

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF



TCP-240-NMC-LP

Configuration

- N Male Connector
- IEC-61169-16
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF, LMR-LW240
- Low PIM Design

Features

- Operating Frequency of 6 GHz Max.
- Good VSWR of 1.3:1
- PIM levels better than -160 dBc
- Silver Plated Brass Contact
- 200 µin minimum contact plating

Applications

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications

Description

Type N Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF and LMR-LW240 Cable, part number TCP-240-NMC-LP, from Fairview Microwave is in-stock and ships same day. This type N male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The type N male connector also has low passive intermodulation (PIM) of -160 dBc.

Fairview's type N male connector TCP-240-NMC-LP datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Insertion Loss			0.245	dB
Passive Intermodulation			-160	dBc
Impedance		50		Ohms

Mechanical Specifications

Size

- Length 1.545 in [39.24 mm]
- Width 0.748 in [19 mm]
- Height 0.748 in [19 mm]
- Weight 0.09 lbs [40.82 g]
- Mating Cycles 500 Cycles
- Mating Torque 44.25 in-lbs [[5.00 Nm]]

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF



TCP-240-NMC-LP

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 µin minimum
Insulation	PTFE	
Body	Brass	Tri-Metal 100 µin minimum
Coupling Nut	Brass	Tri-Metal 100 µin minimum
Retaining Ring	Brass	Silver 200 µin minimum
Gasket	Silicone	

Environmental Specifications

Temperature

Operating Range

-40 to +125 deg C

Shock

MIL-STD-202, Meth.213, Con.I

Vibration

MIL-STD-202, Meth.204, Cond.D

Thermal Shock

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

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

Plotted and Other Data

Notes:

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF



TCP-240-NMC-LP

Assembly Instruction

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SYM	REVISION DESCRIPTION	DFM	DATE	APPD	DATE
A	RELEASED FOR PRODUCTION	Jouken	2019/09/17	Monica	2019/09/17
B	ECN-000000001	Monica	2020/05/18	Tony Z	2020/05/18

Notes:

- Center pin crimp size Hex. 2.15x3.0mm(0.085"x0.118"), Contact pin retention force ≥10 lbs

I. MATERIALS & FINISHES				II. ELECTRICAL PROPERTIES			
Components	Materials	Finishes	Thk. (μ")	Impedance:	50 Ω	RECOMMENDED CABLE STRIPPING DIMS Connector Adds: 15.85 mm(0.624")	
Body	Brass	Albaloy	100	Frequency Range:	DC to 6 GHz		
Coupling Nut	Brass	Albaloy	100	Dielectric Withstanding Voltage:	1000 V rms		
Contact Pin	Brass	Silver	200	Insulation Resistance:	≥5000 MO		
Insulator	PTFE	-	-	VSWR:	±1.30		
Gasket	Silicone	Red	-	Insertion Loss:	-0.1x√f(GHz) dB		
Clamp/Ring	Brass	Silver	200	PIM(dBc): 2x-43dBm:	≤160	Interface Compatible with Standard: IEC-61169-16 MIL-STD-348	
Clamp2	Phosphor Bronze	Albaloy	100				

III. ENVIRONMENTAL PROPERTIES				IV. MECHANICAL PROPERTIES			
Temperature Range:	-40°C to +125°C			Center Contact:	Solder/Crimp		
Thermal Shock:	MIL-STD-202, Meth.107, Cond. B			Outer Contact:	Clamp		
Vibration:	MIL-STD-202, Meth.204, Cond. D			Coupling Nut Torque:	3 N.m		
Shock:	MIL-STD-202, Meth.213, Cond. I			Crk-Connector Retention Force:	250N		
Climatic Class:	IEC 60068-1/2/21			Duration:	500 Cycles		
RoHS:	Compliant						

