

SMA Male Right Angle Connector Crimp/Solder Attachment for PE-C240, RG8X, .240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A



RF Connectors
Technical Data Sheet

PE44638

#### Configuration

- SMA Male Connector
- •50 Ohms
- Right Angle Body Geometry

- Connector Interface Types: PE-C240, RG8X, .240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A
- 5/16 inch Hex

#### **Features**

- Max. Operating Frequency 12.4 GHz
- Gold Plated Brass Contact

•50 µin minimum contact plating

#### **Applications**

General Purpose Test

Custom Cable Assemblies

#### Description

Pasternack's PE44638 SMA male right angle connector with crimp/solder attachment for PE-C240, RG8X, .240 inch, LMR-240, LMR-240-DB, LMR-240-UF and B7808A is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 12.4 GHz. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector PE44638 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz

#### **Mechanical Specifications**

Size

 Length
 0.91 in [23.11 mm]

 Width/Dia.
 0.379 in [9.63 mm]

 Height
 0.715 in [18.16 mm]

 Weight
 0.023 lbs [10.43 g]

Mating Torque 3 to 5 in-lbs [0.34 to 0.57 Nm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Male Right Angle Connector Crimp/Solder Attachment for PE-C240, RG8X, .240 inch, LMR-240-DB, LMR-240-UF, B7808A PE44638

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

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SMA Male Right Angle Connector Crimp/Solder Attachment for PE-C240, RG8X, .240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A



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#### **Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Gold 3 µin minimum
Coupling Nut	Brass	Gold 3 µin minimum

### **Environmental Specifications**

**Temperature** 

**Operating Range** 

-65 to +165 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

SMA Male Right Angle Connector Crimp/Solder Attachment for PE-C240, RG8X, .240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Male Right Angle Connector Crimp/Solder Attachment for PE-C240, RG8X, .240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A PE44638

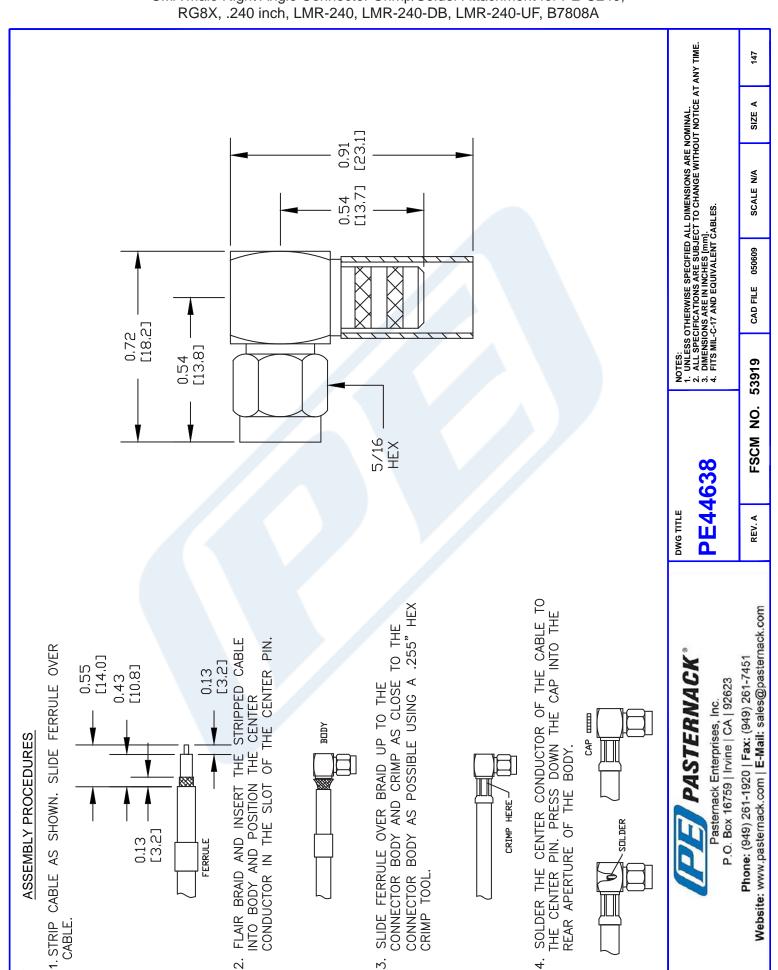
URL: https://www.pasternack.com/sma-male-standard-rg8x-pe-c240-0.240-connector-pe44638-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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## PE44638 CAD Drawing

