

7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-UF



TCP-600-716MC-LP

Configuration

- 7/16 DIN Male Connector
- IEC-61169-4
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-UF, LMR-LW600
- 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 μ in minimum contact plating

Applications

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

Description

7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-UF and LMR-LW600 Cable, part number TCP-600-716MC-LP, from Fairview Microwave is in-stock and ships same day. This 7/16 DIN male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The 7/16 DIN male connector also has low passive intermodulation (PIM) of -160 dBc.

Fairview's 7/16 DIN male connector TCP-600-716MC-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	1.783 in [45.29 mm]
Width	1.26 in [32 mm]
Height	1.26 in [32 mm]
Weight	0.2 lbs [90.72 g]
Mating Cycles	500 Cycles
Mating Torque	44.25 in-lbs [[5.00 Nm]]

7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-UF



TCP-600-716MC-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.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:

7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-UF



TCP-600-716MC-LP

Assembly Instruction

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.

SYNOPSIS DESCRIPTION	DTM	DATE	APPRO
A. RELEASED FOR PRODUCTION	Joslen	2017/06/26	TZ
B. Update Drawing	Patricia	2018/05/16	Joslen
C. IEC-60608-02-001	Markus	2020/01/05	Form-2

Notes:

- Center pin clamp size Hex, 4.83x2.70mm(0.19"x0.11"). Contact pin retention force ≥ 10 lbs.

Assembly Section

I. MATERIALS & FINISHES

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

II. ELECTRICAL PROPERTIES

Impedance (Ω):	50
Frequency Range (GHz):	DC to 6 GHz
Dielectric Withstanding Voltage (V):	3000
Insulation Resistance (MΩ):	≥5000
VSWR:	≤1.30
Insertion Loss(dB, f/GHz):	-0.1x √f
Im3 (2x43 dBm)	≤-160dBc

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
Climate Class:	IEC 60068 55/155/21
(2011/65/EU)RoHS:	Compliant

IV. MECHANICAL PROPERTIES

Center Cont.:	Crimp or solder
Outer Cont.:	Clamp
Coupling Nut Torque (N.m):	25~30
Clamp Retention Force (N):	500
Durability (cycles):	500

Recommended cable stripping dimensions
Connector add: 15.2 mm

Compatible with Standard: IEC 61169-4

MATERIAL:		UNLESS OTHERWISE SPECIFIED		DTM	Joslen
USE ON O		ALL DIMENSIONS ARE IN mm MACHINED SURFACES FINISH 1.6 RMS MAX. REMOVE ALL BURRS 0.13X45 MAX. BREAK MACHINE CORNERS 0.13X45 D MAX. FILET R. TOLERANCES ON DECIMALS X .251 X.2515 ANGLES 12° FRACTIONS ± 0.1 N/A		DATE	2017/06/26
				CHKD	KG
				DATE	2017/06/26
				APPRO	TZ
REV	DATE	DESCRIPTION	CODE	DATE	DATE
1	2017/06/26	DO NOT SCALE DRAWING	68999	2017/06/26	1 OF 1
				3190-6390	

7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-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.

