

TNC

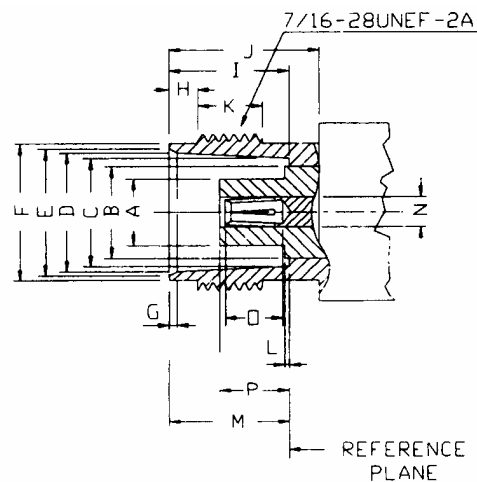
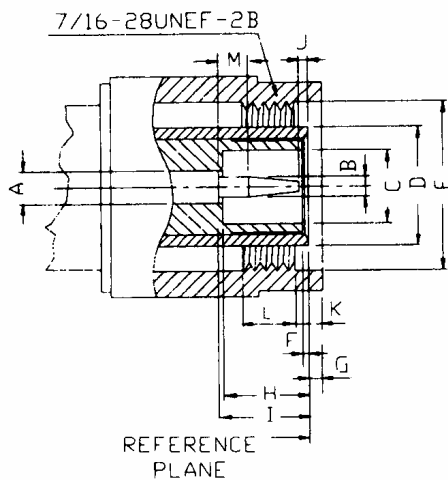
50 ohm 0 – 11 GHz

TNC series connectors are similar to BNC connectors except for their mating threaded coupling. Which is designed to provide low reflection from DC to 11 GHz under extreme environmental conditions, especially shock and vibration.

Cable terminations are available in crimp, clamp, twist-on and solder configurations. The 7/16" – 28 thread coupling provides positive mating.

Although their rugged design was initially developed for high vibration environments, TNC connectors are widely accepted and used for data transmission, medical equipment, cellular mobile telephones, test equipment, microwave components and aerospace application.

INTERFACE DIMENSIONS:



PLUG		
Letter	Millimeters (Inches)	
	Minimum	Maximum
A	2.06 (.081)	2.21 (.087)
B	1.30 (.052)	1.37 (.054)
C	4.83 (.190)	-
D	-	8.08 (.318)
E	11.18 (.440)	-
F	0.15 (.006)	-
G	-	1.98 (.078)
H	5.28 (.208)	5.79 (.228)
I	5.33 (.210)	5.84 (.230)
J	0.08 (.003)	1.02 (.040)
K	1.60 (.063)	-
L	3.96 (.156)	-
M	1.98 (.078)	-

JACK		
Letter	Millimeters (Inches)	
	Minimum	Maximum
A	-	4.72 (.186)
B	-	6.50 (.256)
C	8.10 (.319)	8.15 (.321)
D	8.31 (.327)	8.46 (.333)
E	8.79 (.346)	9.04 (.356)
F	9.60 (.378)	9.68 (.381)
G	0.38 (.015)	0.77 (.030)
H	1.73 (.068)	2.24 (.088)
I	8.31 (.327)	8.51 (.335)
J	10.52 (.414)	-
K	4.75 (.187)	-
L	-	0.15 (.006)
M	4.78 (.188)	5.28 (.208)
N	2.06 (.081)	2.21 (.087)
O	4.95 (.195)	-
P	4.72 (.186)	5.23 (.206)

Electrical:

Impedance	50 ohm	75 ohm
Frequency Range	0 to 11.0 GHz	0 to 1.0 GHz
VSWR	1.3 max	
Voltage Rating	500 volts rms max <ul style="list-style-type: none"> • RG- 58, 141, 142, 223 → 500 volts rms max • RG – 174, 188, 316 → 335 volts rms max 	
Dielectric Withstanding Voltage	1,500 volts rms max <ul style="list-style-type: none"> • RG- 58, 141, 142, 223 → 1,000 volts rms max • RG – 174, 188, 316 → 750 volts rms max 	
Contact Resistance	center contact = 1.5 Milliohms max outer contact = 0.2 Milliohms max	
RF Leakage	-55 dB min @ 3 GHz	
Insertion Loss	.2 dB max @ 3 GHz	
Insulation Resistance	5,000 Megohms min	

