

10KV Male Connector Crimp/Solder Attachment for RG58 Cable

The Fairview Microwave FMCN45836 is designed for high voltage applications and is rated to 10KV. This 10KV male connector utilizes crimp/solder attachment for the contact. Our 10KV male coax connector from Fairview Microwave has an interface type of RG58.

The Fairview Microwave 10KV male coaxial connector has a PE (HD) dielectric type. This Fairview Microwave 10KV coax cable connector has a brass body with nickel over copper plating. Our 10KV male connector uses beryllium copper contact with gold over nickel over copper plating material. This 10KV male coax RF connector is RoHS and REACH compliant, you can find this 10KV male coax connector datasheet specifications above.

Fairview Microwave standard straight male 10KV connector will ship the same day. Our 10KV standard straight male high voltage connector is part of over one million RF, microwave, and millimeter wave components in stock and ready for same-day shipment worldwide. We also build custom standard cable assemblies that will ship quickly from our location.



Configuration:

- 10KV Male Connector
- MIL-STD-202
- Straight Body Geometry
- RG58 Interface Type
- Crimp/Solder Attachment

Features:

- Gold over nickel over copper Plated Beryllium Copper Contact
- High Density PE Insulator

Applications:

- General Purpose Test
- Custom Cable Assemblies
- High Voltage Pulsed RF Transmission

Electrical Specifications

Description	Min	Typ	Max	Units
Operating Voltage (DC)			10,000	Vdc
Test Voltage (DC)			15,000	Vdc
Inner Cond. DC Resistance			3	mOhms
Outer Cond. DC Resistance			2	mOhms
Insulation Resistance	1,000			MOhms

Mechanical Specifications

Size	
Length	2.5 in [63.5 mm]
Width/Dia.	0.57 in [14.48 mm]
Height	0.57 in [14.48 mm]
Weight	0.016 lbs [7.26 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over nickel over copper
Contact Spring		Tinned Copper
Insulation	PE (HD)	
Body	Brass	Nickel Over Copper
Coupling Nut	Brass	Nickel Over Copper
Gasket	Silicone	
Crimp Sleeve	Copper	Nickel over Copper
Washer	Brass	Tinned Copper

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
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sales@fairviewmicrowave.com

Environmental Specifications

Temperature

Operating Range
Salt Spray

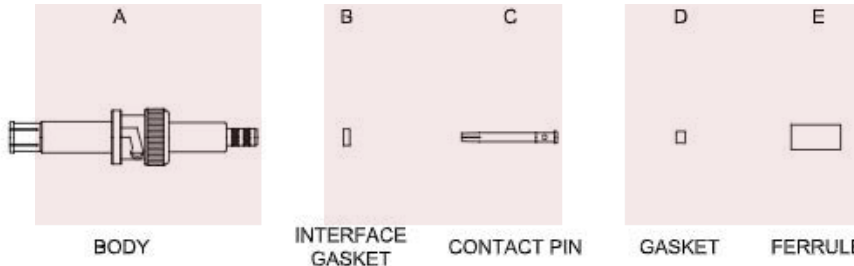

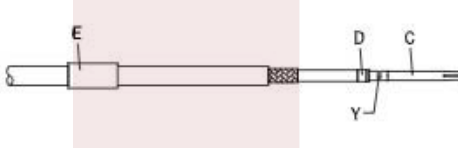
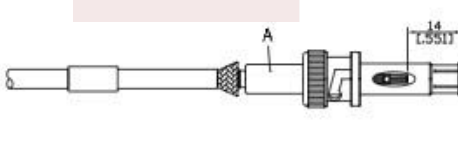
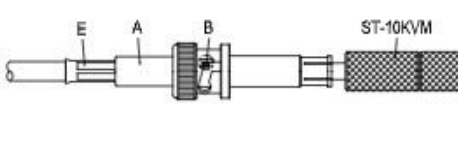
-55 to +85 deg C
MIL-STD-202, Method 101, Condiiton B