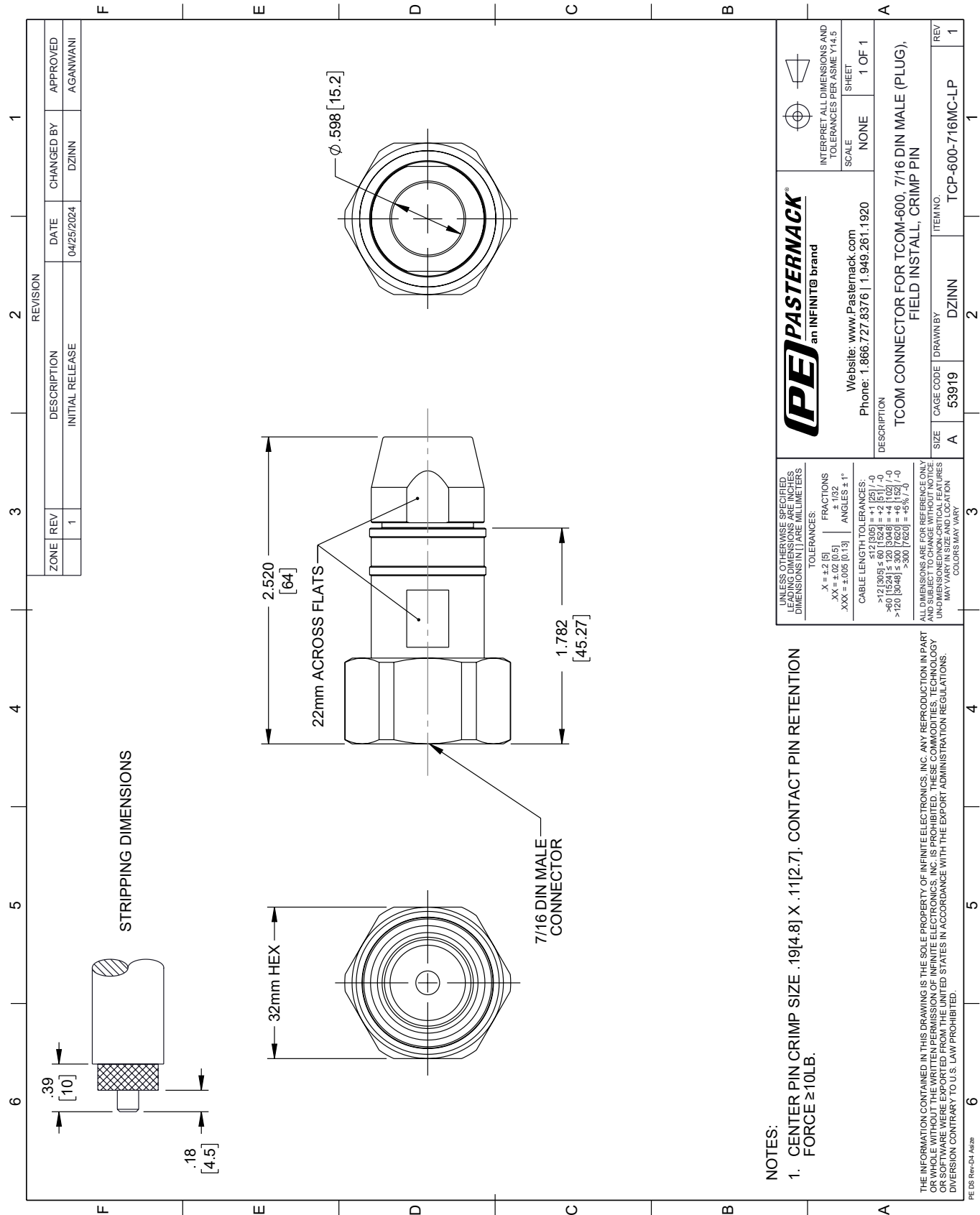
For additional information on this product, please click the following link: [7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-UF TCP-600-716MC-LP](#)

URL: <https://www.fairviewmicrowave.com/7-16-din-male-tcom-600-tcom-600-fr-lmr-600-lmr-600-db-lmr-600-fr-lmr-600-uf-lmr-lw600-connector-tcp-600-716mc-lp-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

TCP-600-716MC-LP CAD Drawing

7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-600, TCOM-600-FR, LMR-600, LMR-600-DB, LMR-600-FR, LMR-600-UF



7/16 DIN Male Right Angle Connector Crimp/Solder Attachment for .600 inch, LMR-600, LMR-600-DB

RA 7/16 DIN male connector with crimp/solder attachment for .600 inch, LMR-600 and LMR-600-DB, part number FMCN1835, from Fairview Microwave is in-stock and ships same day. This 7/16 DIN male connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.15:1. Its right angle body geometry facilitates connections in tight spaces.

Fairview's RA 7/16 DIN male connector FMCN1835 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		3	GHz
VSWR			1.15:1	
Insertion Loss			0.05	dB
DWV (AC)			4,000	Vrms

Mechanical Specifications

Size	
Length	1.54 in [39.12 mm]
Width/Dia.	1.26 in [32.00 mm]
Height	1.96 in [49.78 mm]
Weight	0.282 lbs [127.91 g]
Mating Torque	221 in-lbs [24.97 Nm]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 3μ m minimum
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal 3μ m minimum
Body	Brass	Tri-Metal 3μ m minimum
Coupling Nut	Brass	Tri-Metal 3μ m minimum

Environmental Specifications

Temperature	
Operating Range	-40 to +85 deg C



Configuration:

- 7/16 DIN Male Connector
- 50 Ohms
- Right Angle Body Geometry
- .600 inch, LMR-600, LMR-600-DB Interface Type
- Crimp/Solder Attachment
- 1 1/4 in. Hex

Features:

- Operating Frequency of 3 GHz Max.
- Excellent VSWR of 1.15:1
- Silver Plated Brass Contact
- 3μ m minimum contact plating

Applications:

- General Purpose Test
- Custom Cable Assemblies

Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Shock
Vibration

MIL-STD 202,Meth.213, Cond. I
MIL-STD 202,Meth.204, Cond. B

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

Plotted and Other Data

Notes:

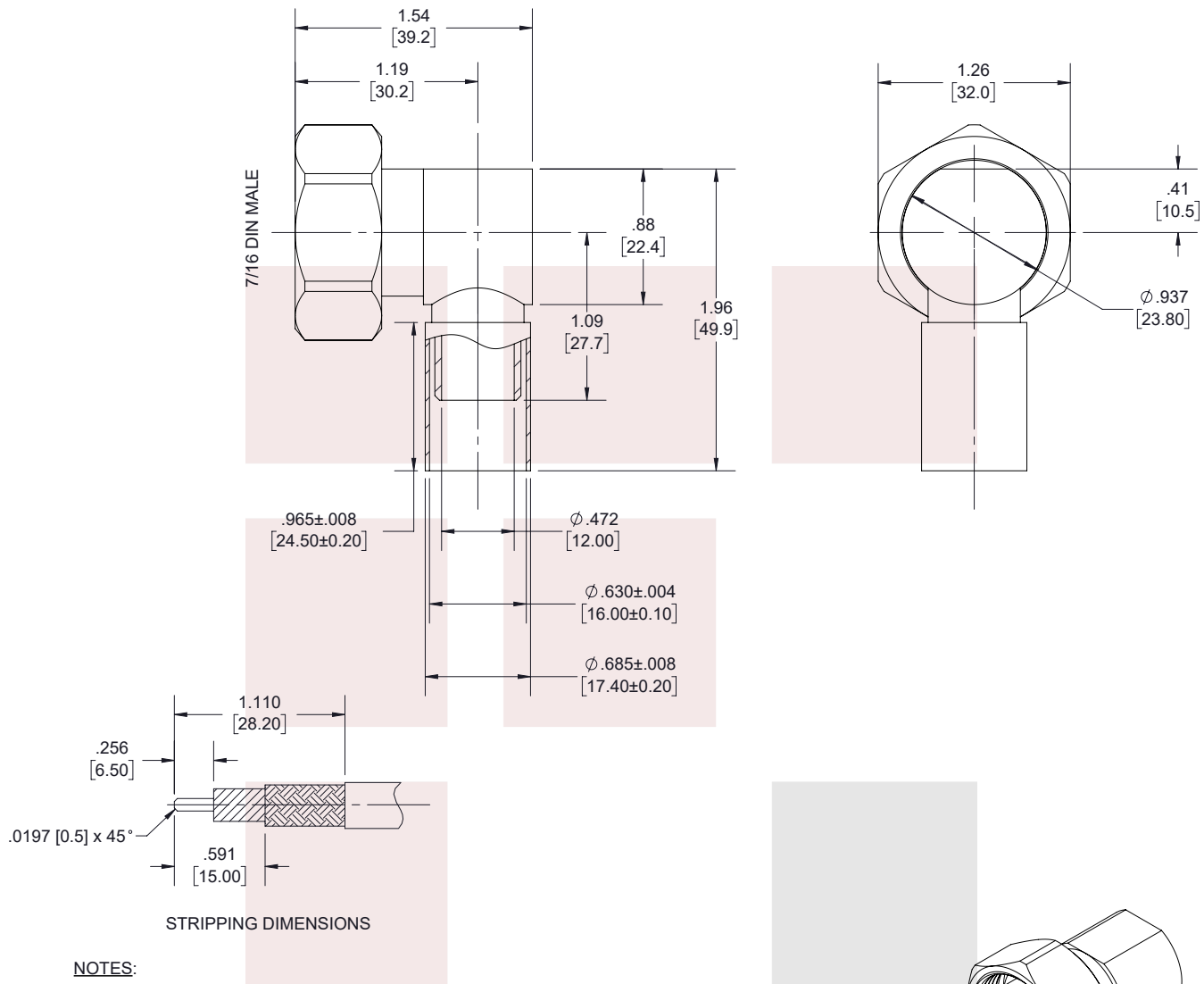
7/16 DIN Male Right Angle Connector Crimp/Solder Attachment for .600 inch, LMR-600, LMR-600-DB from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [7/16 DIN Male Right Angle Connector Crimp/Solder Attachment for .600 inch, LMR-600, LMR-600-DB FMCN1835](#)

URL: <https://www.fairviewmicrowave.com/7-16-din-male-.600-lmr-600-lmr-600-db-connector-fmcn1835-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

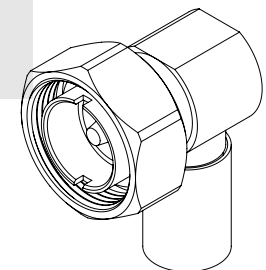
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	02/11/2022	A.GANWANI



NOTES:

- CABLE ATTACHMENT:
 - OUTER: CRIMP.
 - INNER: SOLDER.
- CRIMP SIZE REQUIRED:
 - FERRULE: .610" [15.5] HEX. CRIMP TOOL.
 - CONTACT: SOLDER.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.



