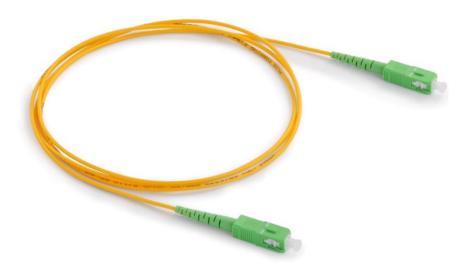
### **Grade B Patch Cord**



#### Introduction

With the advances in fiber optic technology and transmission systems, reliable cabling systems are becoming even more important. Active optical equipment, which is often worth hundreds of thousands of dollars, is all connected into the network via the humble fiber optic patch cord or patch lead. The risk of network downtime due to unreliable cabling is one that should be avoided. Therefore, these types of networks, along with many other Data Center and high-speed Commercial networks require reliable cabling infrastructure in order to maximize performance and to ensure long term reliability.

### **Optical Fiber Connector Grades**

IEC standards dictate the connector performance for each grade of fiber-optic patch cord connector based on IEC 61753-1. As it defined, there are four grades for insertion loss from A (best) to D (worst). For conventional patch cord, mated performance is over 0.5dB, even to 1.0dB. This may cause the whole high speed optical connection system unreliable and transmission unstable. Therefore, grade B is stable with excellent optical performance of maximum 0.25dB while mated each other which is a guarantee for hundreds of gigabit data exchange with connections.

| Grade | Average of Random Mating | 97% of Random Mating |
|-------|--------------------------|----------------------|
| A*    | Not Defined              | Not Defined          |
| В     | ≤0.12 dB                 | ≤0.25 dB             |
| С     | ≤0.25 dB                 | ≤0.50 dB             |
| D     | ≤0.50 dB                 | ≤1.0 dB              |

**Remark:** Grade A is not determined yet according IEC 61753-1



### **Features**

- Good repeatability and interchangeability
- High precision connector
- UPC APC end face polish
- LC, MU, SC, FC, all single fiber connector
- Customized length available
- 100% factory terminated and tested
- ROHS Compliant

# **Standard Compliance**

- TIA/EIA 568.3-D
- TIA/EIA 604 Series
- IEC 61754 Series
- IEC 71753-1
- GR 326-Core

## **Technical Specification**

### **General Specification**

| Constructions         | Descriptions                        |  |
|-----------------------|-------------------------------------|--|
| Fiber Mode            | Single mode: G.652/G657             |  |
|                       | Multimode: OM1, OM2, OM3, OM4       |  |
| Fiber Brand           | SMF-28® Ultra optical fiber         |  |
|                       | Corning ClearCurve® multimode fiber |  |
| Cable Jacket Material | Low Smoke Zero Halogen (LSZH)       |  |
|                       | PVC                                 |  |
| Cable Jacket Ratings  | Riser (OFNR)                        |  |
|                       | Plenum (OFNP)                       |  |
| Cable Jacket Color    | G652/G657: Yellow                   |  |
|                       | OM1/OM2: Orange                     |  |
|                       | OM3: Aqua                           |  |
|                       | OM4: Aqua / Magenta                 |  |
|                       | or Customized                       |  |
| Polarity              | A-A,A-B (TIA 568.3-D)               |  |
| Connector type        | LC/MU/SC/FC/Others                  |  |
| Operating Temperature | -20 °C ~ +70 °C                     |  |
| Storage Temperature   | -40 °C ~ +85 °C                     |  |



# **Technical Specification**

| Optical Properties      | Singlemode                 | Multimode                                      |  |  |
|-------------------------|----------------------------|--|--|--|
| Insertion Loss (dB)     | ≤ 0.2                      | ≤ 0.2  |  |  |
| Return Loss (dB)        | PC ≥ 50; APC ≥ 65          | PC≥ 20; APC ≥ 40                               |  |  |
| Wavelength (nm)         | 1310/1550                  | 850/1300                                       |  |  |
| Random mating loss (dB) | Max 0.12dB mean, Max 0.25c | Max 0.12dB mean, Max 0.25dB for 97% of samples |  |  |

#### Note:

[1] IL&RL Test method: IEC 61300-3-4 insertion B [2] Random mating loss test method: IEC 61300-3-34

