

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-UF



TCP-400-NMC-LP

Configuration

- N Male Connector
- IEC-61169-16
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: TCOM-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-UF, LMR-LW400
- 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-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-UF and LMR-LW400 Cable, part number TCP-400-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-400-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	1.703 in [43.26 mm]
Width	0.748 in [19 mm]
Height	0.748 in [19 mm]
Weight	0.1 lbs [45.36 g]
Mating Cycles	500 Cycles
Mating Torque	44.25 in-lbs [[5.00 Nm]]

N Male Low PIM Connector Clamp/Solder
Attachment for TCOM-400, TCOM-400-FR, LMR-
400, LMR-400-DB, LMR-400-FR, LMR-400-UF



TCP-400-NMC-LP

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 µin minimum
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin minimum
Retaining Ring	Brass	Silver 200 µin minimum
Gasket	Silicone	
Crimp Sleeve	Brass	Tri-Metal

Environmental Specifications

Temperature

Operating Range

-40 to +125 deg C

Shock

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

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:

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-UF



TCP-400-NMC-LP

Assembly Instruction

NOTICE OF PROPRIETARY RIGHTS: THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION, 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.

SYNOPSIS/REVISION DESCRIPTION	DP/TM	DATE	APPRO
A RELEASED FOR PRODUCTION	Josken	2016/08/04	TZ
A1 Change the cable strip dimensions from 4.6mm to 4.5mm	Patrick	2018/12/13	Josken
B Add thread on contact pin	Moroka	2018/11/13	Emy-Z
C IEC-400-401	Moroka	2020/03/04	Emy-Z

Notes:

1. Centre pin clamp size Hex. 3.3x2.70mm(0.13"x0.11"). Contact pin retention force ≥ 10 lbs

I. MATERIALS & FINISHES

Components	Materials	Finishes	Thk. (µ")
Body	Brass	Albaloy	80
Center Cont.	Brass	Silver	200
Gasket	PTFE	-	-
Insulator	Silicone	Red	-
Clamp 1	Brass	Silver	200
Clamp 2	Phosphor Bronze	Albaloy	80
Ring	Brass	Silver	200
Barrel/Ferrule	Brass	Albaloy	80

II. ELECTRICAL PROPERTIES

Impedance (Ω):	50
Frequency Range (GHz):	DC to 6 GHz
Working Voltage (V):	1000
Insulation Resistance (MΩ):	≥2500
VSWR:	≤1.3
Insertion Loss(dB, f/GHz):	-0.1x √f
Im3 (2x43 dBm)	≤-160dBm(2x43dB)

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.G
Climate Class:	IEC 60068 55/155/21
RoHS:	Compliant

IV. MECHANICAL PROPERTIES

Center Cont.:	Crimp /Solder
Outer Cont.:	Clamp
Coupling Nut Torque (N.m):	3
Ch-Connector Retention Force (N):	400
Durability (cycles):	500

Assembly instruction

Recommended cable stripping dimensions
connector added; 17.2mm

Compatible with Standard:
IEC 61169-16

MATL:	UNLESS OTHERWISE SPECIFIED	DTM:	Josken
	ALL DIMENSIONS ARE IN mm	DATE	2018/12/13
	MACHINED SURFACES FINISH 1.6 RMS MAX.	CHKD	
	REMOVE ALL BURRS 0.15X45° MAX. BREAK	DATE	KG
	MACHINE CORNERS 0.15X45° D MAX. FILLET	DATE	2018/12/13
	R: TOLERANCES ON DECIMALS	APPRO	TZ
	X .251 - .X5 ±0.16		
	ANGLES 12° FRACTIONS ± 0.1		
USED ON O			
REV.	REV.	REV.	REV.
1	1	1	1
DO NOT SCALE DRAWING	CODE	68999	
	DATE	2018/12/13	
	1 of 1	3190-6297	

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-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.