SMA Male Right Angle Connector Crimp/Solder Attachment for PE-C240,







## RF Connectors Technical Data Sheet



TC-240-4310M-X

## **Times Microwave Systems Connector Specification**

## Configuration

- 4.3-10 Male Connector
- 50 Ohms
- Straight Body Geometry

- LMR-240 Interface Type
- Crimp/Solder Attachment

#### **Features**

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1

- Silver Plated Brass Contact
- 200 µin thickness contact plating

#### **Applications**

- General Purpose Test
- Custom Cable Assemblies
- Mobile Communications Systems
- Base Stations
- Distributed Antenna Systems (DAS)
- Small Cells
- Feeder Cables

#### Description

The Times Microwave TC-240-4310M-X 4.3-10 male connector with crimp/solder attachment for LMR-240 is part of our full line of RF components available for same-day shipping. This 4.3-10 male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1.

Our datasheet specifications and drawing with dimensions for Times Microwave's 4.3-10 male connector TC-240-4310M-X are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Insulation Resistance	10,000			MOhms
	•			

Electrical Specification Notes: Insertion Loss = 0.1 x SQRT(FGHz)

#### **Mechanical Specifications**

Mating Cycles 500 Cycles

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 4.3-10 Male Connector Crimp/Solder Attachment for LMR-240 TC-240-4310M-X

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## **RF** Connectors Technical Data Sheet



#### **Material Specifications**

Description	Material	Plating
Contact	Brass	Silver 200 µin thickness
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin thickness
Coupling Nut	Brass	Tri-Metal 80 µin thickness
Gasket	Silicone	
Crimp Sleeve	Brass	Tri-Metal 80 µin thickness

#### **Environmental Specifications**

**Temperature** 

Operating Range

Shock

Vibration Thermal Shock -40 to +125 deg C

MIL-STD 202G, Meth. 204, Cond. B

MIL-STD 202G, Meth. 213, Cond. I

MIL-STD 202G, Meth. 107, Cond. B

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 4.3-10 Male Connector Crimp/Solder Attachment for LMR-240 TC-240-4310M-X

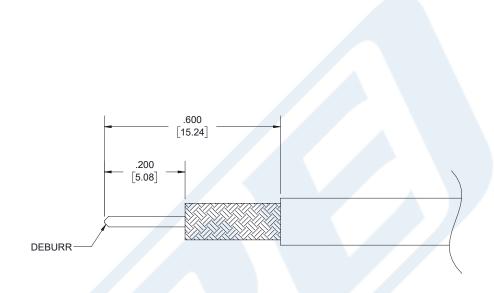




## **RF Connectors** Technical Data Sheet



#### **Assembly Instruction**



#### **ASSEMBLY PROCEDURES**

- 1. STRIP CABLE TO THE DIMENSIONS SHOWN, CHAMFER CENTER CONDUCTOR AND DEBURR CABLE.
- 2. SLIDE FERRULE OVER CABLE AND INSULATOR OVER CABLE CENTER CONDUCTOR. INSERT CENTER CONTACT AND SOLDER.
- PUSH THE CONNECTOR BODY INTO THE CABLE UNTIL IT STOPS. SLIDE FERRULE FORWARD AND AGAINST SHOULDER OF CONNECTOR AND CRIMP.

### **CRIMP SIZE REQUIRED**

FERRULE: .255" [6.48] HEX CRIMP TOOL

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 4.3-10 Male Connector Crimp/Solder Attachment for LMR-240 TC-240-4310M-X

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## **RF Connectors Technical Data Sheet**



4.3-10 Male Connector Crimp/Solder Attachment for LMR-240 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

