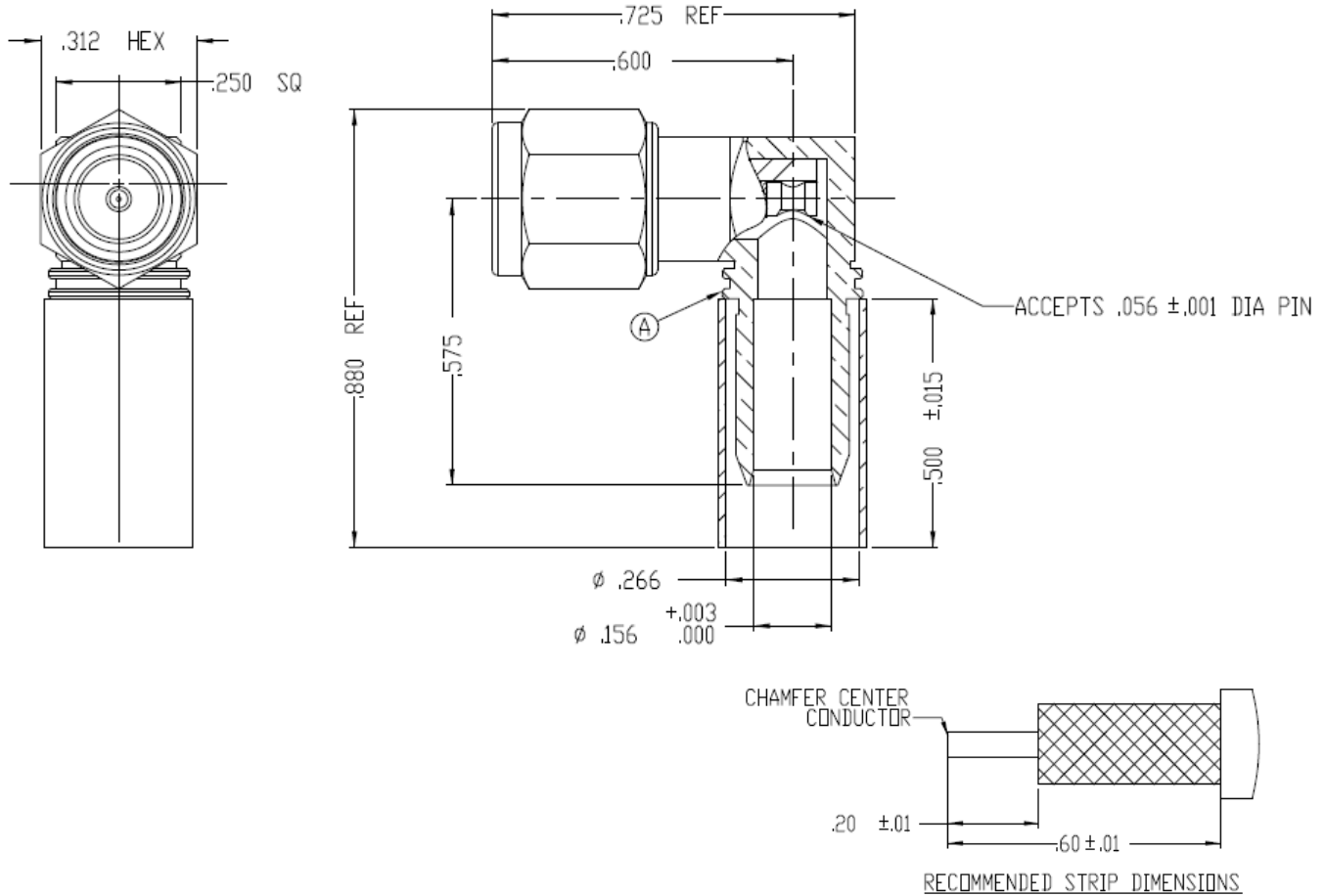


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SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
A	RELEASED FOR PRODUCTION	N.N.N	9/5/13	J.D.B.	9/10/13



NOTES:

- ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348
- MATERIAL:
 - BODY, HEX NUT - BRASS PER ASTM B16, C36000 ALLOY, TEMPER H02
 - INSULATOR - TEFLON PER ASTM D1710, TYPE 1, GRADE 1, CLASS A
 - SHRINK SLEEVE - HEAT SHRINKABLE ATUM PER MIL-I-23053/4 (NOT SHOWN)
 - GASKET - SILICONE RUBBER PER A-A-59588, 50-75 DUROMETER
 - CRIMP SLEEVE - D.H.P. COPPER CDA, ALLOY #122, TEMPER HARD
 - CONTACT & LOCKING RING - BERYLLIUM COPPER PER ASTM B196, C17300 ALLOY, CONDITION HT
- FINISH:
 - CONTACT - GOLD PLATE PER ASTM B488
 - CRIMP SLEEVE - SULFAMATE NICKEL PER MIL-P-27418
 - ALL OTHER METAL PARTS - ALBALOY PLATE PER DELTA SPEC. 111197

MATL:	UNLESS OTHERWISE SPECIFIED	DFTM	TIMES MICROWAVE SYSTEMS		
		N. N. N			
USED ON: B	ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH 63 RMS MAX. REMOVE ALL BURRS .004 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS .XX ±.01 .XXX ±.005 ANGLES ±1° FRACTIONS ±1/64	DATE	9/5/13	EZ-240-SM-RA-X CONNECTOR ASSEMBLY 90° SMAM for LMR-240	
		CHKD.	J. D. B.		
		DATE	9/10/13		
		APPD.	J. D. B.		
SCALE: NONE	DWG. SIZE A	DO NOT SCALE DRAWING	CODE IDENT	68999	DATE 9/10/13
		DATE	9/10/13	1 of 1	SD3190-2899
					A



TNC Male Right Angle Connector Crimp/Solder
Attachment For RG8X, PE-C240, 0.240 inch

TECHNICAL DATA SHEET

PE44635

TNC Male Right Angle Connector Crimp/Solder Attachment For RG8X, PE-C240, 0.240 inch

Configuration

Connector	TNC Male
Connector Interface Type	RG8X, PE-C240, 0.240 inch
Cable Attachment Method (Shield/Contact)	Crimp/Solder
Body Style	Right Angle

Electrical Specifications

Impedance, Ohms	50
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Mechanical Specifications

Size

Length, in [mm]	1.103 [28.02]
Width/Dia., in [mm]	0.59 [15]
Height, in [mm]	1.06 [26.92]
Weight, lbs [g]	0.042 [19.05]

Connector

Type	TNC Male
Contact Material and Plating	Brass, Gold
Coupling Nut Material and Plating	Brass, Nickel
Body Material and Plating	Brass, Nickel
Dielectric Type	Teflon

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	Yes
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Plotted and Other Data

Notes:	Values at 25 °C, sea level
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URL: <http://www.pasternack.com/tnc-male-standard-rg8x-pe-c240-0.240-connector-pe44635-p.aspx>

TNC Male Right Angle Connector Crimp/Solder Attachment For RG8X, PE-C240, 0.240 inch from Pasternack Enterprises has same day shipment for domestic and International orders. We maintain 99% availability of the industry's broadest selection of RF, microwave and fiber optic products.

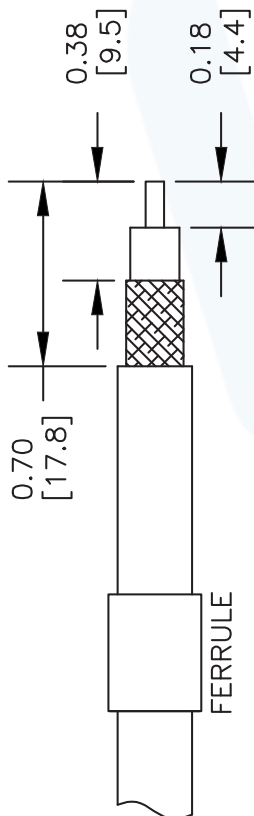
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal.

PE44635 CAD Drawing

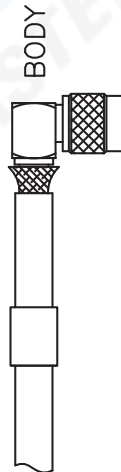
TNC Male Right Angle Connector Crimp/Solder
Attachment For RG8X, PE-C240, 0.240 inch

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. SLIDE FERRULE OVER CABLE.