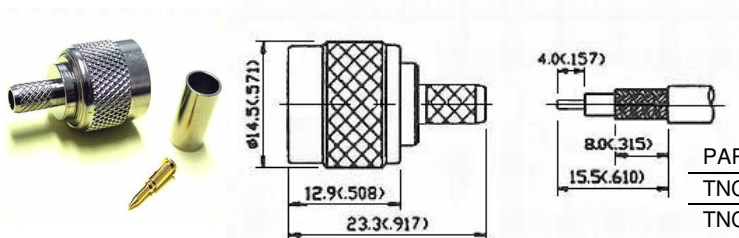
Mechanical & Environmental:

Mating	7/16" – 28 threaded coupling
Cable Retention	RG – 58, 141, 142, 223 → 40 lbs min RG – 59, 62A, 210 → 40 lbs min RG – 174, 188, 316 → 20 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.

Material:

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

Straight Plug Crimp (TNC)

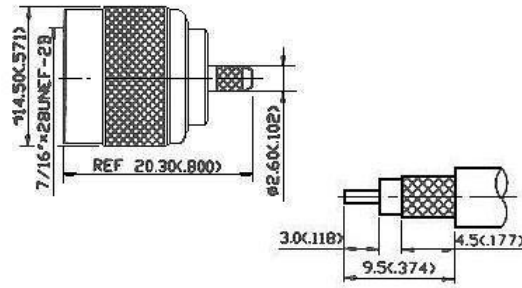


PART NO.	APPLICABLE CABLE RG/U
TNC-1101-DGN	58, 58A, 141A
TNC-1102-DGN	59, 62A, 210

Description:
Flexible Cable-Crimp Attachment
Captive contact

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin TPX

Straight Plug Crimp (TNC)



Description:

Flexible Cable-Crimp Attachment

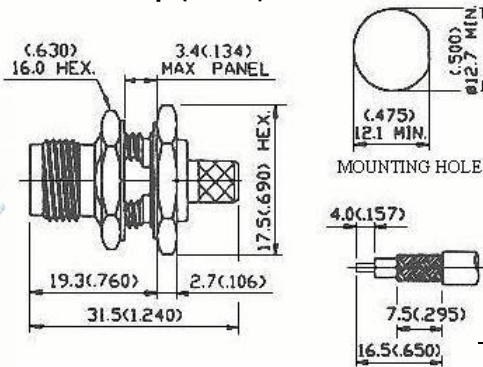
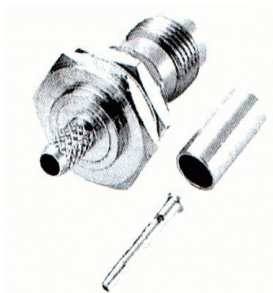
Finish: Gold plated center contact & nickel plated body

Insulation: Delrin TPX

Captive contact

PART NO.	APPLICABLE CABLE RG/U	NOTES
TNC-1103-TGN	174, 188A, 316	
TNC-1104-TGN	179B, 187A	75 ohms

Straight Bulkhead Jack Crimp (TNC)



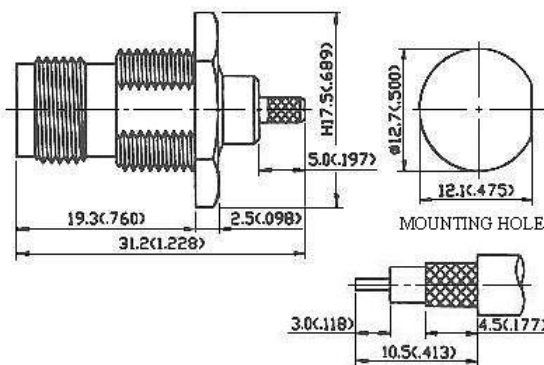
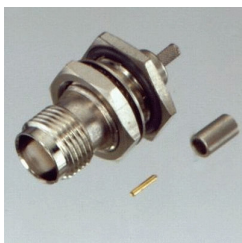
PART NO.	APPLICABLE CABLE RG/U
TNC-1205-DGN	58, 58A, 141A
TNC-1206-DGN	59, 62A, 210

