



## TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240

### RF Connectors Technical Data Sheet



TC-240-TM-X

### Times Microwave Systems Connector Specification

#### Configuration

- TNC Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: LMR-240, PE-C240

#### Features

- Max. Operating Frequency 8 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50 μinch contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's TC-240-TM-X TNC male connector with crimp/solder attachment for LMR-240 and PE-C240 is part of our full line of RF components available for same-day shipping. Our TNC male connector operates up to a maximum frequency of 8 GHz and offers good VSWR of 1.3:1.

Our TNC male connector TC-240-TM-X 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		8	GHz
VSWR			1.3:1	
Insertion Loss			0.3	dB
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
Insulation Resistance	5,000			MOhms

#### Mechanical Specifications

##### Size

Length	1.22 in [30.99 mm]
Width/Dia.	0.59 in [14.99 mm]
Weight	0.051 lbs [23.13 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240 TC-240-TM-X](#)



# TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240

## RF Connectors Technical Data Sheet



TC-240-TM-X

Mating Cycles 500 Cycles  
Mating Torque 8 to 12 in-lbs [0.90 to 1.36 Nm]

### Material Specifications

Description	Material	Plating
Contact	Brass	Gold 50 μinch
Insulation	Teflon	
Body	Brass	Tri-Metal 80 μinch
Coupling Nut	Brass	Tri-Metal 80 μinch

### Environmental Specifications

#### Temperature

Operating Range -40 to +125 deg C  
Shock MIL-STD 202G, Meth. 213, Cond. I  
Vibration MIL-STD 202G, Meth. 204, Cond. B  
Thermal Shock MIL-STD 202G, Meth. 107, Cond. B

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

### Plotted and Other Data

Notes:

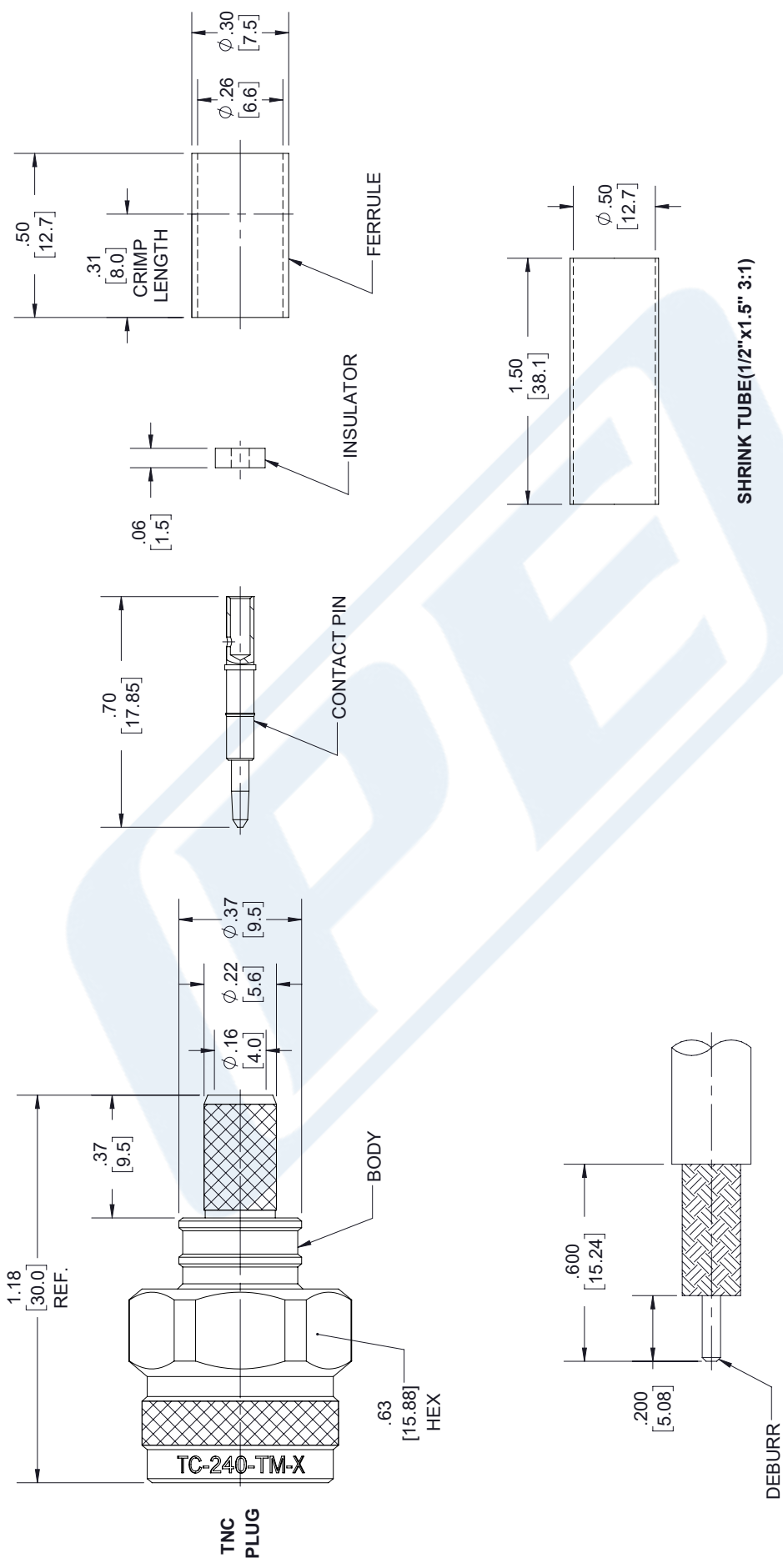
TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/tnc-male-lmr-240-pe-c240-connector-tc-240-tm-x-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.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR TC-240-TM-X 20200622	06/30/20	SRAUTUS



