PANDUIT™

NETWORK CONNECTIVITY GROUP

SPEC SHEET

specifications

Small form factor fiber optic modules shall be compliant with the TIA FOCIS-6 Fiber Jack (FJ) interface specification. RJ-45 style module shall be field terminable in one module space with no adapter. The module shall contain a factory terminated pre-polished multimode fiber, requiring no field polishing and no adhesive. The fibers shall terminate in 2.5mm ferrules with a non-optical disconnect and typical insertion loss of 0.35dB per connector.

Mini-Com® *Opti-Crimp*™ FJ Fiber Optic Module — Pre-polished Crimp

technical information

Fiber compatibility:	3.0mm jacketed or 900µm buffered, 62.5/125µm and 50/125µm multimode
Ferrule type:	Ceramic (Zirconia) with a pre-polished fiber stub
Insertion loss:	0.35dB typical
Return loss:	Greater than 20dB

key features and ...benefits

Pre-polished fiber stub	Eliminates polishing steps, speeding installation
Mechanical crimp cable retention	Consistently provides higher than industry standard cable retention; requires no adhesive, speeding installation
Small form factor connector	Double the port density in one module space at the outlet and in the telecommunications closet
Proven 2.5mm ferrules	Uses standard termination tools and procedures
Robust design	Protects fibers from mechanical and environmental stress
Non-optical disconnect	Maintains data transmission under tensile load
RJ-45 form factor	Familiar to end-users, snaps into all *Mini-Com* outlets and modular patch panels
Field terminable module and connector	Allows flexibility to assemble special length patch cords on site
Adapterless	Fewer components to order and inventory
Flush mount	Unused ports do not protrude from the wall; can be used with shuttered faceplates
TIA standardization	FOCIS-6 interface approved for the TIA, required for TIA/EIA-568-B.3
Keyed solution available	Provides network security; limits access to highly sensitive, classified and segregated networks

applications

Fiber-to-the-desk: The pre-polished mechanical crimp version of *Opti-Jack*™ (FJ) fiber optic module is the ultimate desktop fiber connector. The 2.5mm ferrule provides robustness required for this demanding environment. The FJ interface module and connector design is familiar to the end user and is polarized to prevent mismatch of transmit and receive cables. Because there is no adapter, unused ports remain flush with the wall and away from damage. Shuttered faceplates can be used for further protection of the unused ports. The modularity with copper connectors allows for the complete data-communications solution to every workstation in one outlet.

Keyed network security: Four color-coded, keyed configurations of the module and connector are available to provide mechanical and visual differentiation to prevent unintentional insertion into adjacent ports. Provides network security for military, government, financial and educational applications. Universal keyed connector available for testing purposes.

Telecommunications closet: The high port density of the *Opti-Crimp* module reduces the space requirements for fiber terminations in the closet. This allows the end user to use less rack space and purchase fewer fiber enclosures. The multiple color options allow color coding of different networks or areas of the building for easier troubleshooting.

Visit our website at: www.panduit.com/ncg

Opti-Crimp Multimode Module

62.5/125µm:	FJJSMM5C**
50/125µm:	FJJSMM50C**

Opti-Plug™ Fiber Optic Connector

Multimode:	FJEPGM5C**

Plug to Plug Coupler

Plug to plug coupler: (primarily used in testing)	FJGCCEI

Pre-polished Termination Tooling

Pre-polished crimp termination kit:	FJMKIT

To upgrade from FJKITG, purchase FJQCVR fiber cleaver tool

Opti-Crimp Multimode Module Pre-polished Replacement Ferrules

62.5/125µm:	FJJSMFRL-X
50/125µm:	FJJSM50FRL-X

Multimode Duplex Patch Cords

Opti-Plug connector to Opti-Plug connector:	F^D6P-6PM‡
Opti-Plug connector to Opti-Jack module:	F^D6P-6JM‡
Opti-Plug connector to SC:	F^D6P-3M‡
Opti-Plug connector to ST:	F^D6P-2M‡
Opti-Plug connector to FC:	F^D6P-4M‡
Opti-Plug connector (Keyed W) to SC:	F^D6PW-3M‡
Opti-Plug connector (Keyed W) to ST:	F^D6PW-2M‡

All key type (W, X, Y, Z) patch cords available
^Available in 62.5/125µm (6) and 50/125µm (5)
‡Available in standard (1, 2, 3 and 10 meters) and custom lengths