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Assembly Instruction

	
DIAGRAM	ASSEMBLY INSTRUCTION
	<p>Step 1: STRIP AS SHOWN.</p>
	<p>Step 2: SLIDE FERRULE "E" OVER CABLE. Step 3: PUT GASKET "D" AND PIN "C" ON CENTER CONDUCTOR AND SOLDER IN "Y".</p> <p>※ GASKET MUST BE UNDER COMPRESSION AFTER SOLDERING IS COMPLETED.</p>
	<p>Step 4: LOOSEN BRAIDING AND SLIDE CONNECTOR "A" IN PLACE.</p>
	<p>STEP 5: SLIDE FERRULE "E" TOWARDS THE CONNECTOR "A" AND CRIMP. (USE 5.5MM/0.217INCH HEX SECTION OF INSERT-B) STEP 6: USE LOCATOR TOOL "ST-10KVM" TO INSTALL INTERFACE GASKET "B" OVER CONTACT PIN.</p>

10KV Male Connector Crimp/Solder Attachment for RG58 Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

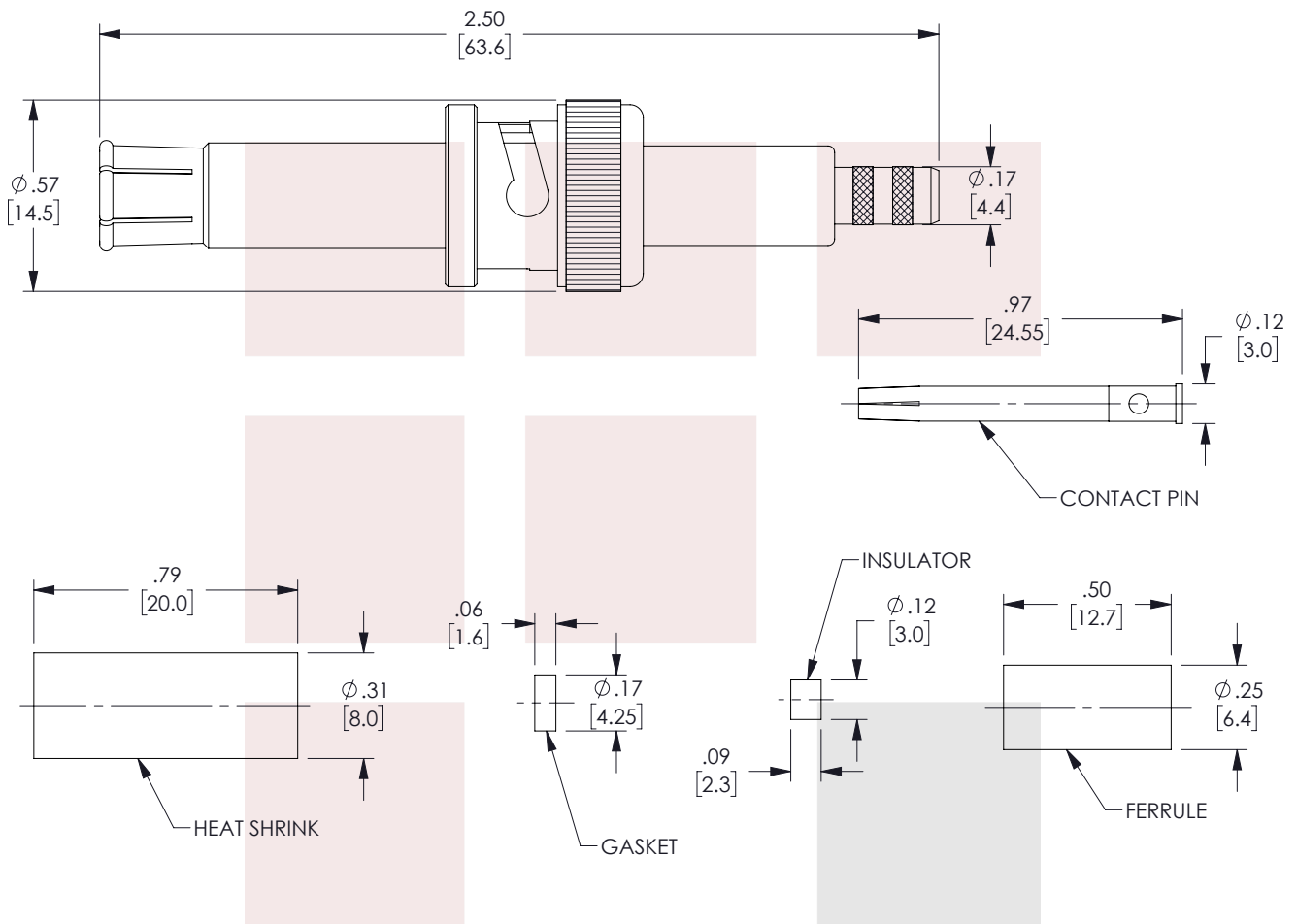
For additional information on this product, please click the following link: [10KV Male Connector Crimp/Solder Attachment for RG58 Cable FMCN45836](#)

