



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
Mating Torque

500 Cycles
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

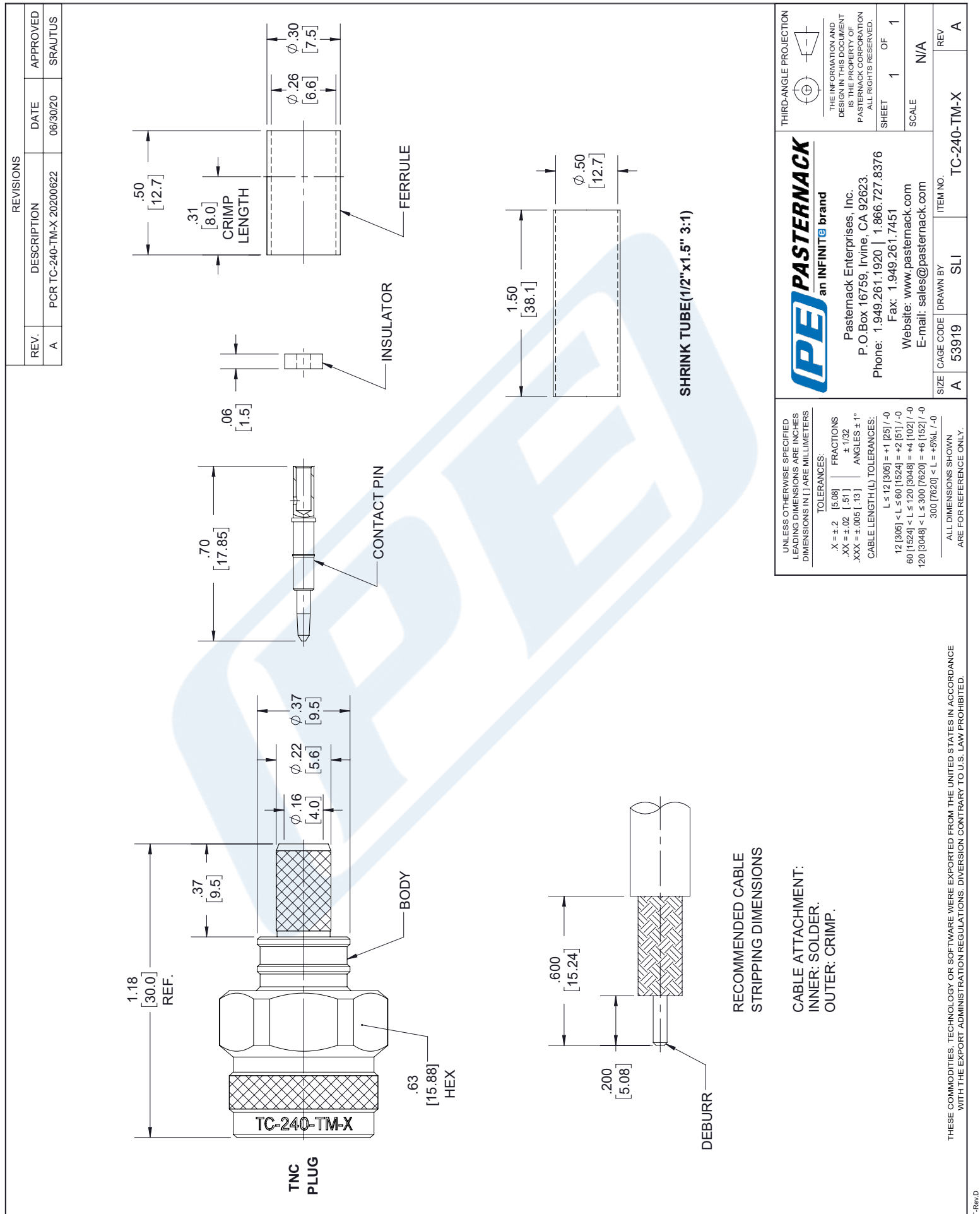
Notes:

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.

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](#)

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

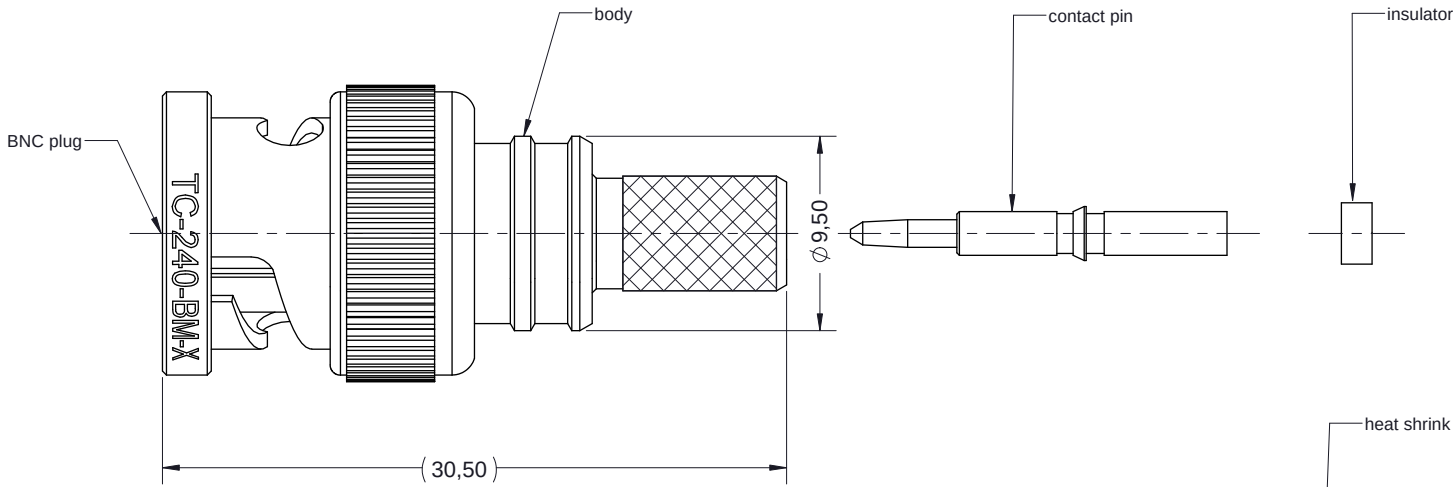
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.



