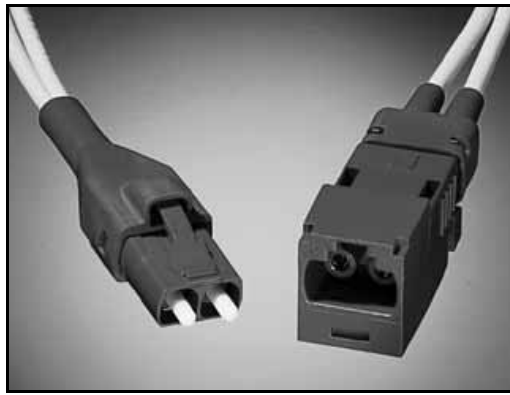


specifications

Single-mode fiber optic connectors shall be compliant with TIA FOCIS-6 Fiber Jack interface specification. "RJ" style plug and jack shall both be field terminable in one module space with no adapter. The fibers shall terminate in 2.5mm ferrules with non-optical disconnect and a typical insertion loss of less than 0.3dB per connection.



OPTI-JACK® Fiber Optic Connector — Single-mode

technical information

Fiber cable types: 3.0mm jacketed or 900µm buffered, works with 9/125µm fiber

Ferrule type: Ceramic (Zirconia)

Insertion loss: Less than 0.3dB typical

Return loss: Greater than 40dB

key features and ...benefits

Half the size of standard connectors	Double the port density in outlets and telecommunication closets
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 plug and jack	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, able to be used with shuttered faceplates
TIA Standardization	FOCIS-6 interface approved at the TIA, required for EIA/TIA-568B document

applications

With its higher bandwidth capacity and increased distance capability, single-mode fiber is frequently used in networking backbone applications. The single-mode **OPTI-JACK** fiber optic connector extends the benefits of the **FJ**™ interface to these higher performance levels and allows the network installer to use the same FOCIS-6 interface throughout the system.

The 2.5mm ferrules provide strength and reliability. The independent spring loaded ferrules allow the fibers to "float" independently to maintain optical

connection in the event of a side load. The plug and jack "RJ" design is familiar to the end user and is polarized to prevent mismatch of transmit and receive fibers.

In the telecommunications closet, the single-mode **OPTI-JACK** connector has twice the port density of ST and SC connectors using less rack space and fewer fiber enclosures.

Field Mountable Jack

Single-mode Jack: FJGS9CBU

Field Mountable Plug

Single-mode Plug: FJPGS9CBU

Plug to Plug Couplers

Plug to Plug Coupler: FJGCCEI
(primarily used in testing)

Termination Tooling

Termination Kit: FJKITG (supplemental materials required)

