

FIBER OPTIC CABLE ASSEMBLIES AND ADAPTERS

DESCRIPTION

The FC optical connector is an industry standard, particularly in telecom applications. Its threaded barrel and keyed ferrule coupling mechanism allow highly repeatable low-loss connections. All FCI optical cable assemblies are manufactured to the customer's specifications 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

- Optically non-disconnecting design
- The precision zirconia ferrules are highly concentric and pre-radiused
- A variety of connector and adapter styles are available to meet all application requirements
- Available in either single-mode or multi-mode
- Signal interruption is prevented via the optically non-disconnecting feature
- Insertion loss and return loss are minimized via the precision zirconia ferrule

TARGET MARKETS / APPLICATIONS

- Telephony
- CATV
- Datacom
 - Telecommunications networks
 - Cable television
 - Local area networks
 - Data processing networks
 - Device terminations
 - Premises distribution



ELECTRICAL PERFORMANCE

- Insertion loss (IAW EIA FOTP 171)
 - Single-mode 0.20 dB typical, 0.50 dB maximum
 - Multi-mode 0.15 dB typical, 0.50 dB maximum
- Return loss
 - SPC45 dB typical, 40 dB minimum
 - UPC55 dB typical, 50 dB minimum
 - APC65 dB typical, 60 dB minimum

MECHANICAL PERFORMANCE

- JIS-C-5973 compliant
- End face Polish radius 10 to 25mm (PC or UPC)
5 to 15mm (APC)
- Fiber extension +/-0.05µm
- Apex offset ≤ 50 µm
- Durability ≤0.2 dB change after 1,000 matings (IAW JIS C 5961-1990)
- Tensile strength 10 lbs. (3.0mm) 1.5 lbs. (0.9mm)
- Operating temperature -40°C to +85°C (IAW Bellcore GR-326-CORE)

OPTIONS

- Cable Type
 - SBJ 900 micron cable
 - 3.0 mm Jumper Cable - OFNR
 - 900 micron buffered fiber
 - Duplex 3.0 mm Zipcord - OFNR
 - 3.0 mm Jumper Cable - OFNR
 - Duplex 3.0 mm Zipcord - OFNR
 - Custom configuration
(use digits 7-14 for drawing file name: YYMMDD##)
- Fiber Type
 - SM depressed-clad, dispersion-shifted
 - SM, depressed-clad, 1300 nm dispersion-optimized
 - SM, matched-clad, dual-window (SMF-28 or equiv.)
 - 100/140 micron MM, graded-index
 - 50/125 micron MM, graded-index
 - 62.5/125 micron MM, graded-index

OPTIONS

- Cable
 - Single-mode or multi-mode fiber
 - 3.0mm or 0.9mm cordage
 - Simplex, duplex or multifiber
 - Riser or plenum rated
- Connector
 - PC, UPC or APC finish
 - Pull-proof to 10 pounds (non-optical disconnect)
 - Metallic or molded housing
- Adapters
 - Phosphor-bronze or zirconia ceramic alignment sleeve
 - Flanged, snap-in or card-edge housing
 - PC or APC
 - Hybrid

PACKAGING

- Reel or sealed bag

- Connector Type
 - ST 2
 - Metral SC
 - Duplex SC - plastic housing, ceramic ferrule
 - FC - stainless steel housing, ceramic ferrule
 - LC
 - SC - plastic housing, ceramic ferrule
 - MU
 - Underminated
- Connector Detail
 - Standard, flat-polished end face
 - APC (Angled Physical Contact) end face
 - PC (Physical Contact) end face
 - SPC (Super Physical Contact) end face
 - UPC (Ultra Physical Contact) end face
 - Underminated