UNLESS OTHERWISE SPECIFIED					
ALL DIMENSIONS ARE IN mm	DFM:	Jouken	TIMES MICROWAVE SYSTEMS		
MACHINED SURFACES FINISH 1.6 RMS MAX.	DATE:	2019/09/17	An Infinite Company		
REMOVE ALL BURRS 0.15X45° MAX. BREAK	CHKD:	Patrick	TCP-240-NMC-LP		
MACHINE CORNERS 0.15X45° D MAX. FILLET	DATE:	2019/09/17	Type N Male (Plug) Infrak Installation		
TOL. RANGES ON DECIMALS	APPD:	Monica	Straight Connector for TCOM-240 Cable		
.X ±0.15 .XX ±0.1 .XXX ±0.1	SCALE:	N/A	DATE:	2019/09/17	SHT: 1/1
ANGLES 22° FRACTIONS ±1/16	DO NOT SCALE DRAWING	DATE:	2019/09/17	REV:	B

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

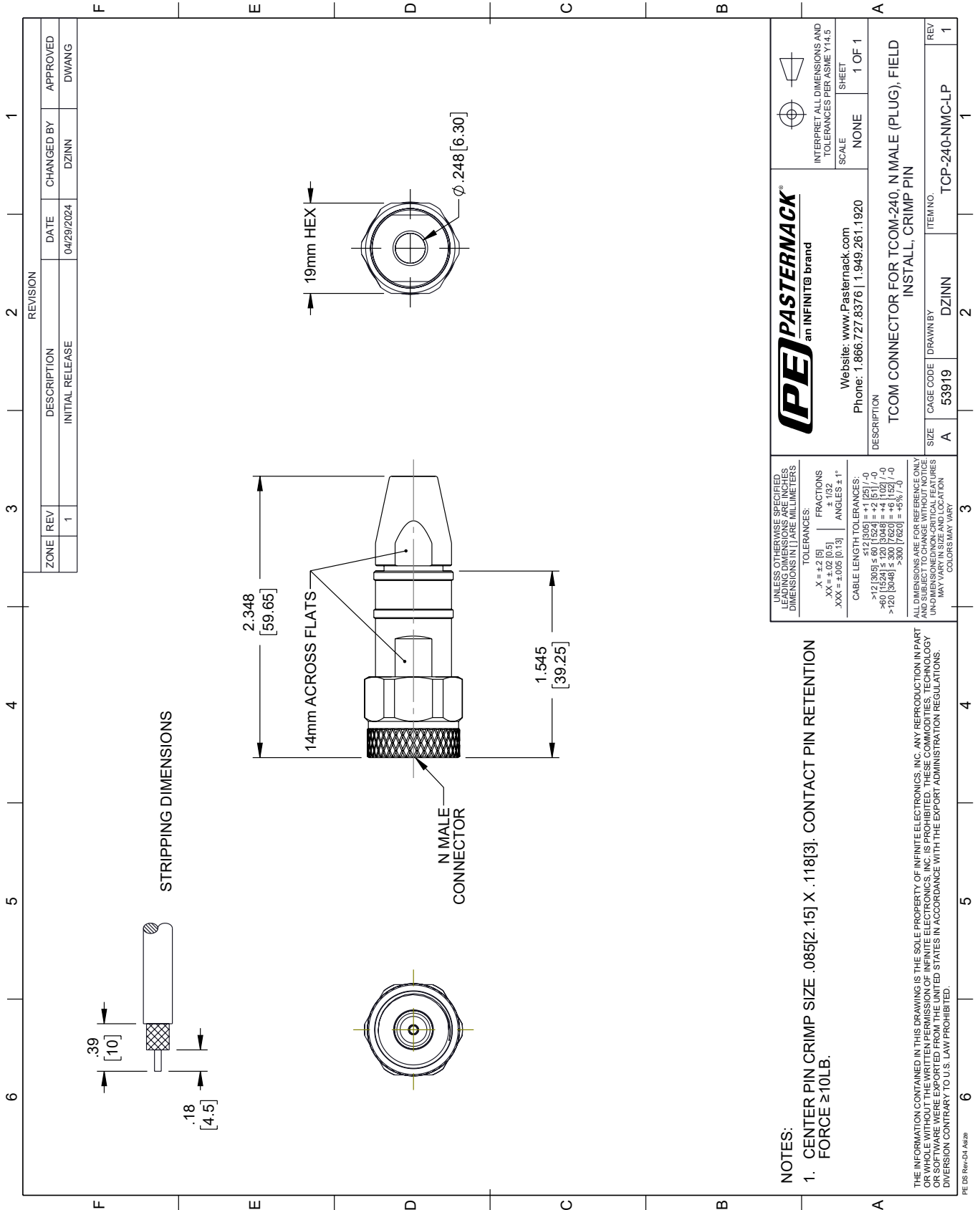
For additional information on this product, please click the following link: [N Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF TCP-240-NMC-LP](https://www.fairviewmicrowave.com/n-male-tcom-240-tcom-240-fr-lmr-240-lmr-240-db-lmr-240-fr-lmr-240-uf-lmr-240-uf-lmr-240-connector-tcp-240-nmc-lp-p.aspx)