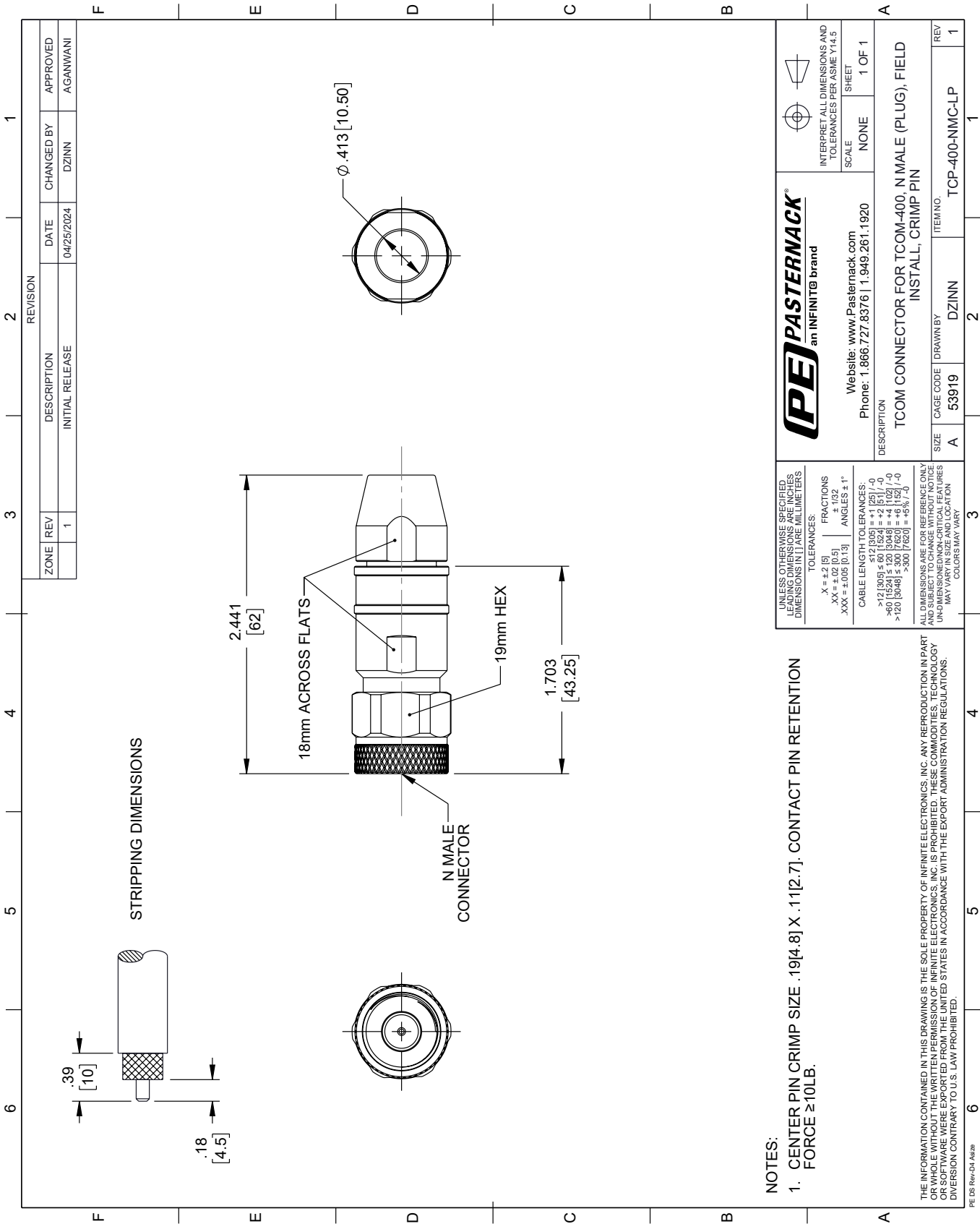
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URL: <https://www.fairviewmicrowave.com/n-male-tcom-400-tcom-400-fr-lmr-400-lmr-400-db-lmr-400-fr-lmr-400-uf-lmr-lw400-connector-tcp-400-nmc-lp-p.aspx>

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TCP-400-NMC-LP CAD Drawing

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-UF



N Male Low PIM Connector Clamp/Solder Attachment for TCOM-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-UF



TCP-400-NMC-LP

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- 50 Ohms
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TCP-400-NMC-LP

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Environmental Specifications