Substitute for Colors:
EI = Electric Ivory
BL = Black
BU = Blue
IW = Off White
OR = Orange
WH = White

Keyed Colors:
WBL = Keyed W in Black
XRD = Keyed X in Red
YOR = Keyed Y in Orange
ZYL = Keyed Z in Yellow

"X" = Bag of 10 ferrules and crimp sleeves

installer tip

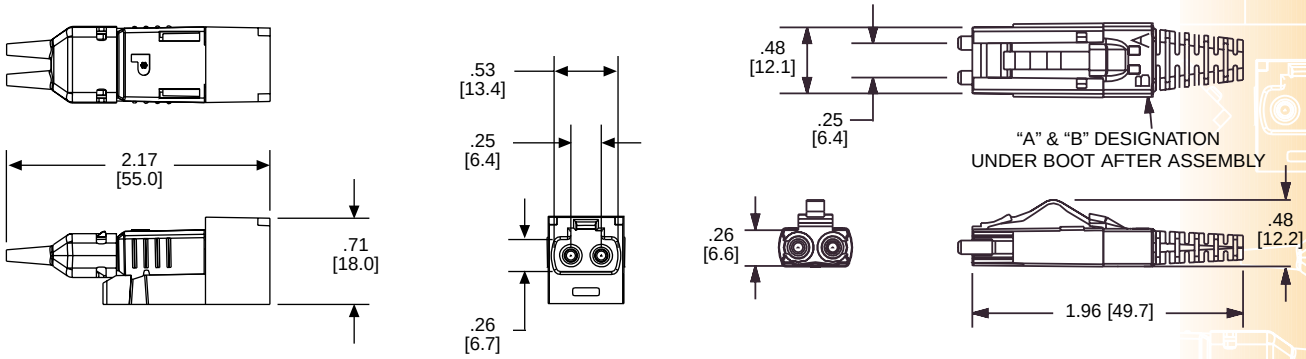
Reduces installation time over standard Opti-Jack modules by 70%.

MINI-COM® OPTI-CRIMP™ FJ Fiber Optic Module — Pre-polished Crimp

Standards Compliant Connector Performance

TIA 455	ISO/IEC 874-1	Description	Test Procedure and TIA/EIA-568-B.3 Required Performance	Performance After Test
1	--	Flex	100 cycles; -180 to 180 degrees; max. insertion loss 0.75dB, min. return loss 20dB	<0.2dB additional loss
2	4.5.11	Impact	8 drops from 1.8m; max. insertion loss 0.75dB, min. return loss 20dB	<0.1dB additional loss
4	4.5.18	High Temperature	4 days at 60°C followed by post-conditioning FOTP-6; max. insertion loss 0.75dB, min. return loss 20dB	<0.2dB additional loss
5	4.4.19	Humidity	4 days at 90-95% RH and 40°C; max. insertion loss 0.75dB, min. return loss 20dB max. change during test 0.4dB	<0.1dB additional loss
6	4.5.4	Cable Retention	11.24 lbs. at 0 degrees, 4.4 lbs. at 90 degrees; max. insertion loss 0.75dB, min. return loss 20dB max. change during test 0.5dB	<0.2dB additional loss
21	4.5.32	Durability	500 mate/unmate cycles; max. insertion loss 0.75dB, min. return loss 20dB	<0.1dB additional loss
34	4.4.7	**Insertion Loss**	max. insertion loss 0.75dB, min. return loss 20dB	**0.35dB typical**
36	4.5.5	Twist	10 cycles; 2.5 cw, 5 ccw, 2.5 cw; max. insertion loss 0.75dB, min. return loss 20dB	<0.1dB additional loss
107	--	**Return Loss**	20dB minimum return loss	**>20dB**
185	4.5.6	Coupling Strength	7.4 lbs. at 0 degrees; max. insertion loss 0.75dB, min. return loss 20dB	<0.1dB additional loss
188	4.5.17	Low Temperature	4 days at 0°C; max. insertion loss 0.75dB, min. return loss 20dB max. change during test 0.3dB	<0.1dB additional loss

NOTE: Above tests performed at 850 and 1300nm on 3.0mm jacketed fiber cable.



Keyed W - Black **Keyed X - Red** **Keyed Y - Orange** **Keyed Z - Yellow**

Dimensions are in inches (Dimensions in parentheses are in millimeters)

PANDUIT™
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