

# Reverse Polarity Connectors

## SMA, BNC, TNC

Reverse polarity connectors are designed to meet FCC Part 15 requirements and are ideal for any application which requires a reliable non-standard interface connection. The reverse polarity design prevents damage and will not mate with standard connectors if accidentally connected. SMA, BNC, and TNC designs are all available.

### Reverse Polarity SMA:

#### Electrical:

Impedance	50 ohm
Frequency Range	0 to 18.0 GHz • for flexible cable $f_{max}$ operation frequency of cable per MIL-C-17
VSWR - Flexible Cable	• 1.15+0.01 X f GHz max (straight) • 1.18+0.02 X f GHz max (right angle)
Voltage Rating	375 volts rms
Dielectric Withstanding Voltage	1000 volts rms
Insertion Loss	.04 dB maximum X\sqrt{f} GHz (straight); .06 dB maximum X\sqrt{T} GHz (right angle)
Insulation Resistance	5,000 Megohms min

#### Mechanical & Environmental

Mating	1/4"-36 threaded coupling
Durability	500 matings
Coupling Nut Retention	Min 60 lbs
Cable Retention	RG-58,141,142,223→40 lbs mini RG-174,188,3169→20 lbs min
Temperature Range	- 65 °C to 165 °C

#### Material:

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

### Reverse Polarity BNC, TNC:

#### Electrical:

Impedance	BNC: 50 ohm	TNC : 50 ohm
Frequency Range	BNC: 0-4 GHz	TNC: 0-11 GHz
VSWR	1.3 max	
Voltage Rating	500 volts rms max	
Dielectric Withstanding Voltage	1,500 volts rms max	
Insertion Loss	.2 dB max @3 GHz	
Insulation Resistance	5,000 Megohms min	

#### Mechanical & Environmental

Mating	BNC: Two stud bayonet coupling	TNC:7/16"-28 thread coupling
Durability	500 matings	
Coupling Nut Retention	100 lbs min	
Cable Retention	RG-58,141,142,223→40 lbs mini RG-59,62A,210→40 lbs mini RG-174,188,3160→20 lbs min	
Temperature Range	-65° C to 85° C	

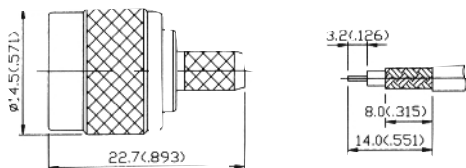
#### Material:

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

# REVERSE POLARITY TNC

## Flexible-Cable Crimp-Attachment

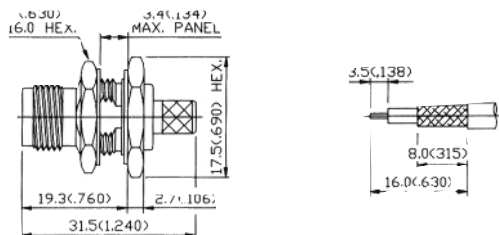
### Straight Plug Crimp



PART NO.	APPLICABLE CABLE RG/U	NOTES
32-01F-TGN	58,58A,141A	
32-01K-TGN	142B/U	

- Finish: gold plated center contact & nickel plated body
- Insulation Teflon

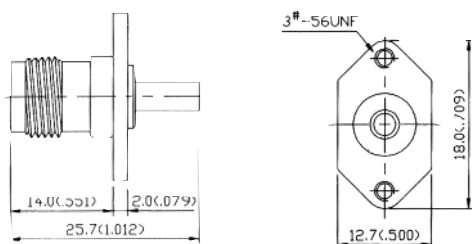
### Straight Bulkhead Jack Crimp



PART NO.	APPLICABLE CABLE RG/U	NOTES
32-02F-TGN	58,58A,141A	
32-02K-TGN	142B/U	

- Finish: gold plated center contact & nickel plated body
- Insulation Teflon

### 2-Hole Flange Jack Crimp

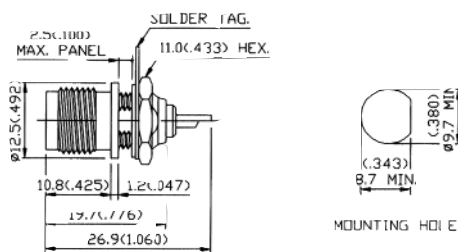


PART NO.	APPLICABLE CABLE RG/U	NOTES
32-06M-TGN	58,58A,141A	

- Finish: gold plated center contact & nickel plated body
- Insulation Teflon

## Bulkhead Receptacles

### Straight Bulkhead Jack Receptacle



#### PART NO: 32-04-TGN

- Finish: gold plated center contact & nickel body (see Notes)
- Insulation: Teflon

NOTES: 1. Gold plated body available. Change the part number suffix from TGN to TGG