



TNC Male Right Angle For LMR-240, PE-C240, RG8X

RF Connectors Technical Data Sheet


TC-240-TM-RA-D

Times Microwave Systems Connector Specification

Configuration

- TNC Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: LMR-240, PE-C240, RG8X

Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.35:1
- Gold Plated Brass Contact
- 50 μ m contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's TNC male right angle connector with crimp/solder contact attachment for LMR-240 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 6 GHz and offers good VSWR of 1.35:1. Its right angle body geometry allows for easier connections in tight spaces.

Our TNC male right angle connector TC-240-TM-RA-D 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		6	GHz
VSWR			1.35:1	
Insertion Loss			0.25	dB
Operating Voltage (AC)			500	Vrms
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Insulation Resistance	5,000			MOhms

Mechanical Specifications

Size	
Length	1.17 in [29.72 mm]
Width	1.12 in [28.45 mm]
Height	0.63 in [16.00 mm]
Weight	0.07 lbs [29.94 g]
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: [TNC Male Right Angle For LMR-240, PE-C240, RG8X TC-240-TM-RA-D](#)



TNC Male Right Angle For LMR-240, PE-C240, RG8X

RF Connectors Technical Data Sheet



TC-240-TM-RA-D

Mating Torque 8 to 12 in-lbs [0.90 to 1.36 Nm]
Cable Retention Force 60 lbs 27.22 kg

Material Specifications

Description	Material	Plating
Contact	Brass	Gold 50 µin
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin
Coupling Nut	Brass	Tri-Metal 80 µin

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. D
Thermal Shock MIL-STD 202G, Meth. 107, Cond. B

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

Plotted and Other Data

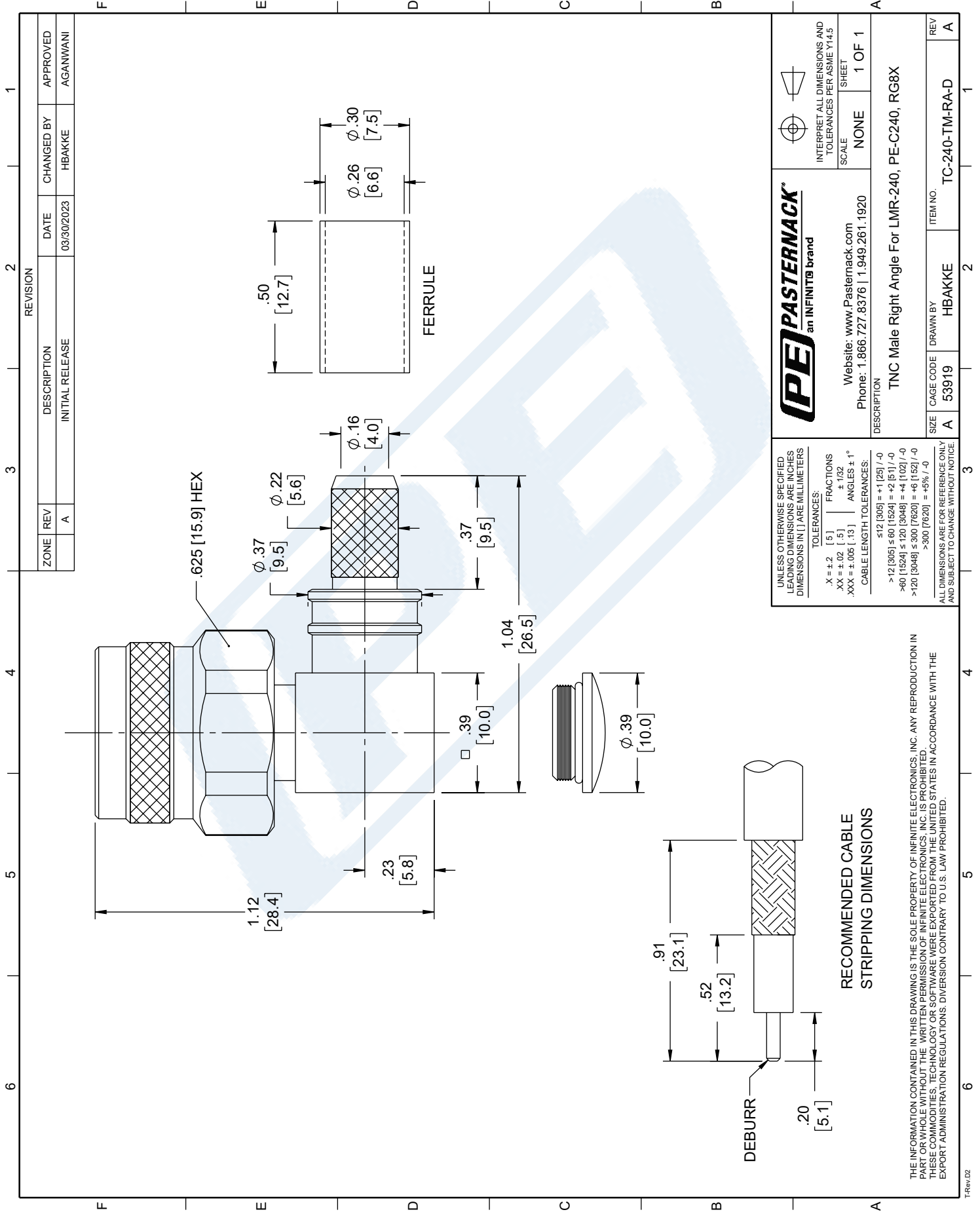
Notes:

TNC Male Right Angle For LMR-240, PE-C240, RG8X 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 Right Angle For LMR-240, PE-C240, RG8X TC-240-TM-RA-D](#)

URL: <https://www.pasternack.com/tnc-male-standard-lmr-240-pe-c240-rg8x-connector-tc-240-tm-ra-p.aspx>

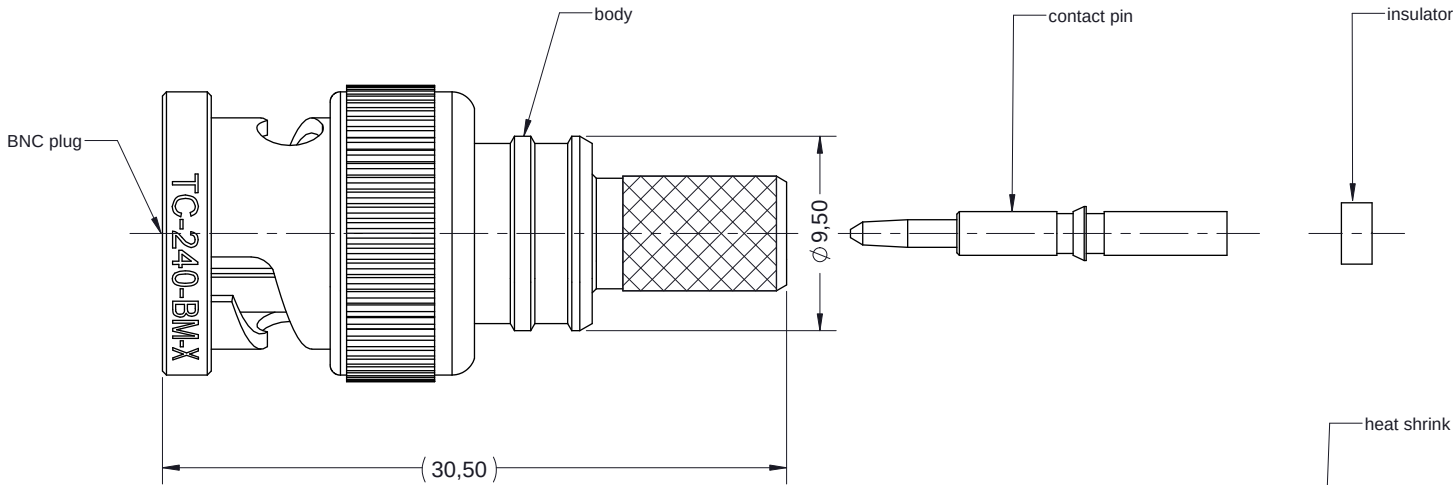
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I. MATERIALS & FINISHES

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

B

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

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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

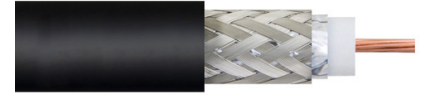
Scale: 4:1

Size: A3

COD

IDEN

Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



LMR-240-UF

Times Microwave Systems Coax Cable Specification

Configuration

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

Features

- Highly Flexible
- Low Loss Cable
- RF Shielding > 90dB
- Designed for Indoor/Outdoor Use

Applications

- Jumper Assemblies
- Short Antenna Feeder Runs
- Wireless Communications

Description

Pasternack's LMR series RF cables from Times Microwave offer an ideal solution for applications where flexibility is essential. These flexible cables provide low loss with a minimum bend radius of 0.75 in. for installation. The stranded center conductor and rubber jacket also make this RF cable ideal for applications requiring periodic or repeated flexing. Pasternack's LMR-240-UF cable is designed for use in indoor and outdoor applications. The LMR-240-UF's thermoplastic elastomer (TPE) jacket gives this RF cable a life expectancy of 10 years. This low loss RF cable is also double shielded to provide greater than 90 dB RF shielding.

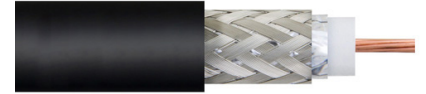
Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	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			4.28	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

Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



LMR-240-UF

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Attenuation, Typ	2.1	3.6	4.4	6.3	9.1	dB/100ft
	6.89	11.81	14.44	20.67	29.86	dB/100m
Input Power (CW), Max	960	550	450	310	220	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	11.8	13	13.8	15.5	24.4	dB/100ft
	38.71	42.65	45.28	50.85	80.05	dB/100m
Input Power (CW), Max	170	150	140	130	80	Watts

Electrical Specification Notes:

Values at 25°C, sea level.//Attenuation = $0.290501 \cdot \sqrt{\text{FMHz}} + 0.000396$

Mechanical Specifications

Diameter	0.24 in [6.1 mm]
Weight	0.032 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	0.13 lbs-ft [0.18 N-m]
Tensile Strength	80 lbs [36.29 kg]
Flat Plate Crush	13 lbs/in [0.23 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Strand	0.056 in [1.42 mm]
Conductor Type	Stranded	
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]
Outer Conductor		0 in [0 mm]
Jacket	TPE, Black	0.24 in [6.1 mm]

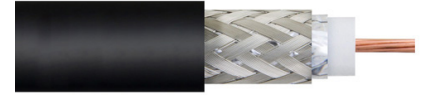
Environmental Specifications

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.

Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



LMR-240-UF

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

Plotted and Other Data

Notes:

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URL: <https://www.pasternack.com/50-ohm-ultra-flexible-lmr-240-uf-pe-jacket-tinned-copper-over-aluminum-tape-outer-conductor-double-shielded-lmr-240-uf-p.aspx>

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