URL: <https://www.fairviewmicrowave.com/n-male-tcom-240-tcom-240-fr-lmr-240-lmr-240-db-lmr-240-fr-lmr-240-uf-lmr-240-uf-lmr-240-connector-tcp-240-nmc-lp-p.aspx>

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TCP-240-NMC-LP CAD Drawing

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF



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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: TCOM CONNECTOR FOR TCOM-240, N MALE (PLUG), FIELD INSTALL, CRIMP PIN

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DZINN	TCP-240-NMC-LP

REV 1

RA SMA Male Connector Crimp/Non-Solder Contact Attachment for LMR-240 Cable

Times Microwave Systems Connector Specification

RA SMA male connector with crimp/non-solder contact attachment for Times' LMR-240, part number EZ-240-SM-RA-X, from Times Microwave offered by Fairview Microwave is in-stock and ships same day. This SMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. Its right angle body geometry facilitates connections in tight spaces.

Times Microwave's RA SMA male connector EZ-240-SM-RA-X datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Insertion Loss			0.25	dB
DWV (AC)			1,000	Vrms

Mechanical Specifications

Size	
Length	0.725 in [18.42 mm]
Width/Dia.	0.312 in [7.92 mm]
Height	0.88 in [22.35 mm]
Weight	0.022 lbs [9.98 g]
Mating Cycles	500 Cycles
Mating Torque	7 to 10 in-lbs [0.79 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Brass/Phosphor Bronze	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



Configuration:

- SMA Male Connector
- MIL-STD-348
- 50 Ohms
- Right Angle Body Geometry
- LMR-240 Interface Type
- Crimp/Non-Solder Contact Attachment
- 5/16 inch Hex

Features:

- Operating Frequency of 6 GHz Max.
- Good VSWR of 1.3:1
- Gold Plated Brass/Phosphor Bronze Contact
- 50 μinch contact plating

Applications:

- General Purpose Test
- Custom Cable Assemblies

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sales@fairviewmicrowave.com

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:

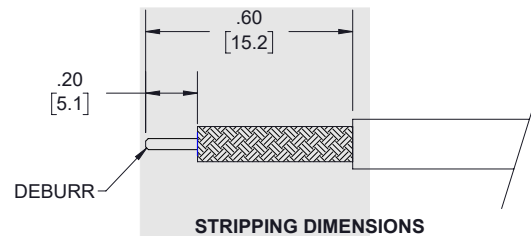
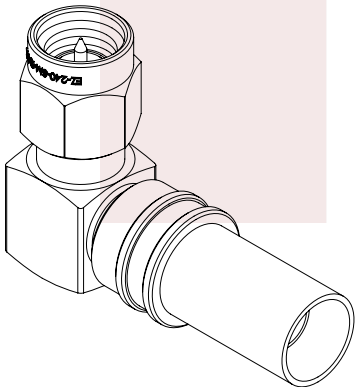
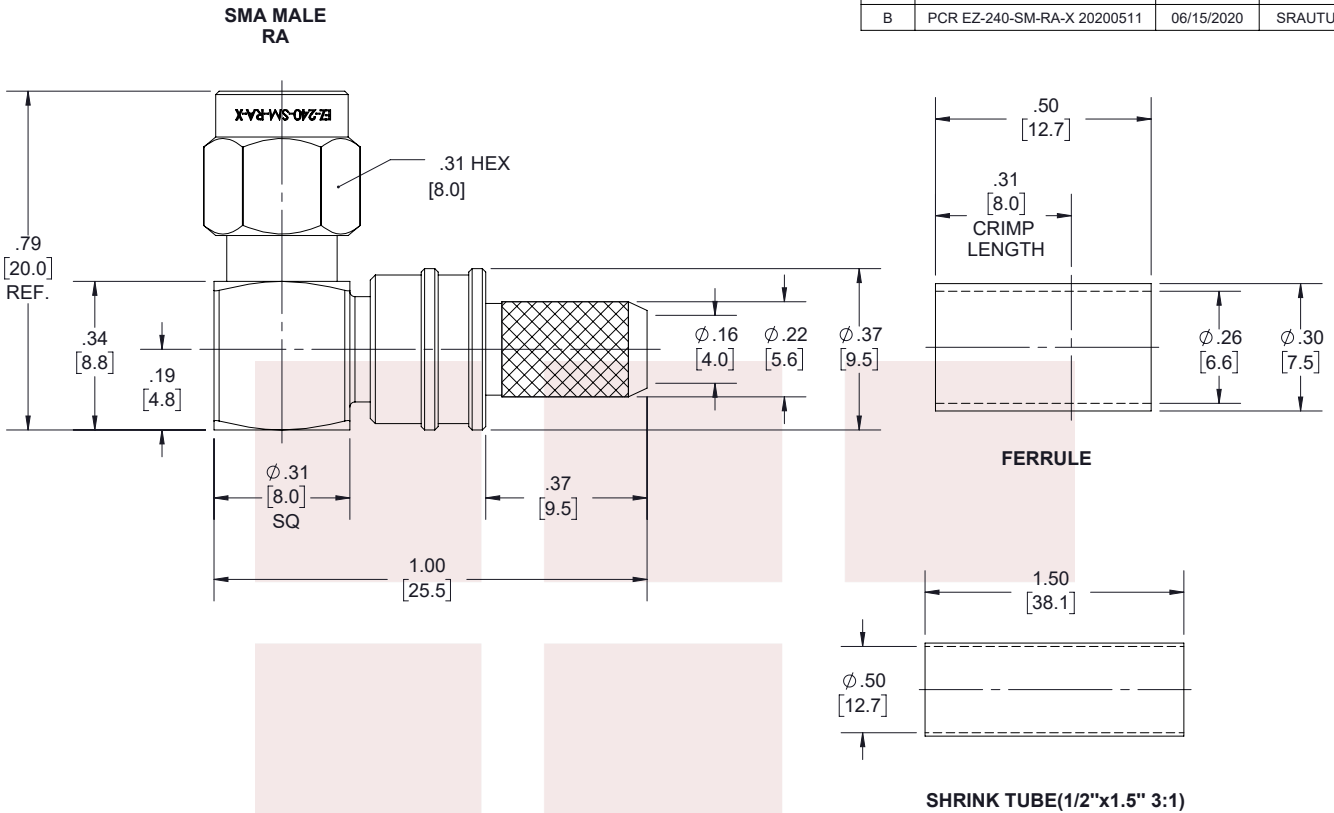
RA SMA Male Connector Crimp/Non-Solder Contact Attachment for LMR-240 Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [RA SMA Male Connector Crimp/Non-Solder Contact Attachment for LMR-240 Cable EZ-240-SM-RA-X](#)

