





## SMA Male Connector Crimp/Solder Attachment for LMR-400, PE-C400

### RF Connectors Technical Data Sheet

**TC-400-SM-X**

#### Times Microwave Systems Connector Specification

##### Configuration

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: LMR-400, PE-C400

##### Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.22:1
- Gold Plated Brass Contact
- 50 $\mu$ ” Minimum contact plating

##### Applications

- General Purpose Test
- Custom Cable Assemblies

##### Description

Pasternack's TC-400-SM-X SMA male connector with crimp/solder attachment for LMR-400 and PE-C400 is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.22:1.

Our SMA male connector TC-400-SM-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		6	GHz
VSWR			1.22:1	
Operating Voltage (AC)			335	Vrms
Dielectric Withstanding Voltage (DC)			500	Vdc
Inner Conductor DC Resistance			3	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms

##### Mechanical Specifications

###### Size

Length	1.23 in [31.24 mm]
Width/Dia.	0.5 in [12.70 mm]
Height	0.5 in [12.7 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for LMR-400, PE-C400 TC-400-SM-X](#)



SMA Male Connector Crimp/Solder Attachment for LMR-400, PE-C400

**RF Connectors**  
**Technical Data Sheet**

**TC-400-SM-X**

Weight	0.051 lbs [23.13 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	Gold 50µ" Minimum
Insulation	Teflon	
Body	Brass	Tri-Metal
Coupling Nut	Brass	Tri-Metal

**Environmental Specifications**

**Temperature**

Operating Range	-55 to +125 deg C
Humidity	MIL-STD-202, Method 106
Shock	MIL-STD-202, Method 213, Cond. I
Vibration	MIL-STD-202, Method 204, Cond. D

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

**Plotted and Other Data**

Notes:

SMA Male Connector Crimp/Solder Attachment for LMR-400, PE-C400 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: [SMA Male Connector Crimp/Solder Attachment for LMR-400, PE-C400 TC-400-SM-X](#)

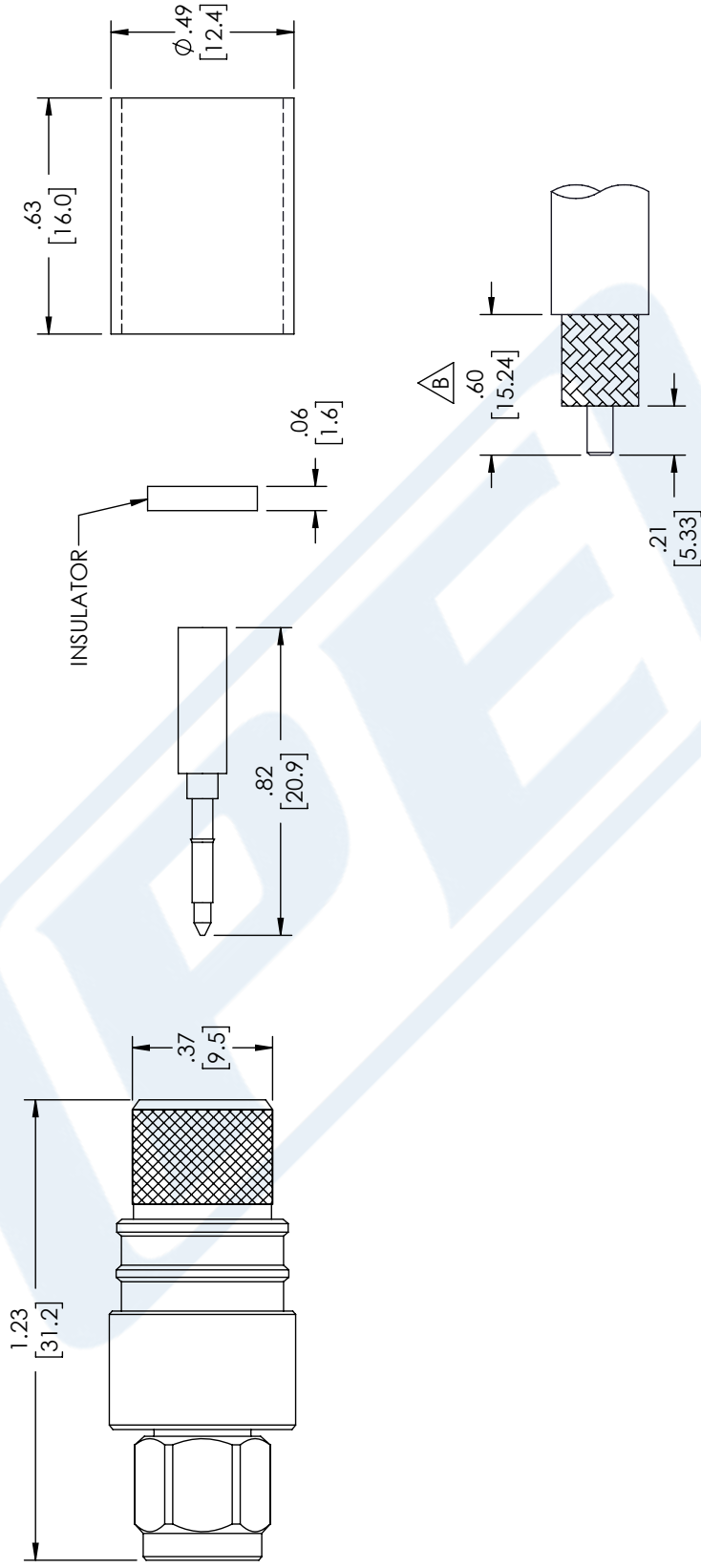
URL: <https://www.pasternack.com/sma-male-lmr-400-pe-c400-connector-tc-400-sm-x-p.aspx>