URL: <https://www.fairviewmicrowave.com/10KV-male-rg58-connector-fmcn45836-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/15/2022	VJIWATODE



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TITLE

10KV Male Connector Crimp/Solder Attachment for RG58 Cable

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

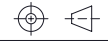
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ± 1/32
.XX = ±.02 [.51] ANGLES ± 1°
.XXX = ±.005 [.13]

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

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SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY DMAY	ITEM NO. FMCN45836	REV A
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T-Rev.D

7/16 DIN Female Bulkhead Connector Crimp/Solder Attachment for 0.195 inch, 1.161 inch DD Hole

7/16 DIN female bulkhead connector with crimp/solder attachment for .195 inch, RG58, RG141, RG303, LMR-195 and LMR-195-FR (1.161 inch DD hole), part number FMCN1832, from Fairview Microwave is in-stock and ships same day. Fairview's FMCN1832 bulkhead 7/16 DIN connector enables designers to make external connections on product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Fairview's 7/16 DIN female bulkhead connector FMCN1832 datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Mechanical Specifications

Size	
Length	2.08 in [52.83 mm]
Width/Dia.	1.2 in [30.48 mm]
Height	0.5 in [12.7 mm]
Weight	0.288 lbs [130.63 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Silver
Insulation	PTFE	
Body	Brass	Tri-Metal

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:



Configuration:

- 7/16 DIN Female Connector
- 50 Ohms
- Straight Body Geometry
- .195 inch, RG58, RG141, RG303, LMR-195, LMR-195-FR Interface Type
- Crimp/Solder Attachment
- Bulkhead

Features:

- Silver Plated Beryllium Copper Contact

Applications:

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Fairview Microwave
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sales@fairviewmicrowave.com

7/16 DIN Female Bulkhead Connector Crimp/Solder Attachment for 0.195 inch, 1.161 inch DD Hole from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