Replacement Jack Ferrules

Replacement Ferrules: FJJ9FRL-X

Replacement Plug Ferrules

Replacement Ferrules: FJP9FRL-X

Hybrid Patch Cords

Plug or Jack to ST or SC

Pre-terminated Patch Cords

Pigtails

"X" = Bag of 10 ferrules and crimp sleeves

installer tip

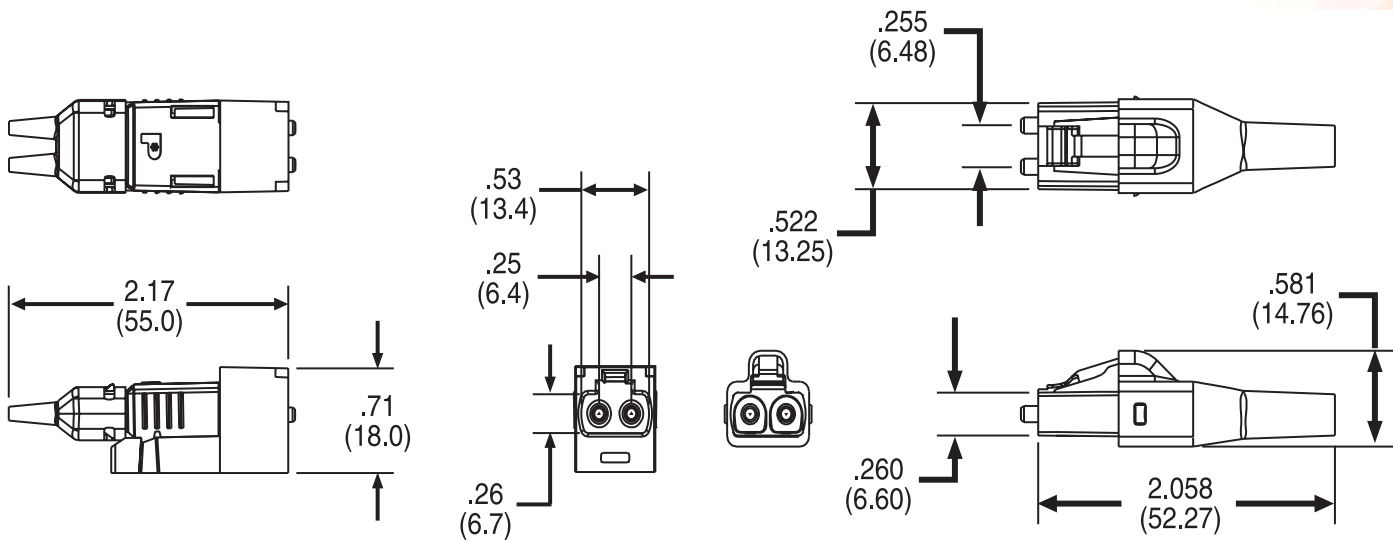
Replacement ferrules allow termination errors to be corrected without replacing the entire connector.

OPTI-JACK® Fiber Optic Connector — Single-mode

standards compliant connector performance

TIA 455	ISO/IEC 874-1	Bellcore 326-CORE	Description	Test procedure and Required performance	OPTI-JACK Performance
1	—	4.4.3.2	Flex	Apply 1.1lb load thru 180° for 100 cycles; 0.75dB maximum insertion loss, 26dB minimum return loss	No additional loss
2	4.5.11	4.4.3.7	Impact	Drop 8 times from 6ft (1.82m); 0.75dB maximum insertion loss, 26dB minimum return loss	No additional loss
4	4.5.18	4.4.2.1	High Temperature	55°C for 14 days; <0.3dB additional loss 0.75dB maximum insertion loss, 26dB minimum return loss	<0.1dB additional loss
5	4.4.19	4.4.2.3	Humidity	40° at 95% RH for 4 days; <0.4dB additional loss 0.75dB maximum insertion loss, 26dB minimum return loss	No additional loss
6	4.5.4	4.4.3.4	Cable Retention	Apply 15lb. load for 5 seconds, 0° angle; 4.4lb at 90° <0.5dB additional loss 0.75dB maximum insertion loss, 26dB minimum return loss	No additional loss
13	4.4.1.2	3.4.3.5	Visual, Mechanical	Inspection and mechanical dimensions	FOCIS-6 compliant
21	4.5.32	4.4.3.8	Durability	Mate/unmate connectors (500 cycles) 0.75dB maximum insertion loss, 26dB minimum return loss	<0.1dB additional loss
34	4.4.7	4.4	Insertion Loss	0.75dB maximum insertion loss	<0.3dB typical loss
36	4.5.5	4.4.3.3	Twist	Apply 3.4lb. load, 10 cycles from +90° to -90°; 0.75dB maximum insertion loss, 26dB minimum return loss	No additional loss
107	—	—	Return Loss	26dB minimum return loss	>40dB
185	4.5.6	—	Coupling Strength	Pull plug from jack, 7.4lb. load for 5 seconds at 0°; 0.75dB maximum insertion loss, 26dB minimum return loss	No additional loss
188	4.5.17	—	Low Temperature	0°C for 4 days; <0.3dB additional loss 0.75dB maximum insertion loss, 26dB minimum return loss	No additional loss

NOTE: Above tests performed at 1310 and 1550nm on 3.0mm jacketed fiber cable.



Dimensions are in inches (Dimensions in parentheses are metric)

The information contained in this literature is based on our experience to date and is believed to be reliable. It is intended as a guide for use by persons having technical skill at their own discretion and risk. We do not guarantee favorable results or assume any liability in connection with its use.

Dimensions contained herein are for reference purposes only. For specific dimensional requirements consult the factory. This publication is not to be taken as a license to operate under, or a recommendation to infringe any existing patents. This supersedes and voids all previous literature, etc.



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SA117N229-OP
 Printed in U.S.A.