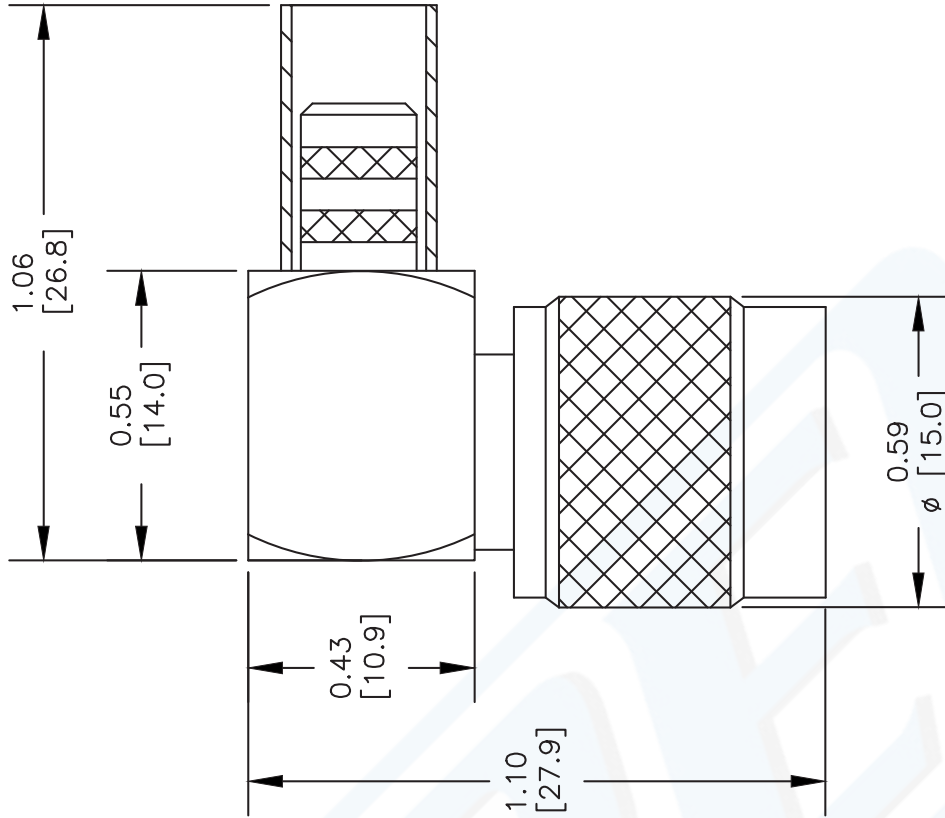
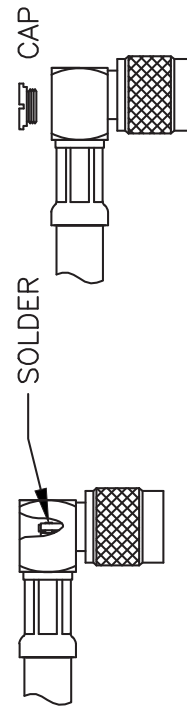
2. FLAIR BRAID AND INSERT THE STRIPPED CABLE INTO BODY AND POSITION THE CENTER CONDUCTOR IN THE SLOT OF THE CENTER PIN.



3. SLIDE FERRULE OVER BRAID UP TO THE CONNECTOR BODY AND CRIMP AS CLOSE TO THE CONNECTOR BODY AS POSSIBLE USING A .255" HEX CRIMP TOOL.



4. SOLDER THE CENTER CONDUCTOR OF THE CABLE TO THE CENTER PIN. TIGHTEN DOWN THE CAP INTO THE REAR APERTURE OF THE BO



DWG TITLE

PE44635

NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

REV. B

FSCM NO. 53919

CAD FILE 012012-B

SCALE N/A

SIZE A

2233

P**ASTERNACK**[®]

Pasternack Enterprises, Inc.