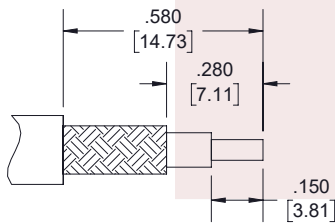
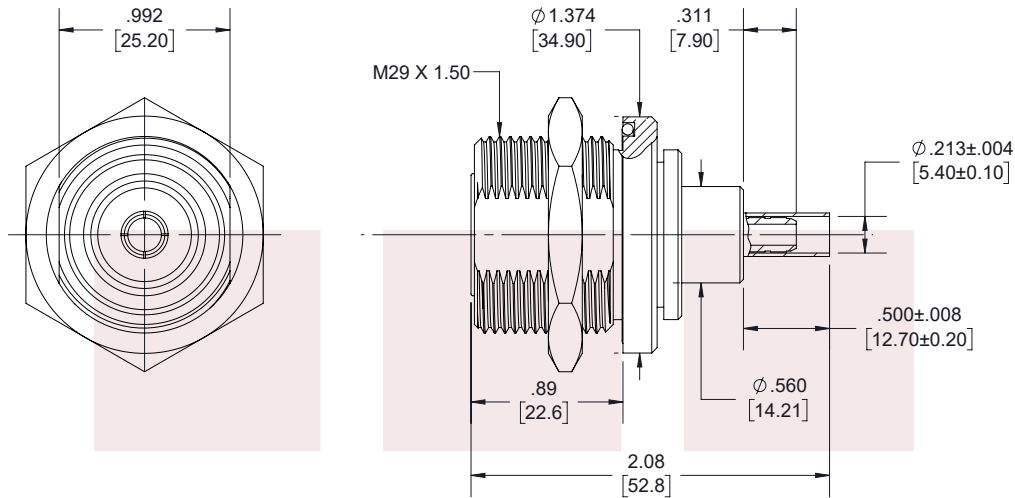
For additional information on this product, please click the following link: [7/16 DIN Female Bulkhead Connector Crimp/Solder Attachment for 0.195 inch, 1.161 inch DD Hole FMCN1832](#)

URL: <https://www.fairviewmicrowave.com/7-16-din-female-.195-rg58-rg141-rg303-lmr-195-lmr-195-fr-connector-fmcn1832-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	02/11/2022	A.GANWANI



STRIPPING DIMENSIONS

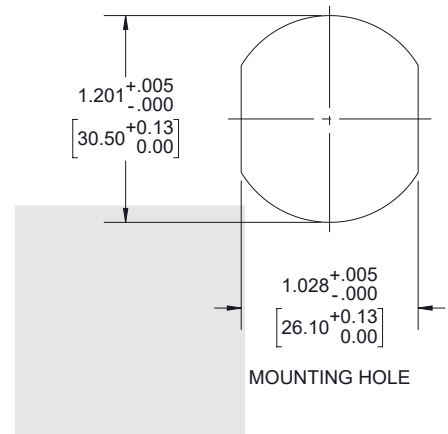
ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. SLIDE PTE OVER CENTER CONDUCTOR.
2. SOLDER CONTACT TO CENTER CONDUCTOR. SLIDE FERRULE OVER CABLE.
3. INSERT CABLE AND PARTS INTO BODY, PUSH CABLE UNTIL CONTACT SEATS IN PLACE.
4. SLIDE FERRULE OVER BRAID AND UP AGAINST BODY. CRIMP FERRULE.

CRIMP SIZE REQUIRED

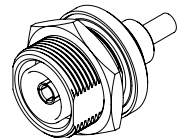
CONTACT: SOLDER.

FERRULE: .213" [5.41] HEX CRIMP TOOL.



MOUNTING HOLE

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TITLE

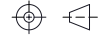
7/16 DIN Female Bulkhead Connector Crimp/Solder Attachment for 0.195 inch, 1.161 inch DD Hole

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = $\pm .2$ [5.08]	FRACTIONS $\pm 1/32$	L ≤ 12 [305] = $+1$ [25] / -0
.XX = $\pm .02$ [.51]	ANGLES $\pm 1^\circ$	12 [305] < L ≤ 60 [1524] = $+2$ [51] / -0
.XXX = $\pm .005$ [.13]		60 [1524] < L ≤ 120 [3048] = $+4$ [102] / -0
		120 [3048] < L ≤ 300 [7620] = $+6$ [152] / -0
		300 [7620] < L = $+5\%$ / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

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SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.GLEBOVA	ITEM NO. FMCN1832	REV A
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T-Rev.D

LMR®-195

Flexible Low Loss Communications Coax

Ideal for...



