

1x31 Coaxial Tree >750 MHz

Overview

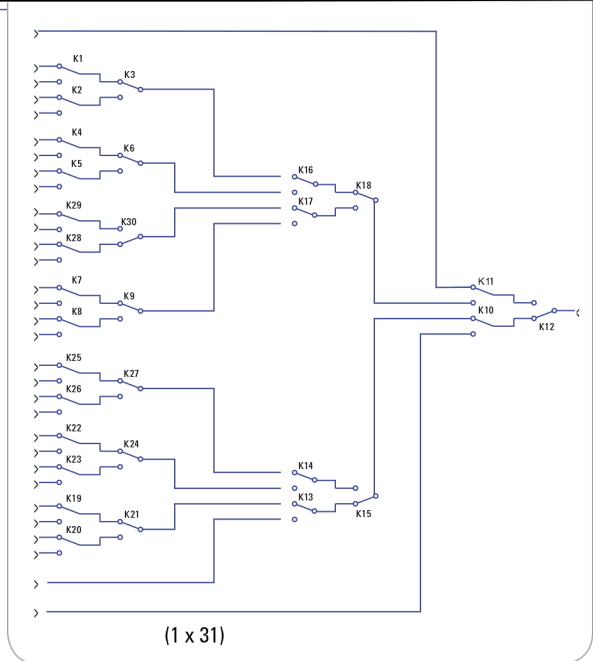
The SMP6103 is a very high-density coaxial tree, and is designed for high-fidelity RF switching applications up to 750 MHz. Excellent crosstalk and isolation is maintained by using RF relays with bandwidths in excess of 2.0 GHz, along with short low-loss coaxial runs from the connector directly to the 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. The front panel contains two high-density, 26-pin coaxial connectors designed for high reliability and superior signal integrity.

The SMP6103 is part of the SMIP//™ family and can be mixed and matched with other SMIP//™ modules to configure high-density switching systems. For example, approximately 180 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 Voltage: | 100 V |
| Maximum Switching Current: | 0.5 A |
| Maximum Switching Power: | 10 W |
| Bandwidth (-3 dB): | >750 MHz |
| Insertion Loss: | |
| 100 MHz: | <0.7 dB |
| 500 MHz: | <2.0 dB |
| Crosstalk: | |
| 10 MHz: | <-70 dB |
| 100 MHz: | <-65 dB |
| 500 MHz: | <-60 dB |
| Isolation: | |
| 10 MHz: | <-90 dB |
| 100 MHz: | <-70 dB |
| 500 MHz: | <-50 dB |
| VSWR: | |
| 100 MHz: | <1.1:1 |
| 500 MHz: | <1.8:1 |
| 750 MHz: | <2.0:1 |
| Rated Switch Operations: | |
| Mechanical: | 5 x 10 ⁶ |
| Electrical: | 1 x 10 ⁵ at full load |
| Switching Time: | <5 ms |



Features

SMP6103 1x31 Coaxial Tree >750 MHz

High-density RF Tree (1x31)

10 W Maximum Switching Power

Can be Mixed and Matched with Combiners/Splitters and other SMIP//™ Modules to Create Application specific Configurations

No Unterminated Stub Effects

Excellent Crosstalk and Isolation Specifications

Switching