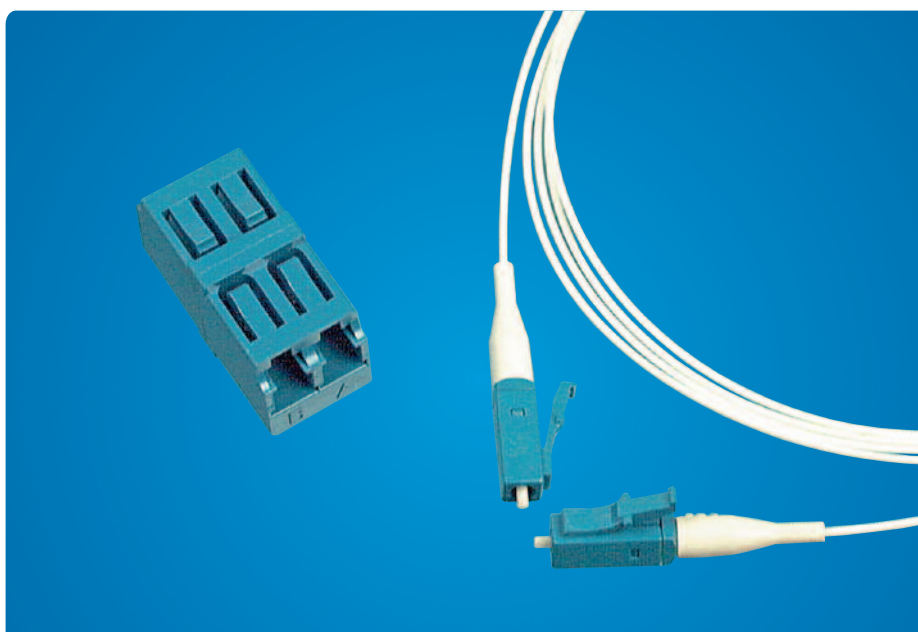


## LC™ OPTICAL ASSEMBLIES

### DESCRIPTION

The LC™ connector is a small form factor connector, simplex or duplex, with a latching mechanism similar to the RJ-45 telephone plug. Introduced by Lucent Technologies, the LC™ connector is about half the size of a NTT SC connector. LC™ optical assemblies are primarily used in high density telecommunication enclosures and other digital systems. Its small size and robust design make it ideal for many optical signal transport applications. All FCI optical cable assemblies are manufactured to the customer's specifications and with the highest standards of quality. Each jumper, pigtail, or fan-out is 100% visually inspected and tested. A data package tailored to specific requirements is available upon request. Custom design services and rapid prototyping are offered to speed product development.



### FEATURES & BENEFITS

- Half the size of standard connectors
- RJ-45 push-pull style housing
- Polarized
- Pull-proof
- PC finish
- Anti-snag latch
- Minimal polish
- Doubles fiber density in shelves and outlets - lowering system costs
- Allows easy disengagement in dense spaces
- Assures high repeatability, maintains transmit/receive direction
- Maintains optical contact under loads, and helps prevent accidental disconnects

### TARGET MARKETS / APPLICATIONS

- Telephony
- Datacom
- CATV
  - Telecommunications networks
  - Local area networks
  - Data processing networks
  - Device terminations
  - Premises distribution
  - Cable television
  - Fiber-to-the-home
  - Fiber-to-the-desktop



## ELECTRICAL PERFORMANCE

- Insertion loss (IAW EIA FOTP 171)
  - Single-mode 0.10 dB typical, 0.20 dB maximum
  - Multi-mode 0.10 dB typical, 0.20 dB maximum
- Return loss
  - Single-mode 50 dB

## MECHANICAL PERFORMANCE

- End face
  - Polish radius  $\leq 15$  mm
  - Fiber extension  $\pm 0.05$   $\mu\text{m}$
  - Apex offset  $\leq 50$   $\mu\text{m}$
- Durability  $\geq 200$  mate-demate cycles
- Duplex adapter footprint 29 mm X 13 mm
- Operating temperature -10°C to +85°C

## OPTIONS

- Cable
  - Single-mode or multi-mode fiber
  - 0.9 mm, duplex, or multi-fiber cable
  - Specialty terminations
- Connector
  - UPC finish
  - Pull proof to 2 lbs. (non-optical disconnect)
- Adapters
  - Molded housing
  - Available in duplex
  - Zirconia ceramic alignment sleeve

## PACKAGING

- Sealed bags