- Jumper Assemblies in Wireless Communications Systems
 - Short Antenna Feeder runs
 - Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable
 - Drop-in replacement for RG-58 and RG-142
- **LMR®** standard is a UV Resistant Polyethylene jacketed cable designed for 20-year service outdoor use. The bending and handling characteristics are significantly better than air-dielectric and corrugated hard-line cables.
 - **LMR® - DB** is identical to standard LMR plus has the advantage of being watertight. The addition of waterproofing compound in and around the foil/braid insures continuous reliable service should the jacket be inadvertently damaged during installation or in the future.
 - **LMR® - FR** is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.
 - **LMR® - FR-PVC** is a general-purpose indoor cable and has a UL/NEC & CSA rating of 'CMR' and 'FT4' respectively. It is less expensive than LMR-FR, however it emits toxic fumes (HCL) and greater smoke density when burned.
 - **LMR® - PVC** is designed for low loss general-purpose applications and is somewhat more flexible than the standard polyethylene jacketed LMR.
 - **LMR® - PVC-W** is a white-jacketed version of LMR-PVC for marine and other applications where color compatibility is desired.
 - **LMR® - MA** is a flexible cable designed specifically for mobile antenna applications. It has a PVC jacket and un-bonded aluminum tape to facilitate end stripping with automated equipment.
 - **Flexibility** and bendability are hallmarks of the LMR-195 cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.
 - **Low Loss** is another hallmark feature of LMR-195. Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.
 - **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).
 - **Weatherability:** LMR-195 cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.
 - **Connectors:** A wide variety of connectors are available for LMR-195 cable, including all common interface types, reverse polarity, and a choice of solder or non-solder center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.
 - **Cable Assemblies:** All LMR-195 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

Part Description				Stock	
Part Number	Application	Jacket	Color	Code	
LMR-195	Outdoor	PE	Black	54110	
LMR-195-DB	Outdoor/Watertight	PE	Black	54113	
LMR-195-FR	Indoor/Outdoor Riser	CMR	FRPE	Black	54111
LMR-195-FR-W	Indoor/Outdoor Riser	CMR	FRPE	White	54158
LMR-195-FR-PVC	Indoor/Outdoor Riser	CMR	FRPVC	Black	54105
LMR-195-MA	Mobile Antennas	PVC	Black	54210	
LMR-195-PVC	General Purpose	PVC	Black	54215	
LMR-195-PVC-W	General Purpose	PVC	White	54199	

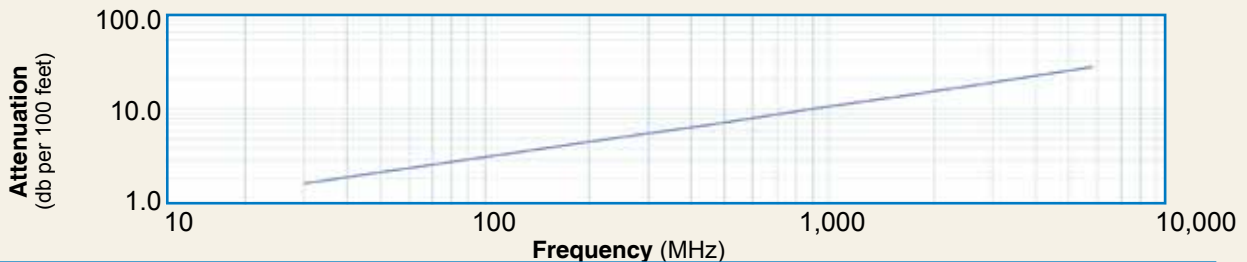
Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	Solid BC	0.037	(0.94)
Dielectric	Foam PE	0.110	(2.79)
Outer Conductor	Aluminum Tape	0.116	(2.95)
Overall Braid	Tinned Copper	0.139	(3.53)
Jacket	(see table above)	0.195	(4.95)

Mechanical Specifications			
Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	0.5	(12.7)
Bend Radius: repeated	in. (mm)	2.0	(50.8)
Bending Moment	ft-lb (N-m)	0.2	(0.27)
Weight	lb/ft (kg/m)	0.021	(0.03)
Tensile Strength	lb (kg)	40	(18.2)
Flat Plate Crush	lb/in. (kg/mm)	15	(0.27)