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.

# TC-400-SM-X CAD Drawing

SMA Male Connector Crimp/Solder Attachment for LMR-400, PE-C400

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR TC-400-SM-X 20220513; UPDATE STRIPPING DIM	6/2/22	SRAUTUS



RECOMMENDED CABLE STRIPPING DIMENSION

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 [5.08]     FRACTIONS ± 1/32          .XX = ±.02 [ .51]     ANGLES ± 1°          .XXX = ±.005 [ .13]</p> <p>CABLE LENGTH (L), TOLERANCES:          L ≤ 12 [305] = +1 [25] / -0          12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0          60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0          120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0          300 [7620] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
	<p>SIZE A     CAGE CODE 53919     DRAWN BY HBAKKE     ITEM NO. TC-400-SM-X-PE     REV B</p>

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## LMR-400-FR Fire Rated version of the 400 series Low Loss Coax

### 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 84% VoP
- Max Operating Temperature +85°C
- Min Install Bend Radius of 1 inches

#### Applications

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

#### Description

LMR-400-FR Fire Rated version of the 400 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-400-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-400-FR is constructed with a 0.405 inch diameter and Black FRPE jacket.

LMR-400-FR flexible 50 Ohm coax cable with FRPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.405 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-400-FR FRPE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-400-FR coax cable provides specs for this wire on its RF coax cable LMR-400-FR datasheet.

LMR-400-FR cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss flexible LMR-400-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		84		%
Time Delay		1.2 3.94		ns/ft ns/m
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			2,500	Vdc

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-400-FR Fire Rated version of the 400 series Low Loss Coax LMR-400-FR](#)



## LMR-400-FR Fire Rated version of the 400 series Low Loss Coax

### RF Cables Technical Data Sheet



LMR-400-FR

Jacket Spark	8,000	Vrms
Inner Conductor DC Resistance	1.39	Ohms/1000ft
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	0.9	1.5	1.9	2.7	3.9	dB/100ft
	2.95	4.92	6.23	8.86	12.8	dB/100m
Input Power (CW), Max	2,570	1,470	1,200	830	580	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	5.1	5.7	6	6.8	10.8	dB/100ft
	16.73	18.7	19.69	22.31	35.43	dB/100m
Input Power (CW), Max	440	400	370	330	210	Watts