URL: <https://www.fairviewmicrowave.com/sma-male-lmr-240-connector-ez-240-sm-ra-x-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR EZ-240-SM-RA-X 20200511	06/15/2020	SRAUTUS



NOTES:

- CABLE ATTACHMENT:
 - OUTER: CRIMP.
 - INNER: NON-SOLDER.
- CRIMP SIZE REQUIRED:
 - FERRULE: .255 [6.48] HEX. CRIMP TOOL.

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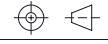
TITLE
RA SMA Male Connector Crimp/Non-Solder Contact Attachment for LMR-240 Cable

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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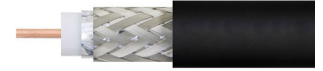
SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	PART NUMBER EZ-240-SM-RA-X	REV B
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Times Microwave LMR-240 Low Loss Flexible Coax Cable Black PE Jacket



LMR-240



Times Microwave Systems Connector Specification

Configuration

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

Features

- Max Operating Frequency of 8 GHz
- Low Loss Cable
- Phase Velocity 84% VoP

Applications

- Laboratory Applications
- General Purpose RF Interconnect

Description

LMR-240 coax cable from Fairview is only one of a large number of radio frequency twinaxial and coaxial cable types specifically stocked to be ready for quick shipment. Fairview Microwave LMR-240 coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss flexible 50 Ohm coax cable LMR-240 is constructed with a 0.24 inch diameter and PE jacket.

LMR-240 flexible 50 Ohm coax cable with PE jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.24 inch diameter and low loss flexible coax cable is built with a shield count of 2 and RF shielding of 90 dB.

Fairview Microwave LMR-240 coax is constructed with PE (F) dielectric and a maximum operating temperature of 85 degrees C. Times Microwave LMR-240 coax cable specs for this wire properties can be found on its RF coax cable LMR-240 datasheet PDF specifications above.

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

* LMR™ is a trademark of Times Microwave Systems.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Cutoff Frequency		31		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

Times Microwave LMR-240 Low Loss Flexible Coax Cable Black PE Jacket



LMR-240

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
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]
Weight	0.033 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	
Second Shield	Tinned Copper Braid	
Jacket	PE, Black	0.24 in [6.1 mm]

Times Microwave LMR-240 Low Loss Flexible Coax Cable Black PE Jacket



LMR-240

Environmental Specifications

Temperature

Operating 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:

Times Microwave LMR-240 Low Loss Flexible Coax Cable Black PE Jacket from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

