

7/16 DIN 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-240-716MC-LP

Configuration

- 7/16 DIN Male Connector
- IEC-61169-4
- 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

7/16 DIN 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-240-716MC-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-240-716MC-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	1.781 in [45.24 mm]
Width	1.26 in [32 mm]
Height	1.26 in [32 mm]
Weight	0.13 lbs [58.97 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-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF



TCP-240-716MC-LP

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 µin minimum
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin minimum
Coupling Nut	Brass	Tri-Metal 100 µin minimum
Retaining Ring	Brass	Silver 200 µin minimum
Gasket	Silicone	
Crimp Sleeve	Phosphor Bronze	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-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF



TCP-240-716MC-LP

Assembly Instruction

NOTICE OF PROPRIETARY RIGHTS: THIS DOCUMENT CONTAINS CONFIDENTIAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS INFORMATION WITHOUT 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.

SYM	REVISION DESCRIPTION	OP/IM	DATE	APPRO	DATE
A	RELEASED FOR PRODUCTION	Joslen	2019/08/26	Monica	2019/08/26
B	ECN-2020-04-001		2020/04/30	Tomy-Z	2020/04/30

The technical drawing illustrates the TCM-240-716MC-LP connector assembly. It includes an exploded view at the top and two detailed cross-sectional views below. The exploded view shows the following components from left to right: a 716 male plug with dimensions Hex 32.0 [1.260"], flat 21.0 [0.827"], body with diameters ø16.00 [0.630"] and ø16.20 [0.637"], a contact pin with diameter ø1.50 [0.059"] and length 3.00 [0.118"] crimp length, a ring with diameter ø1.85 [0.073"], a clamp with thickness 0.30 [0.012"], a gasket with thickness 0.30 [0.012"], a ferrule with diameter ø12.50 [0.492"] and length 4.30 [0.169"], and a barrel with flat 14.0 [0.551"] and diameter ø16.00 [0.630"]. The barrel also has a thread M14x1.0-6g and a length of 25.84 [1.018"]. The bottom cross-section shows the internal assembly with dimensions: 45.25 [1.781"] REF., 17.75 [0.699"], 24.27 [0.954"], 3.00 [0.118"], 7.50 [0.295"], 2.50 [0.098"], 17.00 [0.669"], and ø6.30 [0.248"].

Notes:

- Contact pin crimp size Hex .215x3.0mm(0.085"x0.118"). Contact pin retention force ≥10 lbs

I. MATERIALS & FINISHES

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

II. ELECTRICAL PROPERTIES

Impedance (Ω):	50
Frequency Range (GHz):	DC to 6 GHz
Working Voltage (V):	1000
Insulation Resistance (MΩ):	≥5000
VSWR:	≤1.3
Insertion Loss(dB, f/GHz):	-0.1x √f
Im3 (2x43 dBm)	≥-160dBc@2x43dB

This detail view shows the contact pin crimp. Dimensions include a total height of 10 [0.394"] and a crimp width of 4.5 [0.177"]. A note indicates "deburr" for the crimp area.

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 55/155/21
RoHS:	Compliant

IV. MECHANICAL PROPERTIES

Center Cont.:	Crimp or solder
Outer Cont.:	Clamp
Coupling Nut Torque (N.m):	25-30
Cbl-Connector Retention Force (N):	250N
Durability (cycles):	500

RECOMMENDED CABLE STRIPPING DIMS
Connector Addis: 21.35 mm[0.841"]

Interface Compatible with Standard:
IEC 61169-4
MIL-STD-348

UNLESS OTHERWISE SPECIFIED				DTFM	Joslen
ALL DIMENSIONS ARE IN mm MACHINED SURFACES FINISH 1.6 RMS MAX. REMOVE ALL BURRS 0.15MM± MAX BREAK-MACHINE CORNERS 0.15X45° D MAX FILLET R: TOLERANCES ON DECIMALS X .2015 XX .251 ANGLES 12° FRACTIONS ± N/A				DATE	2019/08/26
				CHRD	Patrick
				DATE	2019/08/26
				APPD	Monica
DO NOT SCALE DRAWING				DATE	2019/08/26
				SHT	1/1
				3190-6292	REV

TIMES
An Amphenol Company

TCP-240-716MC-LP

716 Male (Plug) Inlets Installation Straight Connector for TC04A-240 Cable

7/16 DIN 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: [7/16 DIN 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-240-716MC-LP](#)

URL: <https://www.fairviewmicrowave.com/7-16-din-male-tcom-240-tcom-240-fr-lmr-240-lmr-240-db-lmr-240-fr-lmr-240-uf-lmr-lw240-connector-tcp-240-716mc-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-240-716MC-LP CAD Drawing

7/16 DIN Male Low PIM Connector Clamp/Solder Attachment for TCOM-240, TCOM-240-FR, LMR-240, LMR-240-DB, LMR-240-FR, LMR-240-UF