#### Mechanical Specifications

Diameter	0.405 in 10.29 mm
Weight	0.068 lbs/ft [0.1 Kg/m]
Min. Bend Radius (Installation)	1 in [25.4 mm]
Min. Bend Radius (Repeated)	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Tensile Strength	160 lbs [72.57 kg]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.108 in [2.74 mm]

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LMR-400-FR Fire Rated version of the 400 series Low Loss Coax

RF Cables  
Technical Data Sheet



LMR-400-FR

Conductor Type	Solid	
Dielectric	Foam PE	0.285 in [7.24 mm]
First Shield	Aluminum Tape	[ ]
Second Shield	Tinned Copper	[ ]
Jacket	FRPE, Black	0.405 in [10.29 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:

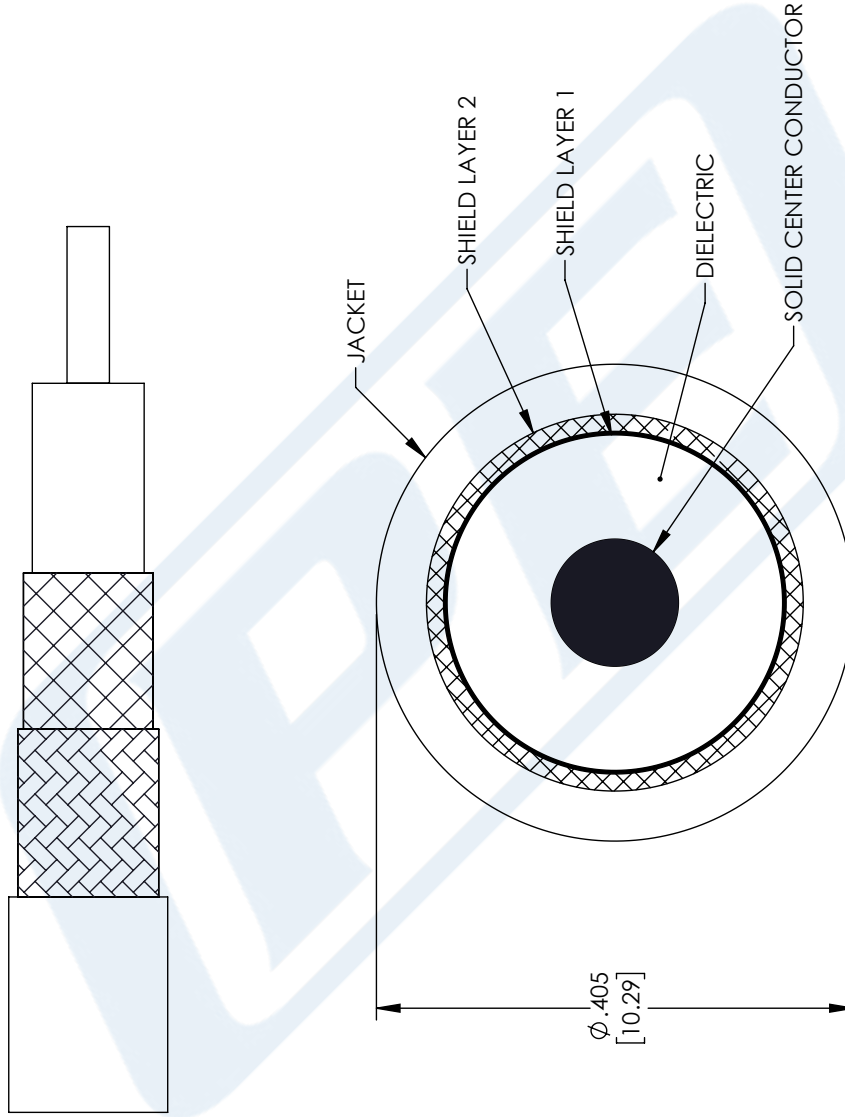
LMR-400-FR Fire Rated version of the 400 series Low Loss Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/low-loss-flexible-lmr-400-fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-400-fr-p.aspx>

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



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SIZE [CAGE CODE] DRAWN BY ITEM NO.  
 A 53919 MVEERAPPAN LMR-400-FR

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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