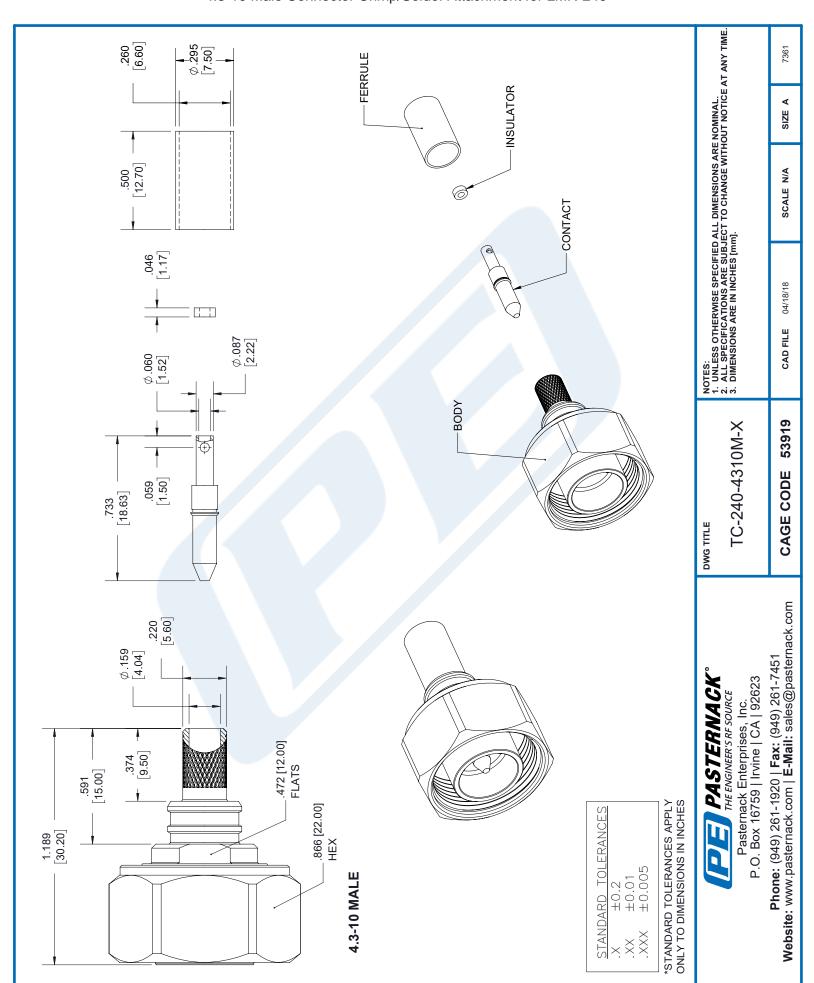
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 4.3-10 Male Connector Crimp/Solder Attachment for LMR-240 TC-240-4310M-X

URL: https://www.pasternack.com/4.3-10-male-lmr-240-connector-tc-240-4310m-x-p.aspx

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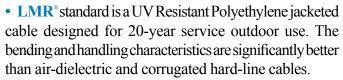


# TIMES MICROWAVE SYSTEMS

# LMR®-240 Flexible Low Loss Communications Coax

#### Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs (e.g. WLL, GPS, LMR, Mobile Antennas)
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable



- 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-240 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-240. 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-240 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-240 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-240 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

	<b>Part Description</b>			Stock
Part Number	Application	Jacket	Color	Code
LMR-240	Outdoor	PE	Black	54021
LMR-240-DB	Outdoor/Watertight	PE	Black	54090
LMR-240-FR	Indoor/Outdoor Riser CMR	FRPE	Black	54029
LMR-240-FR-PVC	Indoor/Outdoor Riser CMR	FRPVC	Black	54214
LMR-240-PVC	General Purpose	PVC	Black	54140
LMR-240-PVC-V	V General Purpose	PVC	White	54202
LMR-240-MA	Indoor & Mobile Antenna	PVC	Black	54046

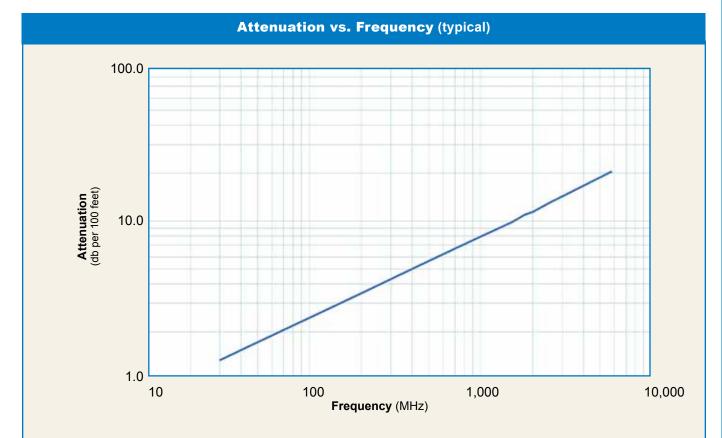
Construction Specifications									
Description	Material	In.	(mm)						
Inner Conductor	Solid BC	0.056	(1.42)						
Dielectric	Foam PE	0.150	(3.81)						
Outer Conductor	Aluminum Tape	0.155	(3.94)						
Overall Braid	Tinned Copper	0.178	(4.52)						
Jacket	(see table above)	0.240	(6.10)						