Temperature

Operating Range

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Vibration

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Thermal Shock

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

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

Plotted and Other Data

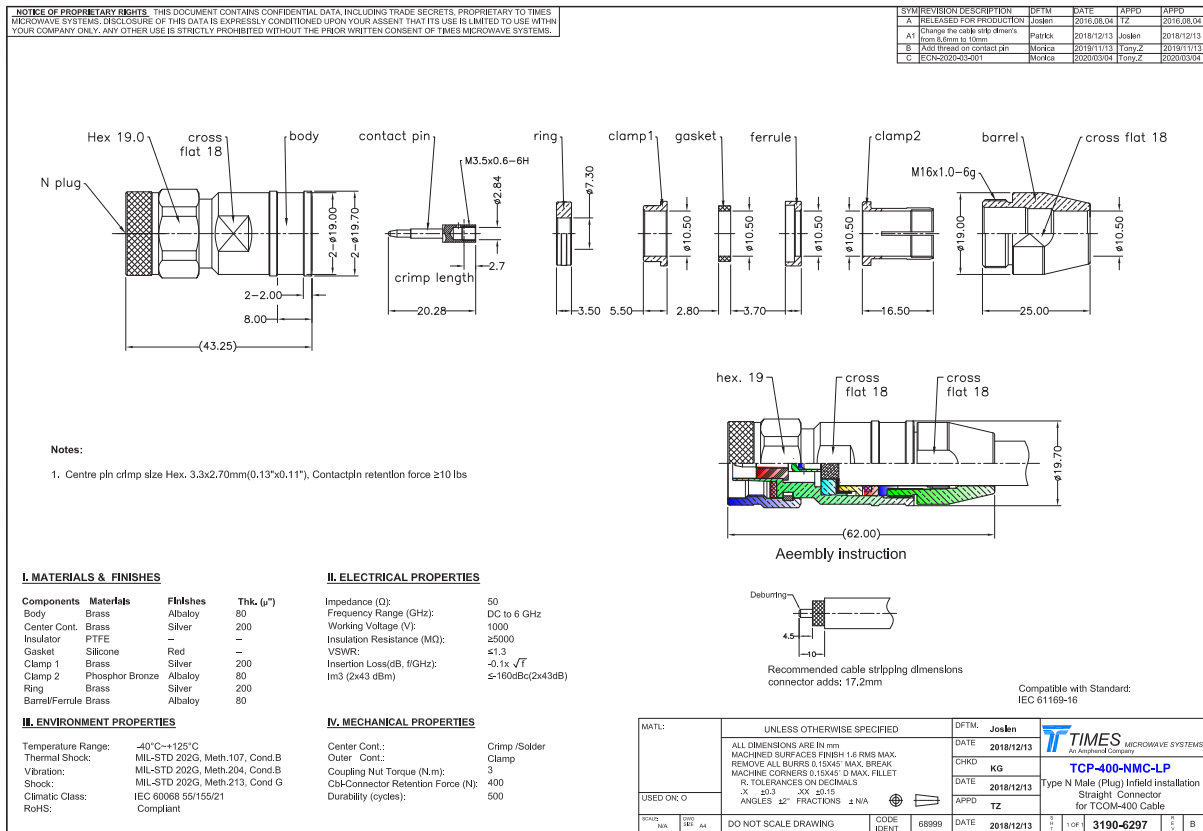
Notes:

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TCP-400-NMC-LP

Assembly Instruction



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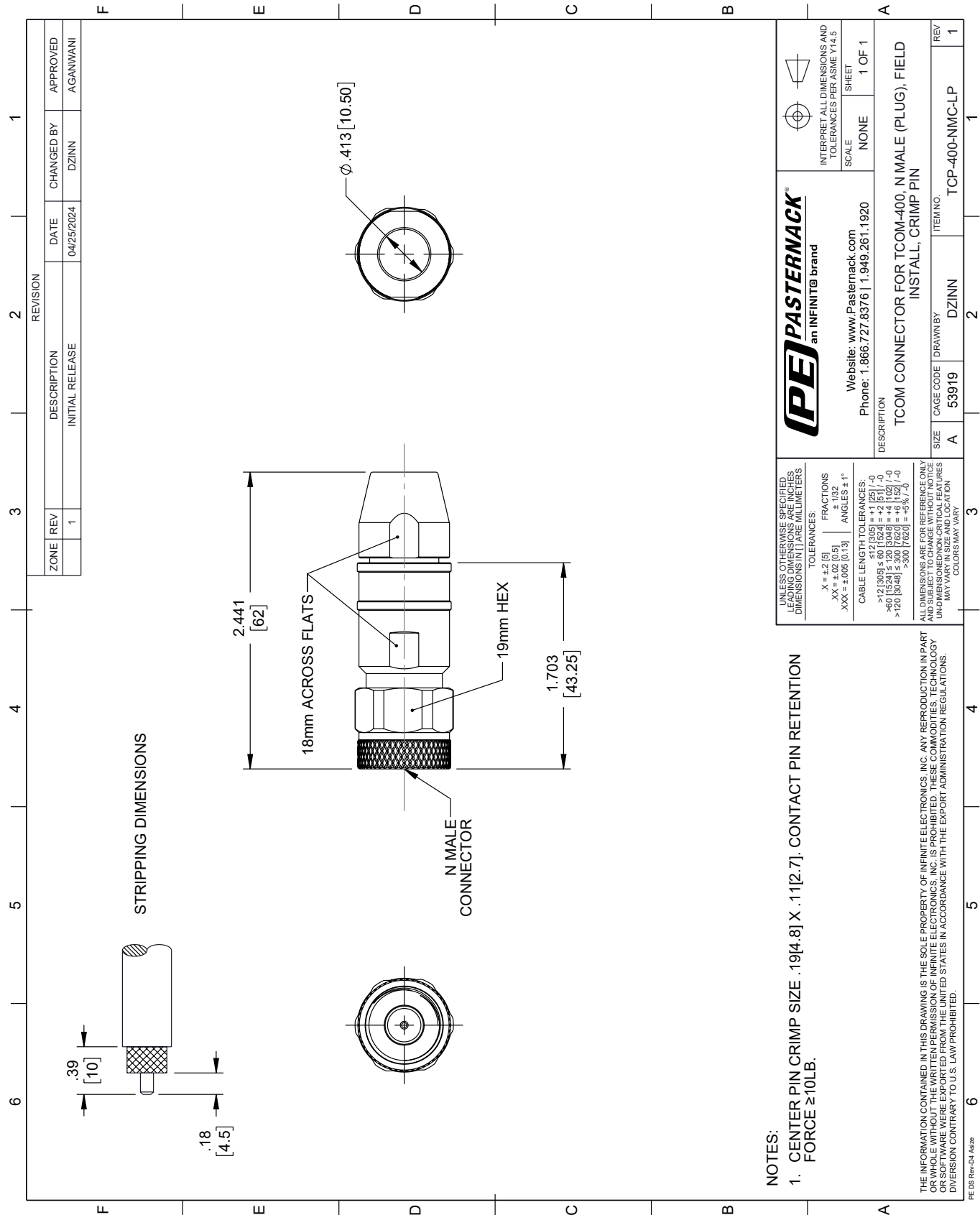
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TCP-400-NMC-LP CAD Drawing

