DATASHEET

MTRJ Fiber Optic Connector

OMC INDUSTRY CO.LIMTED

2018|En version1.0

www.omcftth.com sales@omcftth.com 0086-755-29163551

MTRJ Fiber Optic Connector

Description

MT-RJ stands for Mechanical Transfer Registered Jack. An MTRJ connector is a type of Duplex fiber optic Connector that has an endpoint similar to the RJ-45 connector endpoint found in Ethernet connections. MT-RJ t is very popular for small form factor devices due to its small size. Housing two fibers and mating together with locating pins on the plug, MTRJ connectors with the pins inserted are called "male" connectors, the MTRJ connectors without the pins are called "female" connectors.
MTRJ connectors are designed to snap into the Ethernet port of a computer, modem, or wireless router and provide that computer or network with extremely fast data transfer rates. MTRJ connectors are usually designed for multi-mode optical fibers but can be used for single mode optical fibers as well. MTRJ connectors are approximately 2.45 mm x 4.4 mm in size and are standardized by the International Electrotechnical Commission.

Industrial Standard:

MTRJ: TIA/EIA, FOCIS12, GR-326. IEC and JIS C5973.

Optical Performance：

Meets Telcordia GR-326-Core issue
IL(Typical):SM<0.5dB; MM <0.7dB:
RL(Typical):SM >50dB; MM >35dB:

Environmental Performance：

Operating Environment: -40°C ~ + 80°C
Meets UL94-V0 Flammability Requirements
ROHS compliant

Mechanical Performance:

Connection Durability: 500 Matings cycles
Connector Repeatability: MM<0.2dB; SM <0.1dB

Products Details

Fiber Connector	MT-RJ	Ferrule	MT 2fibers ferrule
Housing	Plastic Black for all SM and MM	Boot Size	Flat 2.0mm/3.0mm Boot Round 2.0mm/3.0mm Boot
Operating Temp Range	-40~80°C	Boot color	Black for all SM and MM
Suit Cable	1.6-3.0mm OD cable	Available for	Not assembled Multi-Piece Pre-assembled one piece

Boot Type

Flat 2.0mm/3.0mm Boot

Round 2.0mm/3.0mm Boot

Female or Male

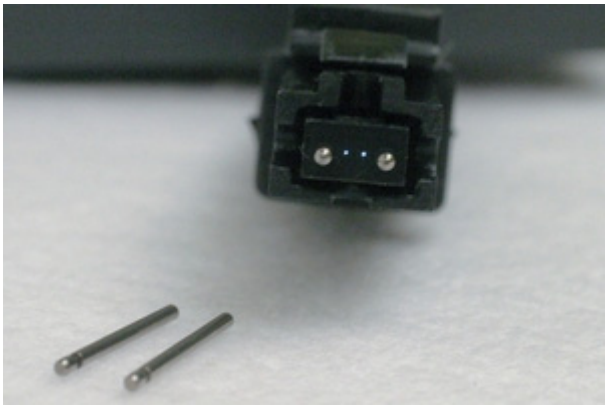
Female, No Pin

Male With Pin

MTRJ Fiber Optic Connector

How MTRJ Connectors Work

MTRJ connectors work in the same way that any fiber optic cable does, with modes of light travelling parallel with the fiber and their photons vibrating perpendicularly to the fiber. At its end, each MTRJ connector has an RJ-45-like end-point that is slightly larger than a telephone jack and can fit into the Ethernet port on any computer, modem, or wireless router.



MTRJ alignment pins are used when mating two MTRJ connectors. One of the connectors should have two pins inserted in the two visible holes in the face of the connector. As this connector is inserted into a MTRJ adapter, these pins will mate with the two holes in the opposing connector. MTRJ connectors with the pins inserted are called "male" connectors, the MTRJ connectors without the pins are called "female" connectors. Two pins should be ordered for each adapter used.

Photo shows two pins in relation to a male MTRJ connector. The male connector has light projected through the fibers so you may see the ends of the fibers in relation to the position of the two alignment pins.

Advantages

MTRJ connectors are advantageous because they allow users to take advantage of fiber optic data transfer speeds without purchasing any special equipment or installing specially designed fiber optic systems. MTRJ connectors are fairly inexpensive and can be connected to any Ethernet-enabled hardware in the same way that an Ethernet cable can be.

Applications

MTRJ connectors are used to provide fiber optic speeds to personal computers, servers, commercial workstations, wireless routers, modems, and other devices that have not already been equipped for use with fiber optic cables. MTRJ connectors are, therefore, a type of hybrid connector between a fiber optic cable and an Ethernet cable.

Order index

Products	Connector	Ports	Pin or No Pin	Boot Type	Boot Color	Assembly
G– Fiber Connector	K-MTRJ	1 - SM	0 - Female no Pin	2– 2.0mm Round boot	A - Blue	0– not assembled
		2– SM	1– Male With Pin	3– 3.0mm Round boot	B- Orange	1-Assembled
				4- 2.0mm Flat boot	C- Green	
				5– 3.0mm Flat boot	D- Brown	
					E– Grey	
					F-White	
					G-Red	
					H-Black	
					I-Yellow	
					J-Purple	
					K-Pink	
					L-Aqua	
					M-Magenta	