Description:

Flexible Cable-Crimp Attachment
Captive contact

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin

Straight Bulkhead Jack Crimp (TNC)



Description:

Flexible Cable-Crimp Attachment

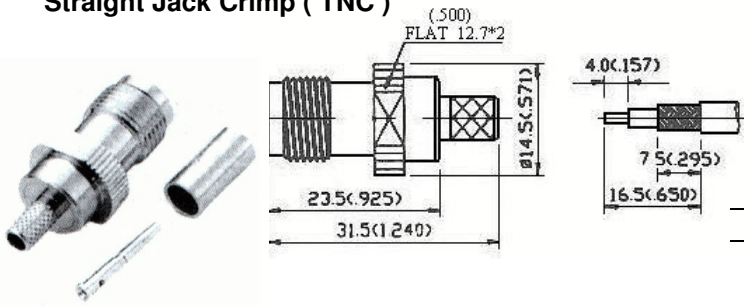
Finish: Gold plated center contact & nickel plated body

Insulation: Teflon

Captive contact

PART NO.	APPLICABLE CABLE RG/U	NOTES
TNC-1207-TGN	174, 188A, 316	
TNC-1208-TGN	179B, 187A	75 ohms

Straight Jack Crimp (TNC)

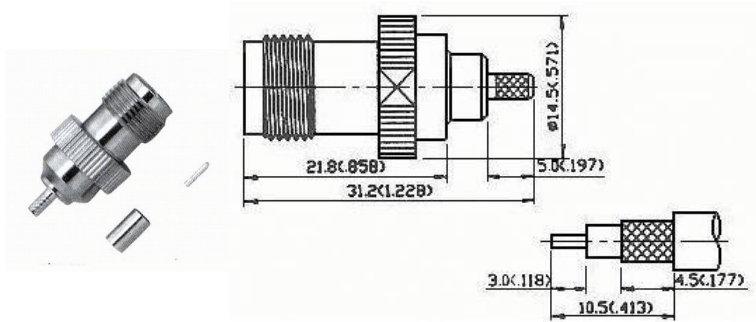


PART NO.	APPLICABLE CABLE RG/U
TNC-1205-DGN	58, 58A, 141A
TNC-1206-DGN	59, 62A, 210

Description:
Flexible Cable-Crimp Attachment
Captive contact

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin

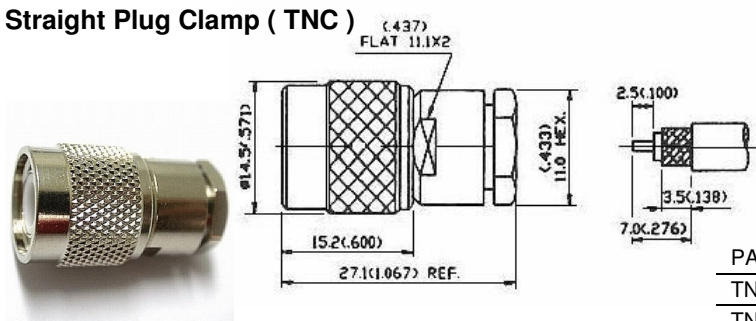
Straight Jack Crimp (TNC)



Description:
Flexible Cable-Crimp Attachment
Attachment
Finish: Gold plated center contact & nickel plated body
Insulation: Teflon
Captive contact

PART NO.	APPLICABLE CABLE RG/U	NOTES
TNC-1211-TGN	174, 188A, 316	
TNC-1212-TGN	179B, 187A	75 ohms

Straight Plug Clamp (TNC)