N Male Low PIM Connector Clamp/Solder Attachment for TCOM-400, TCOM-400-FR, LMR-400, LMR-400-DB, LMR-400-FR, LMR-400-UF



Times Microwave LMR-400-UF Low Loss Flexible Coax Cable Black TPE Jacket



LMR-400-UF



Times Microwave Systems Connector Specification

Configuration

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

Features

- Max Operating Frequency of 8 GHz
- Low Loss Cable
- Phase Velocity 85% VoP

Applications

- Laboratory Applications
- General Purpose RF Interconnect

Description

LMR-400-UF 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-400-UF coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss flexible 50 Ohm coax cable LMR-400-UF is constructed with a 0.405 inch diameter and TPE jacket.

LMR-400-UF flexible 50 Ohm coax cable with TPE jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.405 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-400-UF coax is constructed with PE (F) dielectric and a maximum operating temperature of 85 degrees C. Times Microwave LMR-400-UF coax cable specs for this wire properties can be found on its RF coax cable LMR-400-UF datasheet PDF specifications above.

LMR-400-UF cable is part of more than one million RF, microwave and millimeter wave parts in stock at Fairview. This Times Microwave low loss LMR-400-UF 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		16.2		GHz
Impedance		50		Ohms
Velocity of Propagation		85		%
Time Delay		1.2 [3.94]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Jacket Spark			8,000	Vrms
Inner Conductor DC Resistance			1.07	Ohms/1000ft

Times Microwave LMR-400-UF Low Loss Flexible Coax Cable Black TPE Jacket



LMR-400-UF

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Outer Conductor DC Resistance			1.65	Ohms/1000ft
Nominal Capacitance		23.9 [78.41]		pF/ft [pF/m]
Nominal Inductance		0.06 [0.2]		uH/ft [uH/m]
Input Power (Peak)			16	kWatts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	1.1	1.8	2.2	3.3	4.7	dB/100ft
	3.61	5.91	7.22	10.83	15.42	dB/100m
Input Power (CW), Max	2,140	1,220	1,000	690	480	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	6.2	6.8	7.2	8.1	13	dB/100ft
	20.34	22.31	23.62	26.57	42.65	dB/100m
Input Power (CW), Max	360	330	310	280	170	Watts

Mechanical Specifications

Diameter	0.405 in [10.29 mm]
Weight	0.087 lbs/ft [0.13 kg/m]
Min. Bend Radius (Installation)	1 in [25.4 mm]
Min. Bend Radius (Repeated)	4 in [101.6 mm]
Bending Moment	0.38 lbs-ft [0.52 N-m]
Tensile Strength	160 lbs [72.57 kg]
Flat Plate Crush	20 lbs/in [0.36 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Strand	0.108 in [2.74 mm]
Conductor Type	Stranded	
Dielectric	PE (F)	0.285 in [7.24 mm]
First Shield	Aluminum Tape	
Second Shield	Tinned Copper Braid	
Jacket	TPE, Black	0.405 in [10.29 mm]

Times Microwave LMR-400-UF Low Loss Flexible Coax Cable Black TPE Jacket



LMR-400-UF

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-400-UF Low Loss Flexible Coax Cable Black TPE 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-400-UF Low Loss Flexible Coax Cable Black TPE Jacket LMR-400-UF](#)

URL: <https://www.fairviewmicrowave.com/lmr400uf-low-loss-flexible-coax-cable-tpe-jacket-lmr-400-uf-p.aspx>

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LMR-400-UF CAD Drawing
 Times Microwave LMR-400-UF Low Loss Flexible Coax Cable Black TPE Jacket

