





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SMP6	301	4 1x4 Self-Terminated
Option 79		50Ω Terminations (factory installed)
	50 Ω On-bo Option	ard Self-termination
	SMB Male Connectors for High Performance	
	Greater than 1.8 GHz Bandwidths with Excellent Crosstalk and Isolation	
	10 W Maximum Switching Power	
	Can be Mixed and Matched to Create Application- specific Configurations	
	Ideal for Ge RF Switchir Fidelity	eneral Purpose ng with High Signal
	No Untermi	nated Stub Effects