7711

$2GHz 50\Omega$ RF Module

The Model 7711 plug-in module provides an eco-

systems. The Model

7711 offers dual 1×4

configurations and

can interface with a

wide range of exter-

nal AC instruments,

scopes, pulse genera-

tors, and signal analy-

sis tools. One channel

bank is always closed

to the corresponding

connections are easily

OUT connector. All

accessible from the

rear panel.

in each multiplex

including oscillo-

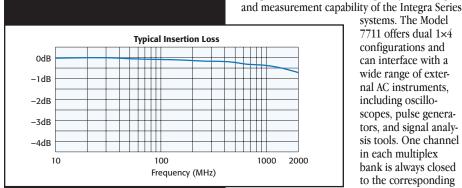
nomical, wideband signal routing solution that

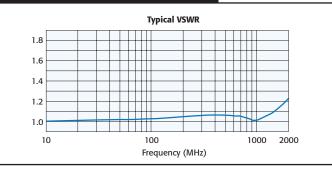
complements the DC/low frequency switching

- Signal routing performance to
- Switches up to 60VDC
- **Rear panel SMA connections**
- **Onboard switch closure counter**
- Onboard S parameter storage

Ordering Information

7711 2GHz 50Ω RF Module





AC PERFORMANCE (END OF LIFE)

For $Z_{load} = Z_{source} = 50\Omega$

| | <100 MHz | 500 MHz | 1 GHz | 1.5 GHz | 2 GHz |
|-----------------|----------|---------|---------|---------|---------|
| Insertion Loss | <0.4 dB | <0.6 dB | <1.0 dB | <1.2 dB | <2.0 dB |
| Max. | | | | | |
| VSWR Max. | <1.1 | <1.2 | <1.2 | <1.3 | <1.72 |
| Ch-Ch Crosstalk | 1 −85 dB | -65 dB | -55 dB | -45 dB | -35 dB |
| Max. | | | | | |

- Specification assumes 50Ω termination.
- ²Add 0.1VSWR after 5×10⁵ closures (no load).

INPUTS (Channels 1-8)

MAXIMUM SIGNAL LEVEL: Any channel to any channel or chassis (1-8): 30Vrms (42V peak for AC waveforms) or

MAXIMUM POWER: 20W per module, 10W per channel (refer to 7711/7712 Manual PA-818 for measurement consider-

SAFETY: Conforms to European Union Directive 73/23/EEC

EMC: Conforms with European Union Directive 89/336/EEC; EN61326-1.

ISOLATION: Multiplexer to Multiplexer: >1G Ω . Center to Shield: $>1G\Omega$. <25pF. Channel to Channel: $>100M\Omega$.

CONTACT LIFE: 1×106 no load, 1×105 rated load (resistive load)

CONTACT POTENTIAL: <6uV

CONTACT RESISTANCE: $<0.5\Omega$ (initial), $<1\Omega$ (end of life).

RISE TIME: <300ps (guaranteed by design).

SIGNAL DELAY: <3ns.

GENERAL

RELAY TYPE: High frequency electromechanical.

CONTACT CONFIGURATION: Dual 1×4 multiplexer, single pole four throw, Channels 1 and 5 are normally closed.

NOTE: One channel in each multiplex bank is always closed to the corresponding OUT connector.

CLOSE CHANNEL: ROUTe:CLOSe allows a single channel in a multiplex bank to be closed. ROUTe:MULTiple:CLOSe allows two channels (one in each bank) to be closed at one time.

OPEN CHANNEL: ROUTe: OPEN: ALL closes CH1 and CH5 to OUT A and OUT B respectively.

ACTUATION TIME: <10ms.

FIRMWARE: Specified for Model 2700 rev. B04, 2701 rev. A01, and 2750 rev. A03 or higher.

CONNECTOR TYPE: Ten external rear panel SMA connectors. MATING TORQUE: 0.9 N·m (8 in-lb).

ENVIRONMENTAL

OPERATING ENVIRONMENT: Specified for 0°C to 50°C. Specified for 80% RH at 35°C.

STORAGE ENVIRONMENT: -25°C to 65°C.

WEIGHT: <0.5kg (1.1 lb).

ACCESSORIES AVAILABLE

| 71000000111007117110110 | | | | |
|-------------------------|---|--|--|--|
| 7051-2 | BNC Cable, male to male, 0.6m (2 ft.) | | | |
| 7051-5 | BNC Cable, male to male, 1.5m (5 ft.) | | | |
| 7051-10 | BNC Cable, male to male, 3.0m (10 ft.) | | | |
| 7711-BNC-SMA | Male SMA to female BNC Cables (5), 0.15m (0.5 ft) | | | |
| 7712-SMA-1 | SMA Cable, male to male, 1m (3.3 ft) | | | |
| 7712-SMA-N | Female SMA to Male N-Type Adapter | | | |
| S46-SMA-0.5 | SMA Cable, male to male, 0.15m (0.5 ft.) | | | |
| S46-SMA-1 | SMA Cable, male to male, 0.3m (1 ft.) | | | |

SERVICES AVAILABLE

1-year factory warranty extended to 3 years from date of shipment