8 7 6 5 4 3

NOTICE OF PROPRIETARY RIGHTS. THIS DOCUMENT CONTAINS CONFIDENTIAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

VER
A



C

I. MATERIALS & FINISHES

Components	Materials	Finishes	Thk. (μ")
Body	Brass	Albaloy	100
Center Cont.	Brass	Gold	50
Ferrule	Brass	Albaloy	100
Coupling Nut	Brass	Albaloy	100
Insulator	PTFE	N/A	N/A
Gasket	Silicone	Red	N/A

II. ELECTRICAL PROPERTIES

Impedance (Ω):	50
Frequency Range (GHz):	DC to 4 GHz
Working Voltage (V):	≥1000
Insulation Resistance (MΩ):	≥10000
VSWR:	≤1.30
Insertion Loss(dB, f/GHz):	-0.1x √f

III. ENVIRONMENT PROPERTIES

Temperature Range:	-40°c - +125°c
Thermal Shock:	MIL-STD 202G, Meth.107, Cond.B
Vibration:	MIL-STD 202G, Meth.204, Cond.B
Shock:	MIL-STD 202G, Meth.213, Cond I
Climatic Class:	IEC 60068 55/155/56
(2002/95/EC)RoHS:	Compliant

IV. MECHANICAL PROPERTIES

Center Conductor:	Solder
Outer Conductor.:	Crimp
Coupling Nut Torque (N.m):	Bayonet Lock
Cable-Connector Retention Force (N):	500
Durability (cycles):	500

V. TOOLING

Stripping Tool:	3192-152
Crimping Tool:	3190-667/CT-240/200/100

UNLESS OTHERWISE SPECIFIED

ALL DIMENSIONS ARE IN mm
MACHINED SURFACES FINISH 1.6 RMS MAX
REMOVE ALL BURRS 0.15X45° MAX. BREAK
MACHINE CORNERS 0.15X45° D MAX. FILLET
R. TOLERANCES ON DECIMALS
.X ±0.3 .XX ±0.15
ANGLES ±2° FRACTIONS ± N/A

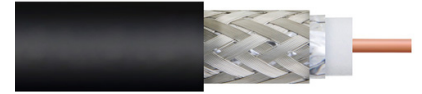
Scale: 4:1

Size: A3

COD

IDEN

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket



LMR-240-DB

Times Microwave Systems Coax Cable Specification

Configuration

- Low Loss Flexible Cable
- 2 Shield(s)

Features

- Easily Routed
- Low Loss Cable
- RF Shielding > 90dB
- Designed for Outdoor Use
- Watertight

Applications

- Jumper Assemblies
- Short Antenna Feeder Runs
- Wireless Communications

Description

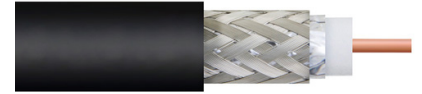
LMR-240-DB part number from Pasternack is a LMR-240-DB coax cable that is flexible. Pasternack LMR-240-DB flexible coax cable is 50 Ohm and has a PE (F) dielectric. Our LMR-240-DB coax is constructed with a 0.24 jacket made of PE. LMR-240-DB coax has a shield count of 2, a RF shielding of 90 dB and the maximum frequency for this Pasternack cable is 8 GHz. LMR-240-DB coax cable has an attenuation at 1 GHz of 7.66 dB.

Pasternack LMR-240-DB coax cables are part of over 40,000 RF, microwave and millimeter wave components. LMR-240-DB cables and our other RF parts are available for same day shipping worldwide. Custom RF cable assemblies using LMR-240-DB or other coax can be built and shipped same day as well.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Velocity of Propagation		84		%
Time Delay		1.21 [3.97]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			1,500	Vdc
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

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket



LMR-240-DB

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

Electrical Specification Notes:

Values at 25°C, sea level.//Attenuation = $0.242080 \cdot \sqrt{\text{FMHz}} + 0.000330$

Mechanical Specifications

Diameter	0.24 in [6.1 mm]
Weight	0.034 lbs/ft [0.05 kg/m]
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	
Dielectric	PE (F)	0.15 in [3.81 mm]
First Shield	Aluminum Tape	0.155 in [3.94 mm]
Second Shield	Tinned Copper Braid	0.178 in [4.52 mm]
Jacket	PE, Black	0.24 in [6.1 mm]

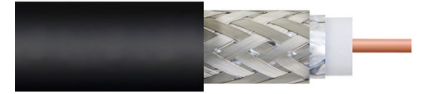
Environmental Specifications

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

Environmental Specification Notes:

Designed for indoor and outdoor use.

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket



LMR-240-DB

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

Plotted and Other Data

Notes:

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket 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: [Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket LMR-240-DB](#)

URL: <https://www.pasternack.com/low-loss-flexible-lmr240db-pe-jacket-double-shielded-black-lmr-240-db-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.