



SM6306

1 X 4 (6) COAXIAL SWITCH UP TO 3 GHZ

The SM6306 is a high-density RF switch module designed for high-fidelity RF switching applications that can work up to 3 GHz. These modules consist of high density 6 channel 1 x 4 coaxial tree module designed for general purpose RF switching. Front panel connectivity is available in SMB type to integrate seamlessly into new or existing test systems.

All relays used in this module are independently controllable and exhibits excellent crosstalk and isolation. These modules are configured to avoid any unterminated stub effects and hence improving overall signal integrity.

FEATURES:

- Wide bandwidth up to 3 GHz
- High density RF switches
- 220VDC, 250VAC Max switching voltage
- 50W Max RF power
- Excellent Crosstalk and Isolation
- No Unterminated Stub Effects

Specifications

Channel Count	6 (1 x 4)
Relay Type	Non-Latching Electromechanical, fail-safe
Connector Type	SMB (female)
Max. Switching Voltage	250VAC RMS, 220 VDC
Max. Switching Current	1.5A
Max. Switching Power	60W DC, 62.5VA / 50W (2.5GHz)
Switching Time	3ms typical, 5ms Max.
Path Resistance	< 0.5Ω
Insulation Resistance	> 10 ⁹ Ω
Maximum Thermal Offset	< 10μV
Propagation Delay	< 3ns
Mechanical Endurance	10 ⁷ Operations with no load, 10 ⁵ Operations with Max. rated Load
Insulation Resistance	>10 ⁸ Ω; < (40°C, 65% RH)
Dimensions	VXI C-size, 1-slot
Weight	< 3 lbs (1.4 kg)

Insertion Loss

Frequency	Insertion Loss
< 0.1 GHz	< 0.4 dB
< 0.5 GHz	< 0.9 dB
< 1.5 GHz	< 1.5 dB
< 3.0 GHz	< 3.0 dB

VSWR

Frequency	VSWR
< 0.1 GHz	< 1.15
< 0.5 GHz	< 1.28
< 1.5 GHz	< 1.40
< 3.0 GHz	< 1.80

Crosstalk

Frequency	Crosstalk
< 0.1 GHz	< -80 dB
< 0.5 GHz	< -65 dB
< 1.5 GHz	< -50 dB
< 3.0 GHz	< -30 dB

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