

## Models FD7003, F7003 Model 7006-1 Model FD7006 Inside DC Block

9 kHz to 18.0 GHz  
9 kHz to 20.0 GHz  
9 kHz to 26.5 GHz

*Choice of Type N or SMA Connectors*



### Features

Inside DC Block contains capacitance in-series with the center conductor to prevent the flow of dc current, while permitting RF power to flow without interruption.

- /// **Low SWR** - Maximum SWR remains low through full frequency and power range.
- /// **Rugged Construction** - semi-precision Type N and SMA stainless steel connectors. Molded captive inner contact/bead assembly provides controlled and stable interface dimensions.
- /// **Model 7003 useable to 22 GHz.**

### Specifications

**NOMINAL IMPEDANCE:** 50  $\Omega$

**FREQUENCY RANGE:**

|                |                   |
|----------------|-------------------|
| FD7003, F7003: | 9 kHz to 18.0 GHz |
| 7006-1:        | 9 kHz to 20 GHz   |
| FD7006:        | 9 kHz to 26.5 GHz |

#### MAXIMUM SWR:

| Frequency (GHz)  | FD7003<br>F7003* | FD7006* | 7006-1 |
|------------------|------------------|---------|--------|
| 9 - 10 kHz       | 1.50             | 1.45    | 1.50   |
| 11 - 20 kHz      | 1.35             | 1.35    | 1.50   |
| 20 kHz - 18      | 1.35             | 1.35    | 1.30   |
| 18 - 26.5 (20.0) | ---              | 1.70    | 1.20   |

\* Source & load SWR of test system is <1.2.

**INSERTION LOSS:** Model FD7003, F7003: 0.9 dB max.  
Model 7006-1, FD7006: 0.8 dB max.\*

**VOLTAGE RATING:** +50 Vdc maximum

**POWER RATING:** 2 Watts (average), 100 Watts (peak)

**TEMPERATURE RANGE:** -20 °C to +80 °C (operating)  
-20 °C to +100 °C (storage)

**TEST DATA:** Test data is available at additional cost.

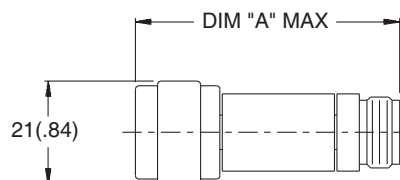
**CONNECTORS:** Type N (Model 7003) or SMA (Model 7006) connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors. Standard unit has one male and one female connector. Add Prefix F for double female connectors for the 7003 series only.

**CONSTRUCTION:** Stainless steel body and connectors; gold plated beryllium copper contacts

**WEIGHT:** FD7003, F7003: Net: 67 g (2.4 oz)  
Model FD7006, 7006-1: Net: 4 g (0.14 oz)

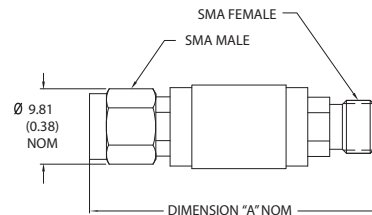
#### PHYSICAL DIMENSIONS:

**Models FD7003, F7003:**



| Model # | DIM A        | Connector Type |
|---------|--------------|----------------|
| FD7003  | 54.61 (2.15) | male-female    |
| F7003   | 50.80 (2.00) | female-female  |

**Models FD7006, 7006-1:**



| Model # | DIM A        | Connector Type |
|---------|--------------|----------------|
| FD7006  | 37.34 (1.47) | male-female    |
| 7006-1  | 37.34 (1.47) | male-female    |

NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.

#### SCHEMATIC DIAGRAM:

