



## Features & Benefits

- Designed to NTT-FC\* standards
- One-piece body design
  - Reduces termination time
  - Field installable - essentially preassembled
- Pre-polished ceramic ferrules
  - Minimum polishing needed
  - Maintains endface geometry, physical contact
- Low insertion loss:
  - < .34 dB TYP MM
  - < .17 dB TYP MM enhanced
  - < .15 dB TYP SM

## Applications

- Telecommunication networks
- CATV networks
- Active device termination
- Instrumentation

FC fiber optic connectors are specifically designed for telecommunication applications. The Molex FC connector series is designed to NTT-FC standards and provides true non-optical disconnect performance. They are fully compatible with existing FC hardware.

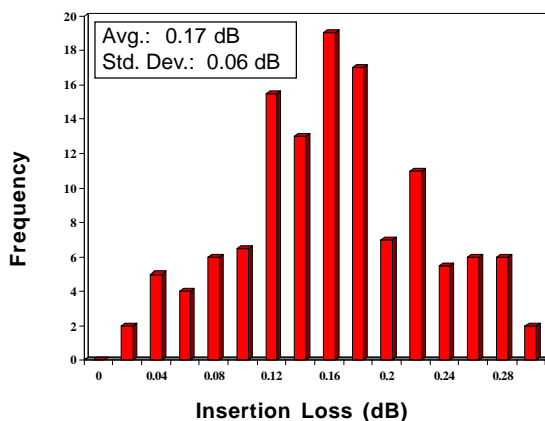
The pre-assembled, one-piece body design and the pre-polished ferrules provide quick and economical terminations both in factory and in-the-field settings. Also, with the pre-polished ferrule and the Molex termination method, a uniform endface geometry is ensured, resulting in consistent optical performance.

Connector mating is achieved by using bulkhead feed-through adapters. These adapters combine a metal housing and either a precision zirconia ceramic or a rugged phosphor bronze sleeve. Flange mount or "D" hole mount adapter styles are available.

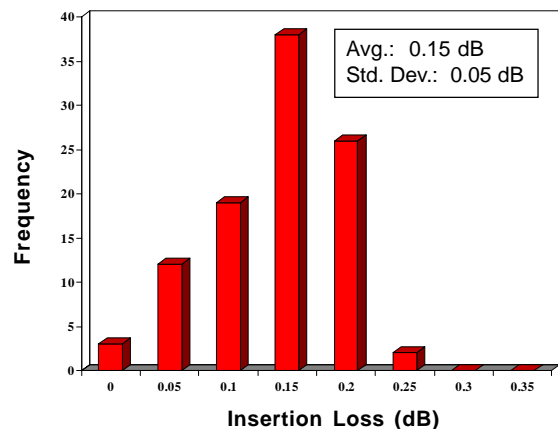
\*NTT-FC is a trademark of NTT Advanced Technology Corporation

## Optical Performance Distribution

**Insertion Loss Performance  
(MM Enhanced ferrule, 62.5/125µm fiber)**



**Insertion Loss Performance  
(SM ferrule, 9/125µm fiber)**

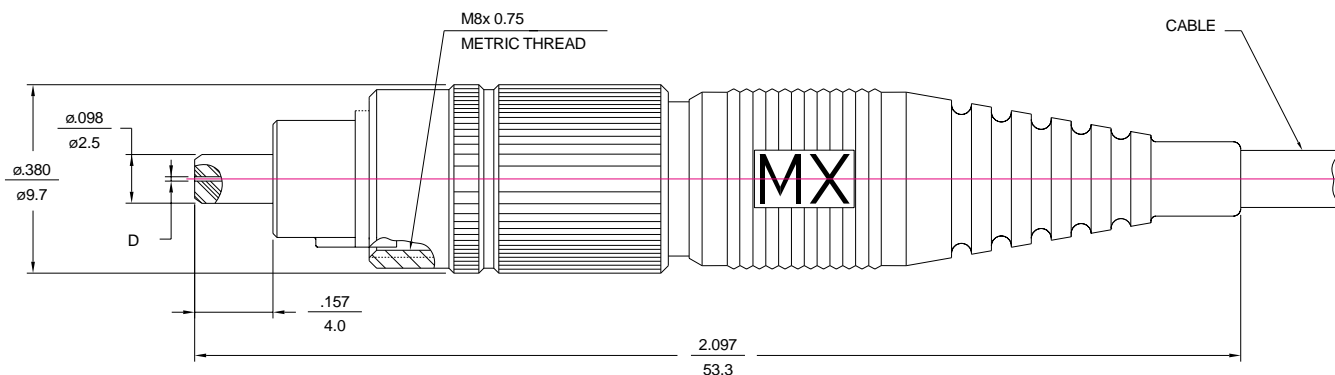


## Performance and Specifications

Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	~dB	-	-	.04	EIA/TIA 455 - 21A, 200 cycles, clean every 25 cycles
Temperature Range:					
Storage	°C	-40	-	+80	May be further limited by cable specifications
Operating	°C	-40	-	+80	May be further limited by cable specifications
Thermal Aging	~dB	-	-	.02	EIA/TIA 455 - 4A, 85°C 14 days
Temperature Cycling	~dB	-	-	.07	EIA/TIA 455 - 3A, -40°C to +75°C, 42 cycles
Humidity Cycling	~dB	-	-	.04	EIA/TIA 455 - 5A, 95% RH 60°C 14 days
Vibration	~dB	-	-	.01	EIA/TIA 455 - 11A, 10 to 50 Hz, 2 hrs./axis
Flex Test	~dB	-	-	.00	Telcordia 326, 0.9kg, 100 cycles
Twist Test	~dB	-	-	.01	Telcordia 326, 1.35kg load
Proof Test	~dB	-	-	.01	Telcordia 326, 4.5kg at 90°, 6.8kg at 0°
Straight Pull Test	~dB	-	-	.05	Telcordia 326, 4.5kg load
Side Pull Test	~dB	-	-	.37	Telcordia 326, 2.3kg load
Stability	~dB	-	-	.10	Telcordia 326, .45kg at 90°, 60°, 30° & 0°
Impact	~dB	-	-	.00	EIA/TIA 455 - 2A, 1.5 M drop, 8 cycles

## Mechanical Dimensions

### FC Connector, 3.0mm Boot Style





## Standard Part Numbers

Order Number	Description	Hole size "D"	Cable size
86053-0000	FC connector, MM, zirconia PC <sup>+</sup> ferrule	127μm	3.0mm
86053-0300	FC connector, MM, zirconia PC <sup>+</sup> ferrule	127μm	2.4mm
86053-0500	FC connector, MM, zirconia PC <sup>+</sup> ferrule, buffered fiber	127μm	900μm buffered fiber
86053-3000	FC connector, MM, zirconia PC ferrule, enhanced	128μm	3.0mm
86053-3300	FC connector, MM, zirconia PC ferrule, enhanced	128μm	2.4mm
86053-3500	FC connector, MM, zirconia PC ferrule, buffered fiber, enhanced	128μm	900μm buffered fiber
86053-4000	FC connector, SM, zirconia PC ferrule	125μm	3.0mm
86053-4300	FC connector, SM, zirconia PC ferrule	125μm	2.4mm
86053-4500	FC connector, SM, zirconia PC ferrule, buffered fiber	125μm	900μm buffered fiber
86053-5000	FC connector, SM, zirconia PC ferrule	126μm	3.0mm
86053-5300	FC connector, SM, zirconia PC ferrule	126μm	2.4mm
86053-5500	FC connector, SM, zirconia PC ferrule, buffered fiber	126μm	900μm buffered fiber
86053-5400	FC connector, SM, zirconia PC ferrule, 90° yellow boot	126μm	3.0mm
86053-5600	FC connector, SM, zirconia PC ferrule, 90° yellow boot	126μm	2.4mm
86053-7000	FC connector, SM, zirconia PC ferrule	127μm	3.0mm
86053-7300	FC connector, SM, zirconia PC ferrule	127μm	2.4mm
86053-7500	FC connector, SM, zirconia PC ferrule, buffered fiber	127μm	900μm buffered fiber
86152-0100	FC adapter, zirconia alignment sleeve, square mounting flange style		
86152-0200	FC adapter, zirconia alignment sleeve, square mounting flange style, low cost		
86156-0100	FC adapter, phosphor bronze alignment sleeve, square mounting flange style		
86152-1000	FC adapter, zirconia alignment sleeve, "D" hole mount style		
86156-1000	FC adapter, phosphor bronze alignment sleeve, "D" hole mount style		
86172-0000	FC to ST adapter, zirconia alignment sleeve, "D" hole mount style		