P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

Website: www.pasternack.com | E-Mail: sales@pasternack.com

LMR®-240-UF UltraFlex Communications Coax

Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs (e.g. WLL, GPS, LMR, Mobile Antennas)
- Any application that requires periodic/repeated flexing



• **LMR® - UltraFlex** has a stranded center conductor and rubber outer jacket designed for multiple bending/flexing cycles. It is used for both indoor and outdoor applications.

• **Flexibility** and bendability are hallmarks of the LMR-240-UF 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-UF. 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-UF cables are designed for outdoor exposure and have a life expectancy in excess of 10 years.

• **Connectors:** A wide variety of connectors are available for LMR-240-UF cable, including all common interface types, reverse polarity, and solder-on center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.

• **Cable Assemblies:** All LMR-240-UF cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	Stranded BC	0.056	(1.42)
Dielectric	Foam Polyethylene	0.150	(3.81)
Outer Conductor	Aluminum Tape	0.155	(3.94)
Overall Braid	Tinned Copper	0.178	(4.52)
Jacket	Black Thermoplastic Elastomer	0.240	(6.10)

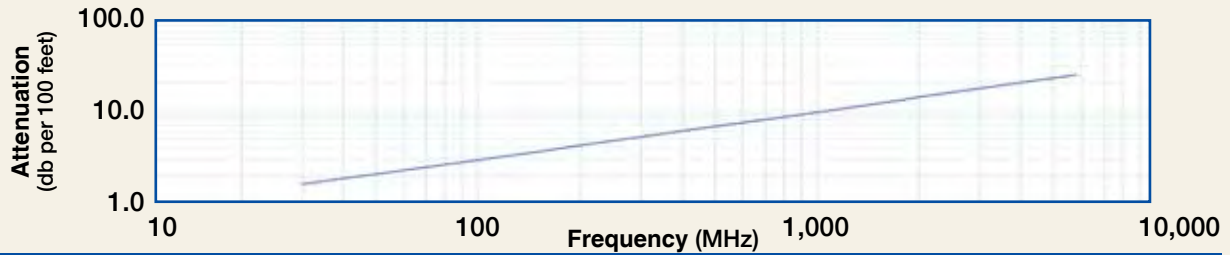
Mechanical Specifications			
Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	0.75	(19.1)
Bend Radius: repeated	in. (mm)	2.5	(63.5)
Bending Moment	ft-lb (N-m)	0.125	(0.17)
Weight	lb/ft (kg/m)	0.034	(0.05)
Tensile Strength	lb (kg)	80	(36.3)
Flat Plate Crush	lb/in. (kg/mm)	13	(0.23)

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

Electrical Specifications			
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)	4.28	(14.1)
Outer Conductor	ohms/1000ft (/km)	3.89	(12.8)
Voltage Withstand	Volts DC	1500	
Jacket Spark	Volts RMS	5000	
Peak Power	kW	5.6	

Part Description				
Part Number	Application	Jacket	Color	Stock Code
LMR-240-UF	Indoor/Outdoor	TPE	Black	54041

Attenuation vs. Frequency (typical)



Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	5800
Attenuation dB/100 ft	1.6	2.1	3.6	4.4	6.3	9.1	11.8	13.0	13.8	15.5	24.4
Attenuation dB/100 m	5.3	6.8	11.9	14.4	20.8	29.8	38.9	42.8	45.2	50.9	80.1
Avg. Power kW	1.24	0.96	0.55	0.45	0.31	0.22	0.17	0.15	0.14	0.13	0.08

Calculate Attenuation = $(0.290501) \cdot \sqrt{\text{FMHz}} + (0.000396) \cdot \text{FMHz}$ (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. 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)
2. 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)
3. N Female	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)
4. N Male	Straight Plug	TC-240-NMH-D	3190-382	<1.25:1 (2.5)	Hex	Solder	Crimp	N/S	1.5 (38)	0.75(19.1)	0.086 (39.0)
5. 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)
6. SMA Male	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)
7. SMA Male	Reverse Polarity	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)
8. TNC Male	Straight Plug	TC-240-TM	3190-275	<1.25:1 (2.5)	Knurl	Solder	Crimp	N/S	1.7 (43)	0.59(15.0)	0.043 (19.5)
9. N Male	Right Angle	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)

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

Hardware Accessories

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

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
Replacement Blade	RB-01	3190-1609	Replacement blade for cutting tool