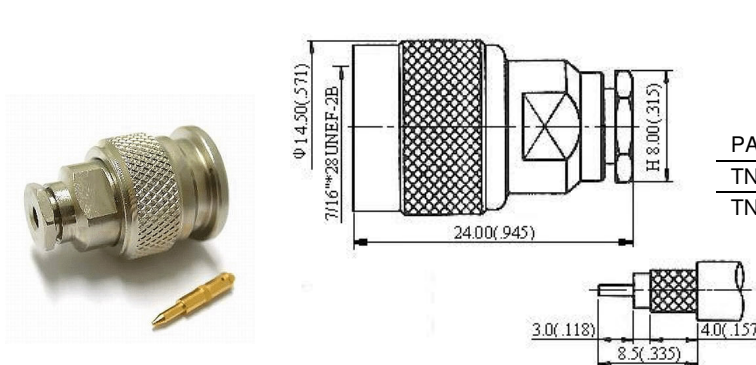


PART NO.	APPLICABLE CABLE RG/U
TNC-2101-DGN	58, 58A, 141A
TNC-2102-DGN	59, 62A, 210

Description:
Flexible Cable-Clamp Attachment

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin

Straight Plug Clamp (TNC)

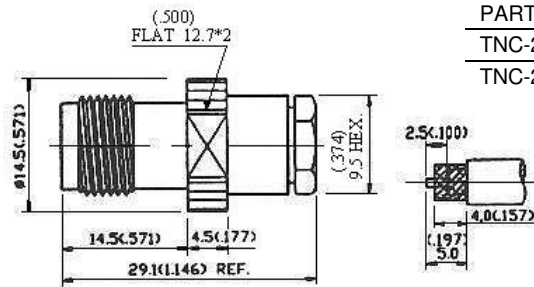
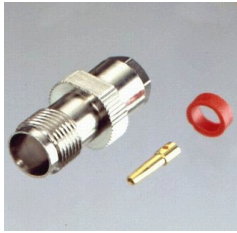


PART NO.	APPLICABLE CABLE RG/U
TNC-2103-TGN	58U, 55U, 223U
TNC-2104-TGN	174, 188, 316U

Description:
Flexible Cable-Clamp Attachment

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin

Straight Jack Clamp (TNC)

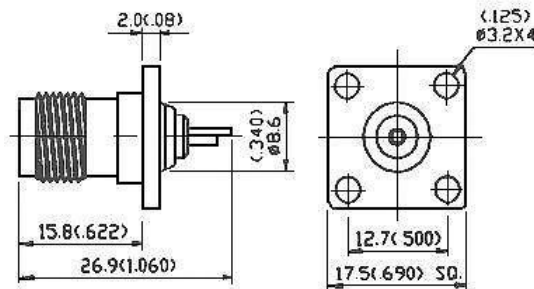


PART NO.	APPLICABLE CABLE RG/U
TNC-2205-DGN	58, 58A, 141A
TNC-2206-DGN	59, 62A, 210

Description:
Flexible Cable-Clamp Attachment

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin

Square Flange Jack Receptacle (TNC)

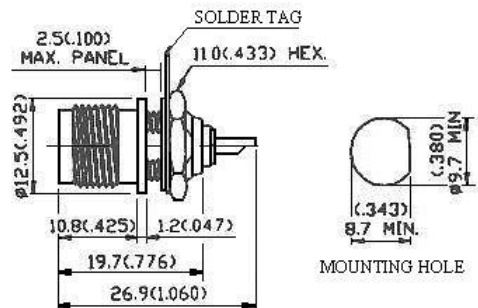


PART NO.
TNC-3201-DGN

Description:
Bulkhead, Panel, PCB Mount Receptacles

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin

Straight Bulkhead Jack Receptacle (TNC)

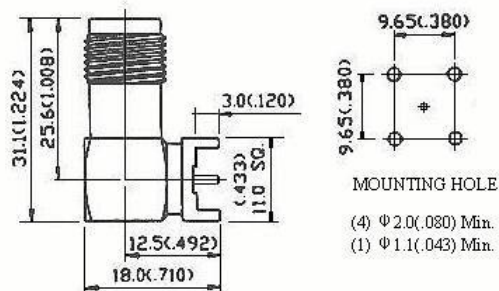


PART NO.
TNC-4201-DGN

Description:
Bulkhead, Panel, PCB Mount Receptacles

Finish: Gold plated center contact & nickel plated body
Insulation: Delrin

Right Angle PCB Mount Jack Receptacle (TNC)



