

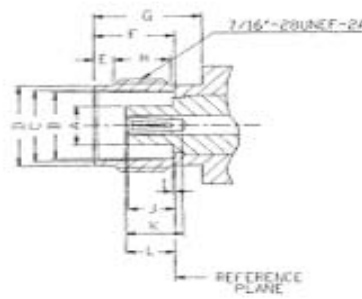
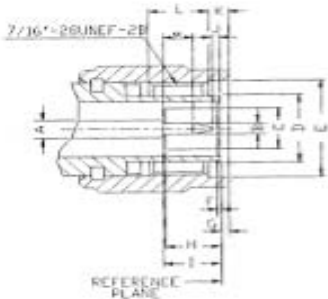


TNC series connectors are designed as a threaded version of the BNC. TNC are miniature, threaded weatherproof units with constant 50 Ω impedance and they operate from 0 - 11 GHz.

There are two types of TNC connectors: Standard and Reverse Polarity. Reverse polarity is a keying system accomplished with a reverse interface, and ensures that reverse polarity interface connectors do not mate with standard interface connectors. The 7/16"-28 thread coupling provides positive mating.

TNC connectors were initially developed for shock and high vibration environments and are widely used for data transmission, medical equipment, cellular mobile telephones, test equipment, microwave components and aerospace applications.

**• Interface Dimensions**



**PLUG**

Letter	Millimeters(Inches)	
	Minimum	Maximum
A	2.06(.081)	2.21(.087)
B	1.32(.052)	1.37(.054)
C	4.83(.190)	—
D	SLOTTED AND FLARED TO MEET ELECTRICAL AND MECHANICAL REQUIREMENTS	
E	11.18(.440)	—
F	0.15(.006)	—
G	—	1.98(.078)
H	5.28(.208)	5.79(.228)
I	5.33(.210)	—
J	0.08(.003)	1.02(.040)
K	1.60(.063)	—
L	3.96(.156)	—
M	1.98(.078)	—

**SOCKET**

Letter	Millimeters(Inches)	
	Minimum	Maximum
A	—	4.72(.186)
B	8.10(.319)	8.15(.321)
C	8.31(.327)	8.46(.333)
D	9.60(.378)	9.68(.381)
E	1.73(.068)	2.24(.088)
F	8.31(.327)	8.51(.335)
G	10.52(.414)	—
H	4.75(.187)	—
I	—	0.15(.006)
J	4.72(.186)	5.23(.206)
K	4.95(.195)	—
L	4.78(.188)	5.28(.208)

## Electrical:

Impedance	50 ohm
Frequency Range	0 to 11.0 GHz
VSWR	Straight : 1.3 max ; Right Angle : 1.35 max
Working Voltage	500 volts rms max at sea level
Dielectric Withstanding Voltage	1,500 volts rms max at sea level
Contact Resistance	center contact=1.5 Milliohms max outer contact=1.0 Milliohms max
Insertion Loss	0.2 dB max @ 3 GHz
Insulation Resistance	5,000 Megohms min

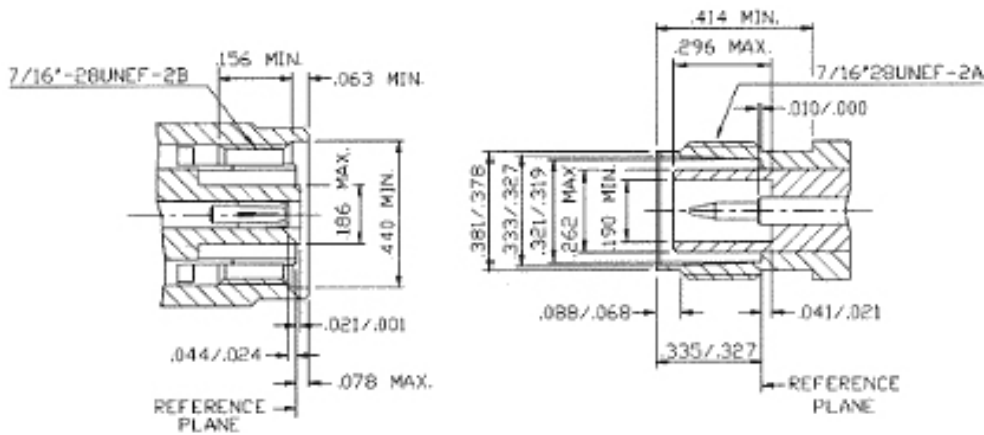
## Mechanical & Environmental:

Mating	7/16"-28 threaded coupling
Cable Retention	HDF200/400 →40 lbs min
Durability	500 matings
Coupling Nut Retention	100 lbs min
Temperature Range	-65°C to 165°C
Vibration	MIL-STD-202 Method 204 Test Cond. B.
Salt Spray	MIL-STD-202 Method 101 Test Cond. B.
Thermal shock	MIL-STD-202 Method 107 Test Cond. B.

## Materials / Finish:

	Material	Plating
Connector Body	Brass	Nickel or Silver
Center Contact	Male: Brass Female: Brass, Phosphor Bronze or Beryllium Copper	Gold Gold
Insulation	Teflon or Delrin	None
Gasket	Silicone Rubber, Rubber	None
Crimp Ferule	Annealed Copper	Same as Body

## Reverse Polarity TNC :



## Electrical :

Impedance	50 ohm
Frequency Range	0-11GHz
VSWR	1.3max (Straight); 1.35 max (Right Angle)
Voltage Rating	500 volts rms max
Dielectric Withstanding Voltage	1,500 volts rms
Insertion Loss	0.2 dB max @ 3 GHz;
Insulation Resistance	5,000 Megohms min

## Mechanical & Environmental:

Mating	7/16"-28 thread coupling
Durability	500 matings
Coupling Nut Retention	100 lbs Min
Cable Retention	Hdf200/400 →40 lbs min
Thermal shock	-65°C to 165°C

## Materials / Finish:

	Material	Plating
Connector Body	Brass	Nickel or Gold
Center Contact	Male: Brass Female: Beryllium Copper	50 μ " gold over 100 μ " nickel
Insulation	Teflon	None
Gasket	Silicone Rubber, Rubber	None
Crimp Ferule	Annealed Copper	Same as Body