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**PE PASTERNAK** an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

ITEM NO. TC-240-TM-X

SIZE A

CAGE CODE 53919

DRAWN BY SLI

REV A

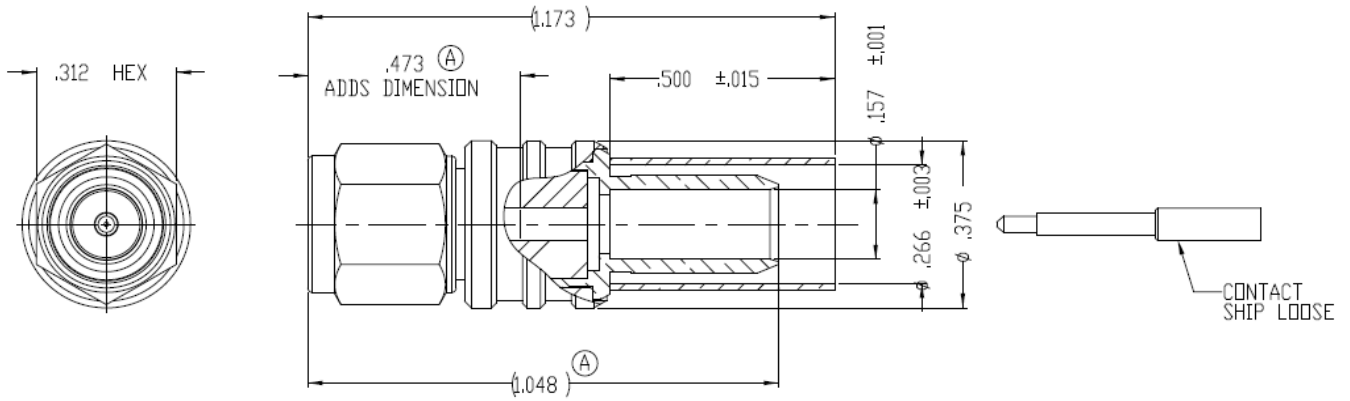
CABLE ATTACHMENT:  
 INNER: SOLDER.  
 OUTER: CRIMP.

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SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
A	RELEASED FOR PRODUCTION	N. N. N	9/4/13	J. D. B.	9/10/13



NOTES:

- ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348
- MATERIAL:

CLAMP & CONTACT - BRASS PER ASTM B16, C36000 ALLOY, TEMPER H02  
 BODY, CNUT - STAINLESS STEEL PER ASTM 582, S30300 ALLOY, COND. A  
 INSULATOR - TEFLON PER ASTM D1710, TYPE 1, GRADE 1, CLASS A  
 GASKET - SILICONE RUBBER PER A-A-59588, 50-75 DUROMETER  
 SHRINK SLEEVE - HEAT SHRINKABLE ATUM PER MIL-I-23053/4 (NOT SHOWN)  
 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  
 CLAMP - NICKEL PLATE PER AMS-QQ-N-290  
 C'NUT & BODY - PASSIVATE PER SAE-AMS-2700

MATL:	UNLESS OTHERWISE SPECIFIED		DFTM. N. N. N	TIMES MICROWAVE SYSTEMS	
	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 9/4/13		
USED ON: A	DO NOT SCALE DRAWING		CHKD. J. D. B.	TC-240-SM-SS-X CONNECTOR ASSEMBLY SMAM for LMR-240	
			DATE 9/10/13		
SCALE: NONE	DWG. SIZE A	CODE IDENT 68999	APPD. J. D. B.	DATE 9/10/13	1 of 1
				SD3190-2898	A



## LMR-240-FR Fire Rated version of the 240 series Low Loss Coax

### RF Cables Technical Data Sheet



LMR-240-FR

## Times Microwave Systems Coax Cable Specification

### Configuration

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

### Features

- CMR Riser Rated Coax
- Non-Halogen, Low Smoke FRPE Jacket
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 83% VoP
- Max Operating Temperature +85°C
- Min Install Bend Radius of 0.75 inches

### Applications

- In-Building Riser Runs
- Short Antenna Installs
- RF Test Systems
- General Purpose RF Interconnect
- Laboratory Applications

### Description

LMR-240-FR Fire Rated version of the 240 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-240-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss and CMR riser rated 50 Ohm coax cable LMR-240-FR is constructed with a 0.240 inch diameter and Black FRPE jacket.