TITLE

7/16 DIN Male Right Angle Connector Crimp/Solder Attachment for .600 inch, LMR-600, LMR-600-DB

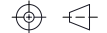
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.GLEBOVA	ITEM NO. FMCN1835	REV A
--------	-----------------	--------------------	-------------------	-------

T-Rev.D

Times Microwave LMR-600-UF Low Loss Flexible Coax Cable Black TPE Jacket Ultra Flex



LMR-600-UF



Times Microwave Systems Connector Specification

Configuration

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

Features

- Max Operating Frequency of 8 GHz
- Phase Velocity 87% VoP
- Stranded Center Conductor Resulting in an Ultra Flexible Coax
- Max Operating Temperature +85°C
- TPE Jacket
- Min Install Bend Radius of 1.5 inches

Applications

- Laboratory Applications
- General Purpose RF Interconnect
- RF Test Systems Requiring Highly Flexible Coax
- Antenna Installs

Description

LMR-600-UF Ultra Flex version of the 600 series Low Loss Coax from Times Microwave is part of the large product offering by Fairview Microwave of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Fairview Microwave LMR-600-UF coax cable is manufactured in an ultra flexible design and has a 50 Ohm impedance. This low loss and ultra flexible 50 Ohm coax cable LMR-600-UF is constructed with a 0.590 inch diameter and Black TPE jacket.

LMR-600-UF flexible 50 Ohm coax cable with TPE jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.590 inch diameter and low loss ultra flexible coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-600-UF TPE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Fairview Microwave's offering of LMR-600-UF coax cable provides specs for this wire on its RF coax cable LMR-600-UF datasheet.

LMR-600-UF cable is part of more than one million RF, microwave parts in stock at Fairview Microwave. This Times Microwave low loss ultra flexible LMR-600-UF coax cable is ready to buy and can be shipped worldwide. Fairview Microwave 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		8	GHz
Impedance		50		Ohms
Velocity of Propagation		87		%
Time Delay		1.17 [3.84]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			4,000	Vdc
Jacket Spark			8,000	Vrms
Inner Conductor DC Resistance			0.43	Ohms/1000ft
Outer Conductor DC Resistance			1.2	Ohms/1000ft

Times Microwave LMR-600-UF Low Loss Flexible Coax Cable Black TPE Jacket Ultra Flex



LMR-600-UF

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Nominal Capacitance		23.4 [76.77]		pF/ft [pF/m]
Nominal Inductance		0.058 [0.19]		uH/ft [uH/m]
Input Power (Peak)			40	kWatts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	0.7	1.2	1.4	2.1	3	dB/100ft
	2.3	3.94	4.59	6.89	9.84	dB/100m
Input Power (CW), Max	3,530	2,000	1,640	1,120	770	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	4	4.4	4.7	5.3	8.7	dB/100ft
	13.12	14.44	15.42	17.39	28.54	dB/100m
Input Power (CW), Max	580	520	490	430	260	Watts

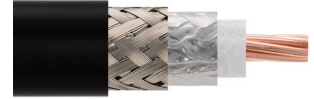
Mechanical Specifications

Diameter	0.59 in [14.99 mm]
Weight	0.176 lbs/ft [0.26 kg/m]
Min. Bend Radius (Installation)	1.5 in [38.1 mm]
Min. Bend Radius (Repeated)	6 in [152.4 mm]
Bending Moment	1.75 lbs-ft [2.37 N-m]
Tensile Strength	350 lbs [158.76 kg]
Flat Plate Crush	40 lbs/in [0.71 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.176 in [4.47 mm]
Conductor Type	Stranded	
Dielectric	Foam PE	0.455 in [11.56 mm]
First Shield	Aluminum Tape	
Second Shield	Tinned Copper	
Jacket	TPE, Black	0.59 in [14.99 mm]

Times Microwave LMR-600-UF Low Loss Flexible Coax Cable Black TPE Jacket Ultra Flex



LMR-600-UF

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:
Indoor/Outdoor

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

Plotted and Other Data

Notes:

Times Microwave LMR-600-UF Low Loss Flexible Coax Cable Black TPE Jacket Ultra Flex 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-600-UF Low Loss Flexible Coax Cable Black TPE Jacket Ultra Flex LMR-600-UF](#)

URL: <https://www.fairviewmicrowave.com/lmr-600-uf-low-loss-flexible-coax-cable-tpe-jacket-lmr-600-uf-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

LMR-600-UF CAD Drawing
 Times Microwave LMR-600-UF Low Loss Flexible Coax Cable Black TPE Jacket Ultra Flex