**Mechanical Specifications Performance Property** Units US (metric) Bend Radius: installation 0.75 (19.1)in. (mm) Bend Radius: repeated in. (mm) 2.5 (63.5)**Bending Moment** ft-lb (N-m) 0.25 (0.34)0.034 Weight lb/ft (kg/m) (0.05)Tensile Strength lb (kg) 80 (36.3)Flat Plate Crush lb/in. (kg/mm) 20 (0.36)

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						

Electri	cal Specifica	tions		
Performance Property	Units	US	(metric)	
Velocity of Propagation	%	84		
Dielectric Constant	NA	1.42		
Time Delay	nS/ft (nS/m)	1.21	(3.97)	
Impedance	ohms	50		
Capacitance	pF/ft (pF/m)	24.2	(79.4)	
Inductance	uH/ft (uH/m)	0.060	(0.20)	
Shielding Effectiveness	dB	>90		
DC Resistance				
Inner Conductor	ohms/1000ft (/km)	3.2	(10.5)	
Outer Conductor	ohms/1000ft (/km)	3.89	(12.8)	
Voltage Withstand	Volts DC		1500	
Jacket Spark	Volts RMS	5000		
Peak Power	kW		5.6	



Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	5800
Attenuation dB/100 ft	1.3	1.7	3.0	3.7	5.3	7.6	9.9	10.9	11.5	12.9	20.4
Attenuation dB/100 m	4.4	5.7	9.9	12.0	17.3	24.8	32.4	35.6	37.7	42.4	66.8
Avg. Power kW	1.49	1.15	0.66	0.54	0.38	0.26	0.20	0.18	0.17	0.15	0.10

#### Calculate Attenuation =

(0.242080) • √FMHz + (0.000330) • 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

# TIMES MICROWAVE SYSTEMS

# LMR®-240 Flexible Low Loss Communications Coax



## **Connectors**

Interface	Description	Part Number	Stock Code	VSI Freq.	WR** (GHz)	Coupling Nut		Outer Contact Attach	Finish* Body /Pin	Le in	ngth (mm)	Wic in	ith (mm)	We lb	eight (g)
FMale	Straight Plug	TC-240-FM	3190-924	<1.25:1	(2.5)	Knurl	Solder	Crimp	N/G	1.1	(28)	0.45	(11.4)	0.014	(6.4)
NMale	Straight Plug	EZ-240-NMH-D	3190-1127	<1.25:1	(2.5)	Hex/Knurl	Spring Finger	Crimp	A/G	1.5	(38.1)	0.78	(19.8)	0.086	(39.0)
N Male	RightAngle	TC-240-NM-RA	3190-2426	<1.35:1	(6)	Hex	Solder	Crimp	A/G	1.3	(32.4)	1.22	(31.0)	0.092	(41.7)
N Male	RightAngle	TC-240-NMH-RA-D	3190-2426	<1.35:1	(6)	Hex/Knurl	Solder	Crimp	A/G	1.2	(32.4)	1.22	(31.0)	0.091	(41.7)
N Male	Straight Plug	TC-240-NMH-D	3190-382*	<1.25:1	(2.5)	Hex/Knurl	Solder	Crimp	N/S	1.5	(38)	0.75	(19.1)	0.086	(39.0)
N Male	Straight Plug	TC-240-NMC	3190-244	<1.25:1	(2.5)	Knurl	Solder	Clamp	S/G	1.5	(38)	0.75	(19.1)	0.082	(37.2)
1.0/2.3 DIN	Straight Plug	EZ-240-1023M	3190-2512	<1.35:1	(2.5)	knurl	Spring Finger	Crimp	N/G	1.1	(228.5)	0.33	(8.5)	0.014	(6.63)
NFemale	Bulkhead Jack	TC-240-NF-BH	3190-419	<1.25:1	(2.5)	NA	Solder	Crimp	A/G	1.7	(44)	0.88	(22.2)	0.115	(52.2)
NFemale	Panel Mount	TC-240-NF-BHF(A)	3190-866*	<1.25:1	(2.5)	NA	Solder	Crimp	A/G	1.7	(44)	0.88	(22.2)	0.115	(52.2)
BNC Male	Straight Plug	TC-240-BMC	3190-242	<1.25:1	(2.5)	Knurl	Solder	Clamp	S/G	1.7	(43)	0.56	(14.2)	0.040	(18.1)
BNC Male	Straight Plug	TC-240-BM(A)	3190-867	<1.25:1	(2.5)	Knurl	Solder	Crimp	A/G	1.7	(43)	0.5 6	(14.2)	0.043	(19.5)
TNC Male	Straight Plug	EZ-240-TM	3190-1128	<1.25:1	(2.5)	Knurl	Spring Finger	Crimp	N/G	1.4	(34.3)	0.59	(15.0)	0.043	(19.5)
TNC Male	Straight Plug	TC-240-TM	3190-275	<1.25:1	(2.5)	Knurl	Solder	Crimp	N/G	1.7	(43)	0.59	(15.0)	0.043	(19.5)
TNC Male	RightAngle	TC-240-TM-RA	3190-604	<1.35:1	(2.5)	Knurl	Solder	Crimp	N/G	1.3	(33)	0.57	(14.5)	0.055	(24.9)
TNC Male	Reverse Polarit	ty EZ-240-TM-RP	3190-970	<1.25:1	(2.5)	Knurl	Spring Finger	Crimp	A/G	1.4	(36)	0.59	(15.0)	0.043	(19.5)
QMAMale	Straight Plug	EZ-240-QM	3190-1533	<1.25:	(6)	Knurl	Spring Finger	Crimp	N/G	1.2	(30.0)	0.41	(10.5)	0.014	(6.35)
QMAMale	RightAngle	EZ-240-QM-RA	3190-1539	<1.25:	(<6)	Knurl	Spring Finger	Crimp	N/G	8.0	(20.3)	0.65	(16.5)	0.019	(8.62)
SMAMale	Straight Plug	EZ-240-SM	3190-1530	<1:25:	(6)	Hex	Spring Finger	Crimp	N/G	1.0	(25.4)	0.32	(8.1)	0.016	(7.26)
SMAMale	Straight Plug	TC-240-SM	3190-380*	<1.25:1	(10)	Hex	Solder	Crimp	SS/G	1.0	(25)	0.32	(8.1)	0.016	(7.3)
SMAMale	RightAngle	TC-240-SM-RA	3190-381*	<1.35:1	(6)	Hex	Solder	Crimp	SS/G	8.0	(20)	0.65	(16.5)	0.019	(8.6)
SMAMale	Reverse Polarit	ty TC-240-SM-RP	3190-326	<1.25:1	(2.5)	Hex	Solder	Crimp	SS/G	1.0	(25)	0.32	(8.1)	0.016	(7.3)
SMAFemale	Bulkhead Jack	TC-240-SF-BH	3190-824*	<1.25:1	(2.5)	NA	Solder	Crimp	SS/G	1.1	(29)	0.31	(7.9)	0.019	(8.6)
Mini-UHF	Straight Plug	TC-240-MUHF	3190-445	<1.25:1	(2.5)	Knurl	Solder	Crimp	N/G	1.1	(28)	0.45	(11.4)	0.014	(6.4)
*Finish metals: N	I=Nickel, S=Silv	er, G=Gold, SS=Stai	nless Steel, A	\=Alballo	y **VS	WRspecba	ased on 3 foot	cable with	naconne	ctorp	air *Avai	lable in	bulk pa	ck	







## **Hardware Accessories**

Туре	Part Number	Stock Code	Description
Ground Kit	GK-S240TT	GK-S240TT	Standard Ground Kit (each)





# **Install Tools**

Туре	Part Number	Stock Code	Description
Crimp Tool	CT-240/200/195/100	3190-667	Crimp tool for LMR-100, 195, 200 and 240 connectors
Strip Tool	CST-240	3192-070	Strip tool
Deburr Tool	DBT-U	3192-001	Removes center conductor rough edges
Cutting Tool	CCT-01	3190-1544	Cable end flush cut tool
Replacement Blade	RB-01	3190-1609	Replacement blade for cutting tool
Replacement	RB-CST	3192-086	Replacement blade kit for all CST strip tools

DBT-U