

7711 50W 2GHz Multiplexer Specifications

GENERAL

Relay Type: High Frequency Electromechanical

Contact Configuration: Dual 1x4 Multiplexer, single pole four throw, Channels 1 and 5 are normally closed.

Notes: 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 and Model 2750 rev. A03 or higher.

Connector Type: Ten External Rear Panel SMA connectors.

Mating Torque: 0.9 N•m (8 in-lb).

INPUTS (CHANNELS 1-8)

Maximum Signal Level: Any channel to any channel or chassis (1-8) 30Vrms (42V peak for AC waveforms) or 60VDC, 0.5A.

Maximum Power: 20W per module, 10W per channel.*

Safety: Conforms to European Union Directive 73/23/EEC EN61010-1, CAT I.

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

Isolation:

Multiplexer to Multiplexer: >1G Ω

Center to Shield: >1G Ω , <25pF

Channel to Channel: >100M Ω

Contact Life: 1x10⁶ No Load, 1x10⁵ Rated Load (resistive load)

Contact Potential: <6 μ V

Contact Resistance: <0.5 Ω (Initial), <1 Ω (End Of Life)

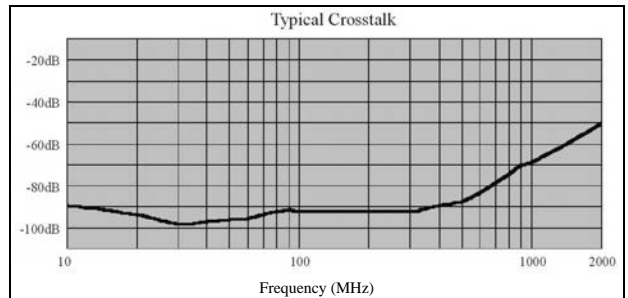
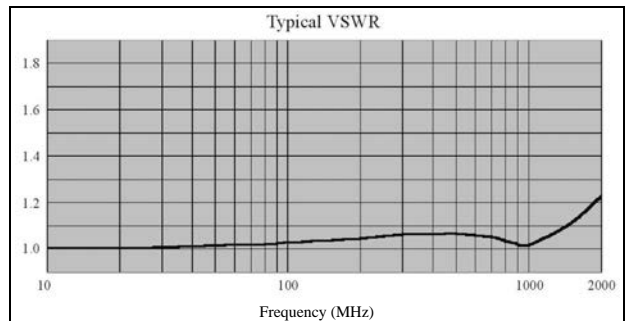
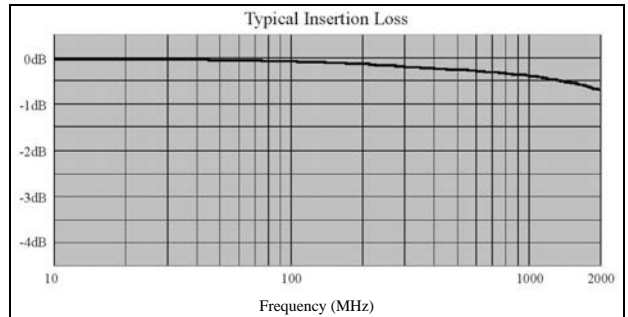
Rise Time: <300ps (Guaranteed by design)

Signal Delay: <3ns

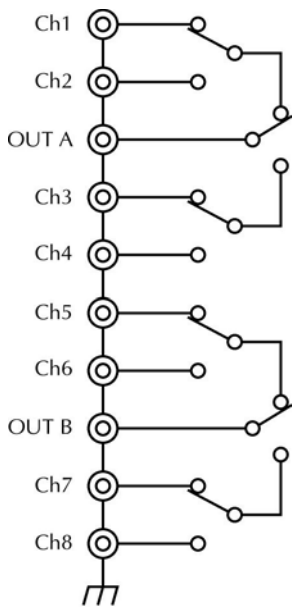
MODEL ACCESSORIES AVAILABLE

7711-SMA-BNC	Male SMA to Female BNC Cables (Five, 0.15m (0.5ft) cables)
7051-2	BNC cable, male to male, 0.6m (2ft.)
7051-5	BNC cable, male to male, 1.5m (5ft.)
7051-10	BNC cable, male to male, 3.0m (10ft.)
7712-SMA-1	SMA cable, male to male, 1.0m (3.3 ft.)
7712-SMA-N	Female SMA to Male N-Type Adapter
S46-SMA-1	SMA cable, male to male, 0.3m (1 ft.)
S46-SMA-0.5	SMA cable, male to male, 0.15m (0.5 ft.)

* Refer to 7711/7712 User's Guide (PA-818) for measurement considerations.



7711 50W 2GHz Multiplexer Specifications



AC Performance: (Includes end of life)

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

	<100MHz	500MHz	1GHz	1.5GHz	2GHz
Insertion Loss MAX	0.4dB	0.6dB	1.0dB	1.2dB	2.0dB
VSWR MAX	1.1	1.2	1.2	1.3	1.7
Ch-Ch Cross-talk¹ MAX	-85dB	-65dB	-55dB	-45dB	-35dB

¹ Specification assumes 50 Ω termination.