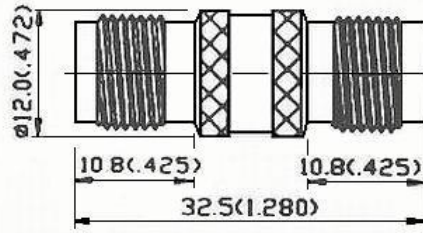
PART NO.
TNC-5201-TGN

Description:
Bulkhead, Panel, PCB Mount Receptacles

Finish: Gold plated center contact & nickel plated body
Insulation: Teflon

MOUNTING HOLE
(4) $\phi 2.0(.080)$ Min.
(1) $\phi 1.1(.043)$ Min.

Jack - Jack (TNC)

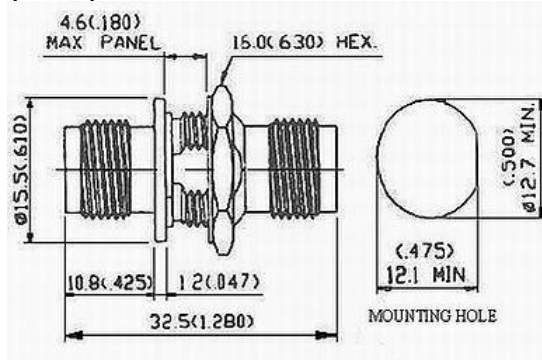


PART NO.
TNC-601-DGN

Description:
In-Series Adapters

Finish: Gold plated center contact & nickel plated body
Insulation: Derlin

Bulkhead Jack - Jack (TNC)

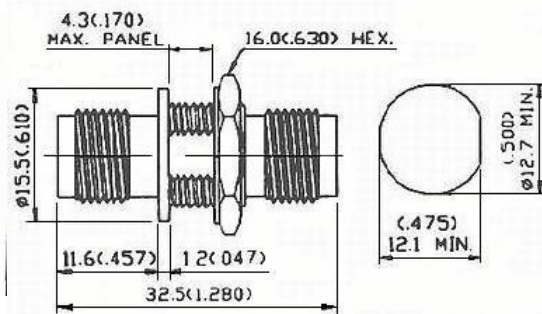


PART NO.
TNC-602-DGN

Description:
In-Series Adapters

Finish: Gold plated center contact & nickel plated body
Insulation: Derlin

Isolated Bulkhead Jack - Jack (TNC)

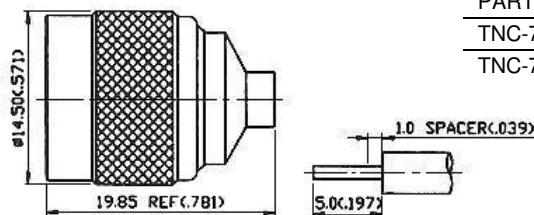


PART NO.
TNC-603-DGN

Description:
In-Series Adapters

Finish: Gold plated center contact & nickel plated body
Insulation: Derlin

Straight Plug Crimp (TNC)

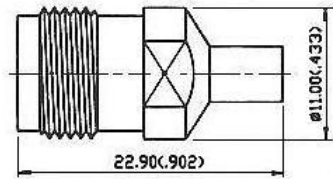


PART NO.	APPLICABLE CABLE RG/U
TNC-7101-TGG	.141"
TNC-7102-TGG	.085"

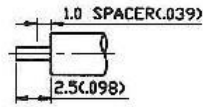
Description:
Flexible Cable-Clamp Attachment

Finish: Gold plated center contact & nickel plated body
Insulation: Derlin

Straight Plug Crimp (TNC)



PART NO.	APPLICABLE CABLE RG/U
TNC-7203-TGG	.141"
TNC-7204-TGG	.085"



Description:
Flexible Cable-Clamp Attachment

Finish: Gold plated center contact & nickel plated body
Insulation: Derlin