LMR-240-FR flexible 50 Ohm coax cable with FRPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.240 inch diameter and low loss fire rated coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-240-FR FRPE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-240-FR coax cable provides specs for this wire on its RF coax cable LMR-240-FR datasheet.

LMR-240-FR cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss flexible LMR-240-FR coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

\* LMR™ is a trademark of Times Microwave Systems.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		83		%
Time Delay		1.21 3.97		ns/ft ns/m
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			1,500	Vdc

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-240-FR Fire Rated version of the 240 series Low Loss Coax LMR-240-FR](#)



## LMR-240-FR Fire Rated version of the 240 series Low Loss Coax

### RF Cables Technical Data Sheet



LMR-240-FR

Jacket Spark	5,000	Vrms
Inner Conductor DC Resistance	3.2	Ohms/1000ft
Outer Conductor DC Resistance	3.89	Ohms/1000ft
Nominal Capacitance	24.2 [79.4]	pF/ft [pF/m]
Nominal Inductance	0.06 [0.2]	uH/ft [uH/m]
Input Power (Peak)	5.6	kWatts

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	1.7	3	3.7	5.3	7.6	dB/100ft
	5.58	9.84	12.14	17.39	24.93	dB/100m
Input Power (CW), Max	1,150	660	540	380	260	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	9.9	10.9	11.5	12.9	20.4	dB/100ft
	32.48	35.76	37.73	42.32	66.93	dB/100m
Input Power (CW), Max	200	180	170	150	100	Watts

#### Mechanical Specifications

Diameter	0.24 in 6.1 mm
Min. Bend Radius (Installation)	0.75 in [19.05 mm]
Min. Bend Radius (Repeated)	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Tensile Strength	80 lbs [36.29 kg]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.056 in [1.42 mm]
Conductor Type	Solid	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-240-FR Fire Rated version of the 240 series Low Loss Coax LMR-240-FR](#)



LMR-240-FR Fire Rated version of the 240 series Low Loss Coax

RF Cables  
Technical Data Sheet



LMR-240-FR

Dielectric	Foam PE	0.15 in [3.81 mm]
First Shield	Aluminum Tape	[ ]
Second Shield	Tinned Copper	[ ]
Jacket	FRPE, Black	0.24 in [6.1 mm]

**Environmental Specifications**

**Temperature**

Operating Range	-40 to +85 deg C
Installation Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

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

**Plotted and Other Data**

Notes:

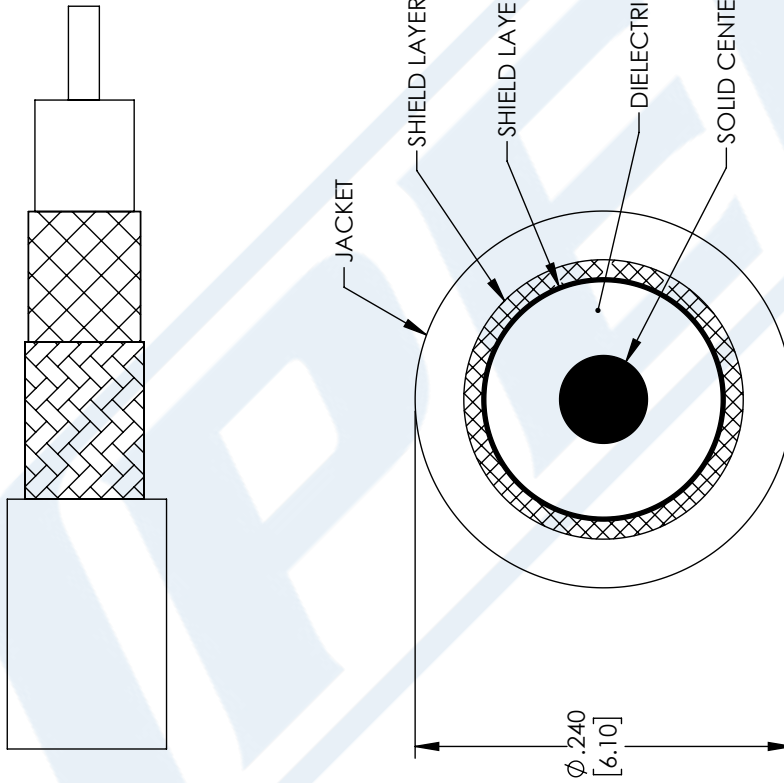
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URL: <https://www.pasternack.com/low-loss-flexible-lmr-240-fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-240-fr-p.aspx>

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REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	06-04-2021
		APPROVED
		SELLIS



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TOLERANCES:  
 .X = ±.2 [ .008] 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% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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ITEM NO. LMR-240-FR  
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SHEET 1 OF 1

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