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: <0.50Kg (1.1 lb.)

7712 50W 3.5GHz Multiplexer

GENERAL

Relay Type: High Frequency Electromechanical

Contact Configuration: Dual 1x4 Multiplexer, single pole four throw, Channels 1 and 5 are normally closed

Notes: 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 and Model 2750 rev. A03 or higher.

Connector Type: Ten External Rear Panel SMA connectors

Mating Torque: 0.9 N•m (8 in-lb).

INPUTS (CHANNELS 1-8)

Maximum Signal Level: Any channel to any channel or chassis (1-8)
30Vrms (42V peak for AC waveforms) or
42VDC, 0.5A.

Maximum Power: 20W per module. 10W per channel.*

Safety: Conforms to European Union Directive 73/23/EEC
EN61010-1, CAT I.

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

Isolation:

Multiplexer to Multiplexer: >1G Ω

Center to Shield: >1G Ω , <20pF

Channel to Channel: >100M Ω

Contact Life: 5x10⁶ No Load, 1x10⁵ Rated Load (Resistive load)

Contact Potential: <12 μ V

Contact Resistance: <0.5 Ω (Initial), <1 Ω (End Of Life)

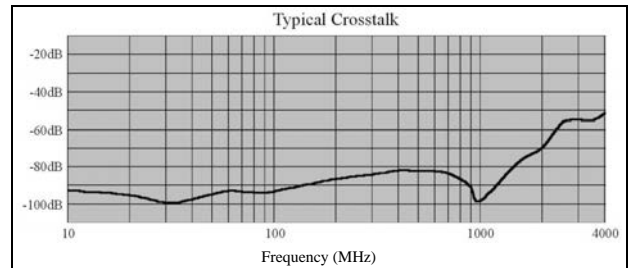
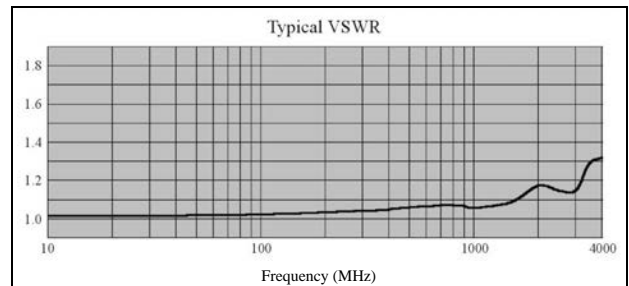
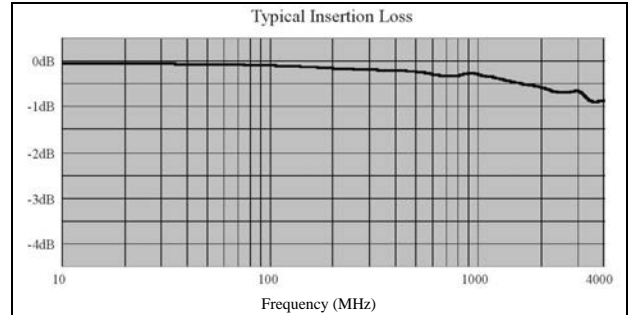
Rise Time: <200ps (Guaranteed by design)

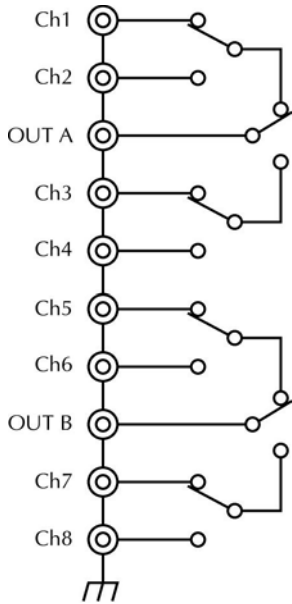
Signal Delay: <1.5ns

MODEL ACCESSORIES AVAILABLE

7712-SMA-1	SMA cable, male to male, 1m (3.3 ft)
7712-SMA-N	Female SMA to Male N-Type Adapter
S46-SMA-1	SMA cable, male to male, 0.3m (1ft)
S46-SMA-0.5	SMA cable, male to male, 0.15m (0.5 ft.)

* Refer to 7711/7712 User's Guide (PA-818) for measurement considerations.





AC Performance: (Includes end of life)

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

	<500MHz	1GHz	2.4GHz	3.5GHz
Insertion Loss MAX	0.5dB	0.65dB	1.1dB	1.3dB
VSWR MAX	1.15	1.2	1.45	1.45
Ch-Ch Crosstalk¹ MAX	-75dB	-70dB	-50dB	-45dB

¹ Specification assumes 50Ω termination.

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: <.50Kg (1.1 lb.)