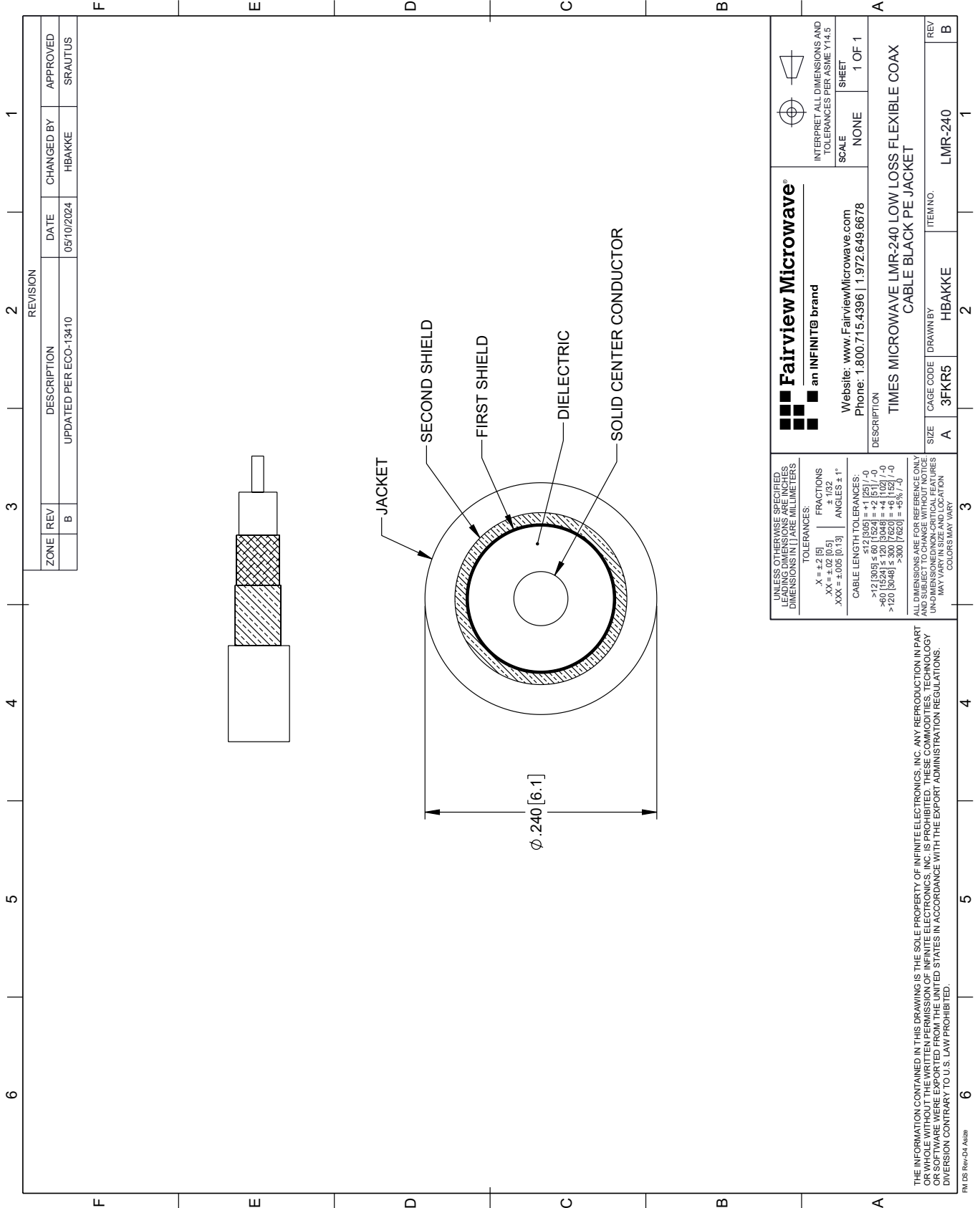
For additional information on this product, please click the following link: [Times Microwave LMR-240 Low Loss Flexible Coax Cable Black PE Jacket LMR-240](#)

URL: <https://www.fairviewmicrowave.com/lmr240-low-loss-flexible-coax-cable-pe-jacket-lmr-240-p.aspx>

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LMR-240 CAD Drawing

Times Microwave LMR-240 Low Loss Flexible Coax Cable Black PE Jacket



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION		
	B	UPDATED PER ECO-13410	HBAKKE	SRAUTUS

 Fairview Microwave [®] an INFINIT [®] brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: TIMES MICROWAVE LMR-240 LOW LOSS FLEXIBLE COAX CABLE BLACK PE JACKET			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	HBAKKE	LMR-240

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = +.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 ≤ 12 [305] ± .60 [1.524] = +.2 [5] / -0
 > 12 [305] ≤ 60 [1524] = +.2 [5] / -0
 > 60 [1524] ≤ 120 [3048] = +.4 [102] / -0
 > 120 [3048] ≤ 300 [7620] = +.6 [15.24] / -0

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PM 06 Rev-D4 Alt2b