Electrical Specifications			
Performance Property	Units	US	(metric)
Velocity of Propagation	%	80	
Dielectric Constant	NA	1.56	
Time Delay	nS/ft (nS/m)	1.27	(4.17)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	25.4	(83.3)
Inductance	uH/ft (uH/m)	0.064	(0.21)
Shielding Effectiveness	dB	>90	
DC Resistance			
Inner Conductor	ohms/1000ft (/km)	7.6	(24.9)
Outer Conductor	ohms/1000ft (/km)	4.9	(16.1)
Voltage Withstand	Volts DC	1000	
Jacket Spark	Volts RMS	3000	
Peak Power	kW	2.5	

Environmental Specifications		
Performance Property	°F	°C
Installation Temperature Range	-40/+185	-40/+85
Storage Temperature Range	-94/+185	-70/+85
Operating Temperature Range	-40/+185	-40/+85

Attenuation vs. Frequency (typical)

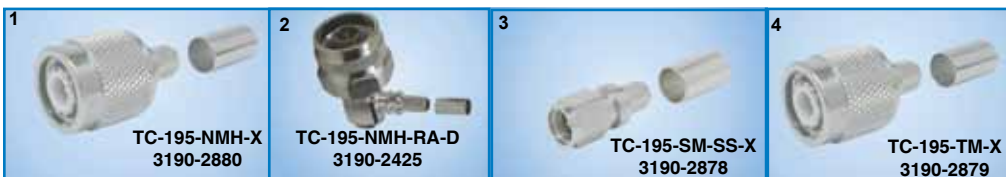


Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	5800
Attenuation dB/100 ft	2.0	2.5	4.4	5.4	7.8	11.1	14.5	16.0	16.9	19.0	29.9
Attenuation dB/100 m	6.5	8.4	14.6	17.7	25.5	36.5	47.7	52.5	55.4	62.4	98.1
Avg. Power kW	0.89	0.68	0.39	0.32	0.22	0.16	0.12	0.11	0.10	0.09	0.06

Calculate Attenuation = (0.356859) * FMHz + (0.000470) * FMHz (interactive calculator available at http://www.timesmicrowave.com/cable_calculators)
 Attenuation: VSWR=1.0; Ambient = +25°C (77°F) Power: VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F);
 Sea Level; dry air; atmospheric pressure; no solar loading

Connectors											
Interface	Description	Part Number	Stock Code	VSWR** Freq. (GHz)	Coupling Nut	Inner Contact Attach	Outer Contact Attach	Finish* Body /Pin	Length in (mm)	Width in (mm)	Weight lb (g)
1. N male	Straight Plug	TC-195-NMH-X	3190-2880	<1.25:1 (2.5)	Knurl	Solder	Crimp	S/G	1.5 (38.1)	0.75 (19.1)	0.073 (33.1)
2. N male	Right Angle	TC-195-NMH-RA-D	3190-2425	<1.35:1 (6)	Hex/Knurl	Solder	Crimp	A/G	1.3 (32.1)	1.19 (30.1)	0.083 (37.5)
3. SMA male	Straight Plug	TC-195-SM-SS-X	3190-2878	<1.25:1 (2.5)	Hex	Solder	Crimp	SS/G	1.0 (25.4)	0.32 (8.1)	0.015 (6.8)
4. TNC male	Straight Plug	TC-195-TM-X	3190-2879	<1.25:1 (2.5)	Knurl	Solder	Crimp	S/G	1.4 (35.6)	0.59 (15.0)	0.045 (20.4)

* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy **VSWR spec based on 3 foot cable with a connector pair



Install Tools

Type	Part Number	Stock Code	Description
Crimp Tool	CT-240/200/195/100	3190-667	Crimp tool for LMR-100,195, 200 and 240 connectors
Cutting Tool	CCT-01	3190-1544	Cable end flush cut tool
Deburr Tool	DBT-U	3192-001	Removes center conductor rough edges
Strip Tool	CST-195/200	3192-102	Prep tool for LMR-195/200
Replacement Blade Kit	RB-CST	3192-086	Replacement blade kit for all CST cutting tools

