

## Model 59

### High Power, N or SMK Connectors

### Conduction Cooled

DC to 2.5 GHz  
100 Watts



### Features

- /// Precision Connectors with high temperature support beads.
- /// Designed to meet environmental requirements of MIL-DTL-3933.
- /// 10 Kilowatts peak, Conductive Cooled
- /// Wireless Applications - Optimized for use in the communications bands.

### Specifications

NOMINAL IMPEDANCE: 50  $\Omega$

FREQUENCY RANGE: dc to 2.5 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY:

Nominal ATTN (dB)	Deviation (dB)	
	DC-1 GHz	1-2.5 GHz
3, 6, 10, 20, 30, 40	$\pm 0.70$	$\pm 1.00$

#### MAXIMUM SWR:

Frequency (GHz)	SWR
DC - 2.5	1.15

**POWER RATING** 100 watts **average (unidirectional)**, 10 kilowatts **peak** (5  $\mu$ sec pulse width; 0.5 % duty cycle) with case temperature held within **100 °C maximum** with appropriate conductive heat sink. Note: 3 dB model can handle 200 Watts **average (unidirectional)**. Maximum power rating into output port is 10 % of the average power rating.

**POWER COEFFICIENT:** <0.00015 dB/dB/watt

**TEMPERATURE COEFFICIENT:** <0.0004 dB/dB/°C

**TEMPERATURE RANGE:** -55°C to 100°C (case temp)

**TEST DATA:** Swept data plots of attenuation and SWR from 50 MHz to 2.5 GHz.

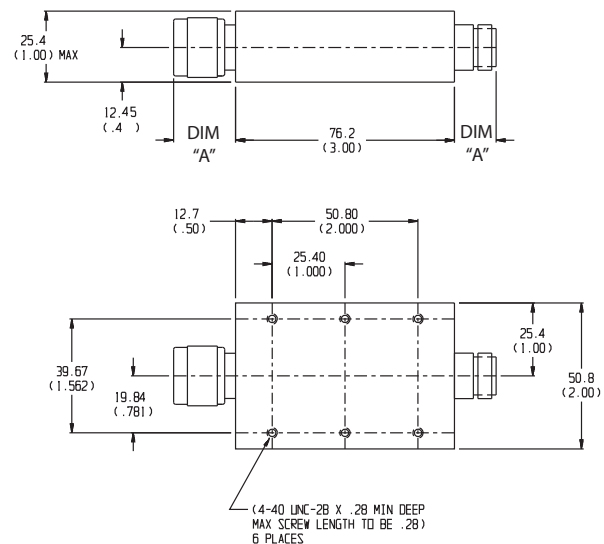
**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors. SMK (2.92mm) connectors mate with SMA, 3.5mm and other 2.92mm connectors.

Options	Description	Options	Description
1	SMK Female	3	Type N Female
2	SMK Male	4	Type N Male

**CONSTRUCTION:** Aluminum alloy body, stainless steel connectors; gold plated beryllium copper contacts.

**WEIGHT:** 300 g (10.6 oz.) maximum

#### PHYSICAL DIMENSIONS:



Connector	DIM A	Connector	DIM A
N Male	22.9 (0.90)	2.92mm Male	14.0 (0.55)
N Female	15.0 (0.59)	2.92mm Female	12.7 (0.50)

NOTE: All dimensions are given in mm (inches) and tolerances are  $\pm 0.5$  (0.02) &  $\pm 0.25$  (0.01), unless otherwise specified.

#### MODEL NUMBER DESCRIPTION:

Example:

