

OPTIC FIBER CABLE

Industrial Control Optic Fiber Cable

Overview

Bones Electronics Co., Ltd (BEC) manufactures standard product lines of fiber optic patch cords with plastic optical fiber (POF) and Versatile Link (VersaLink) terminations. These products provide ready-made solutions for quick installations in commercial or industrial networking/communications applications using Avago VersaLink fiber optic transmitters and receivers. Our premier quality patch cords are available in simplex and duplex cable with latching and non-latching connectors, heavy duty or UL-rated cable construction, and in many standard lengths or connectors.

This patch cord line utilizes high quality Eska® Premier GHCP4001 fiber cable featuring a rugged polyethylene jacket. Patch Cord terminations are authentic Avago VersaLink connectors.

BEC offers a complete portfolio of fiber optic components for networking including: **Ethernet, Fiber Channel, Infiniband, OBSAI/CPRI, Sonet/ATM**, and proprietary communication links.

<http://www.bones-electronics.com>

Specification

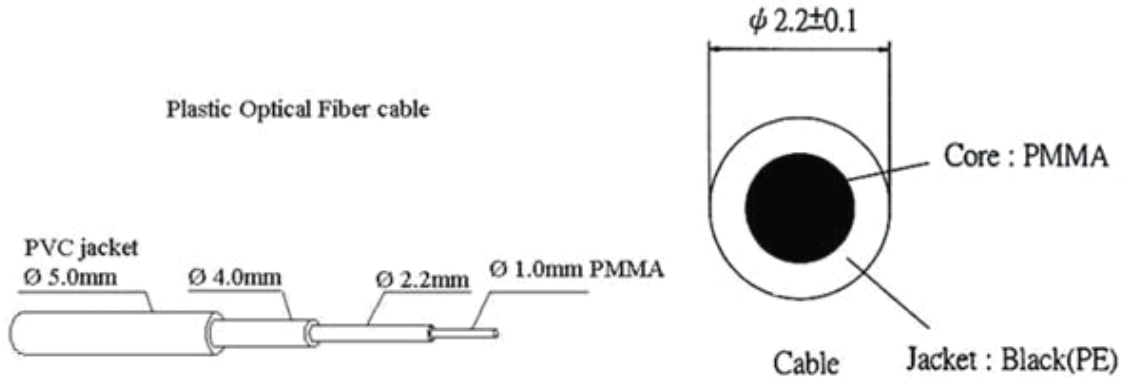
- Simplex, duplex, latching and non-latching connector options
- UL-rated fiber cable and connections
- Crimped and epoxied connector terminations for maximum retention strength
- 1 µm polish terminations ensure high optical coupling efficiency
- Assembly processes exceed Avago recommended procedures
- Standard fiber lengths for low-cost manufacturing and quick delivery

Application

- Motor controller triggering
- Data communications and local area network
- Automotive communications and control networks
- Noise immune communication in audio/video equipment
- Error free signalling for industrial and manufacturing equipment
- Power system

E-mail: sales@bones-electronics.com

Core Structure



Picture 1: side view

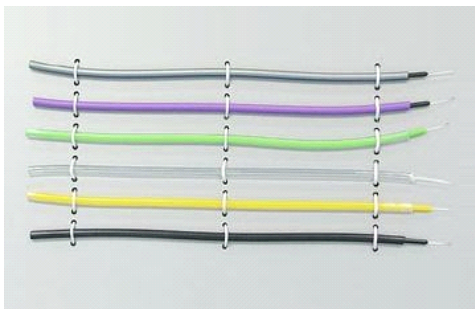
Picture 2: front view



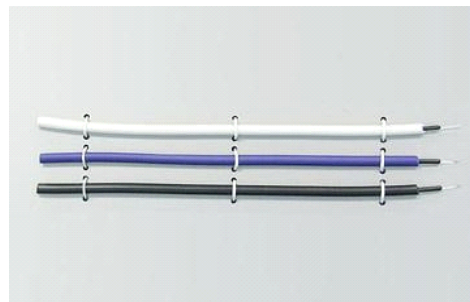
Picture 3: Optic fiber



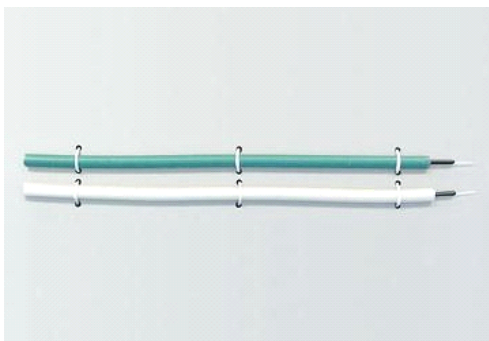
Picture 4: Optic fiber



Picture 5: \varnothing 2.2mm optic fiber cable



Picture 6: \varnothing 4.0mm optic fiber cable



Picture 7: \varnothing 5.0mm optic fiber cable



Picture 8: \varnothing 6.0mm optic fiber cable

Core material

Item No.	Unit	Data
Core diameter	mm	Φ1.0, Φ0.25, Φ0.50, Φ0.75
Core material	---	PMMA
Outside diameter	mm	Φ2.2, Φ2.2mm-10.0mm
Cladding material	---	CPE, PE, PVC, PA, TPU, TPR
Cladding color	---	Black or other colors
Wavelength	nm	650 or 530
Typical Attenuation	dB/km	<180
Refractive Index	---	Step Index
Bend Radius	---	5 x core Diameter
Numberal Aperture	---	0.50, (0.3-0.6)
Angle of incidence	---	60°
Interchangeability	dB	<0.5
Tensile Strength	N	≅ 1.0dB(0~80N)
Vibration	---	≅ 1.0dB(5~50Hz, 1.5mm)
Working Temperature	°C	-40°C~+85°C;
Storage Temperature	°C	-40°C~+85°C
Quality Standard	---	SONET.OC-48m, G.653, YD/T 1447—2006, ROHS

Matching Products

Item no.	Connector 1	Connector 2	Core diameter	Core style	Cable color	Max. Length
HFBR 4501Z-4511Z	HFBR-4501Z	HFBR-4511Z	POF 980/1000	simplex	black	1000 m
HFBR 4503Z-4513Z	HFBR-4503Z	HFBR-4513Z	POF 980/1000	simplex	black	1000 m
HFBR 4506Z-4516Z	HFBR-4506Z	HFBR-4516Z	POF 980/1000	duplex	black	1000 m
HFBR 4531Z-4533Z	HFBR-4531Z	HFBR-4533Z	POF 980/1000	simplex	black	1000 m
HFBR 4532Z-4532Z	HFBR-4532Z	HFBR-4531Z	POF 980/1000	simplex	black	1000 m

HFBR 4501Z-4511Z

Overview

- Original imported AVAGO connector, more firm and integrated anti-drag
- Original imported Japan optic cable to guarantee high quality audio signal transmission
- Fine polishing wearproof covers, PE&PVC sheath and colored cores
- Immunity from electromagnetic interferences



Specification

End style: HFBR 4501Z-4511Z

Core diameter: $\Phi 1.0$; $\Phi 0.25$; $\Phi 0.50$; $\Phi 0.75$

Core material: PMMA

Outside diameter: $\Phi 2.2$; $\Phi 2.2\text{mm}-10.0\text{mm}$

Cladding material: CPE, PE, PVC

Cladding color: black or other color

Typical Attenuation: $< 180\text{dB/km}$

Working Temperature: $-55^{\circ}\text{C}-+85^{\circ}\text{C}$

Length: 1000mm, (special length: 0-100m)

Quality Standard: ROHS, CE

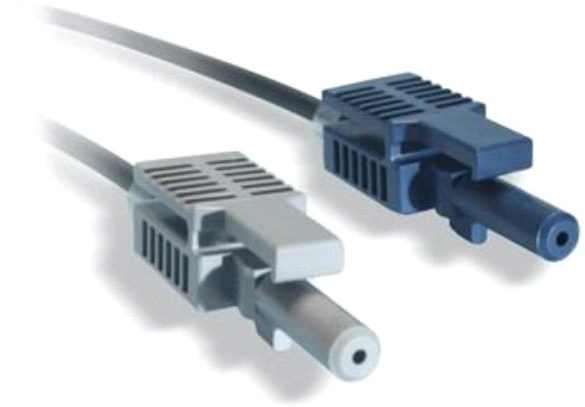
Structure



HFBR 4503Z-4513Z

Overview

- Original imported AVAGO connector, more firm and integrated anti-drag
- Original imported Japan optic cable to guarantee high quality audio signal transmission
- Fine polishing wearproof covers, PE&PVC sheath and colored cores
- Immunity from electromagnetic interferences



Specification

End style: HFBR 4503Z-4513Z

Core diameter: $\Phi 1.0$; ($\Phi 0.25$ 、 $\Phi 0.50$ 、 $\Phi 0.75$)

Core material: PMMA

Outside diameter: $\Phi 2.2$; $\Phi 2.2\text{mm}$ - 10.0mm

Cladding material: CPE、PE、PVC

Cladding color: black or other color

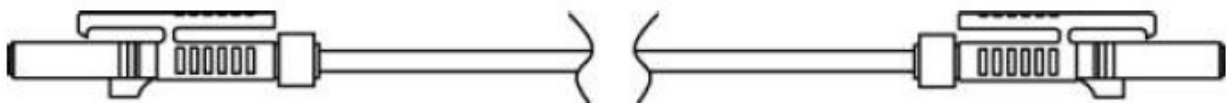
Typical Attenuation: 小于 180dB/km

Working Temperature: -55°C - $+85^{\circ}\text{C}$

Length: 1000mm, (special length: 0-100m)

Quality Standard: ROHS, CE

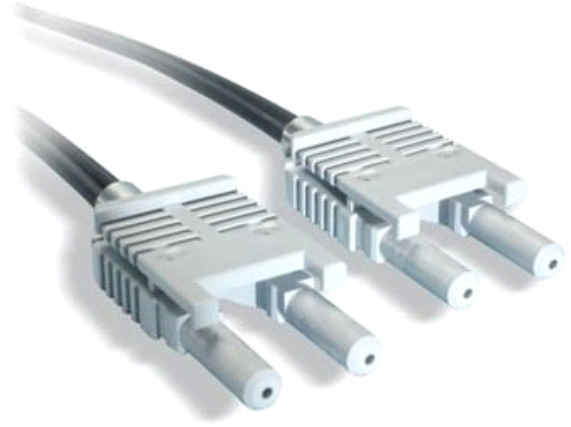
Structure



HFBR 4506Z-4516Z

Overview

- Original imported AVAGO connector, more firm and integrated anti-drag
- Original imported Japan optic cable to guarantee high quality audio signal transmission
- Fine polishing wearproof covers, PE&PVC sheath and colored cores
- Immunity from electromagnetic interferences



Specification

End style: HFBR 4506Z-4516Z

Core diameter: $\Phi 1.0$; $\Phi 0.25$ 、 $\Phi 0.50$ 、 $\Phi 0.75$

Core material: PMMA

Outside diameter: $\Phi 2.2$; $\Phi 2.2\text{mm}-10.0\text{mm}$

Cladding material: CPE、PE、PVC

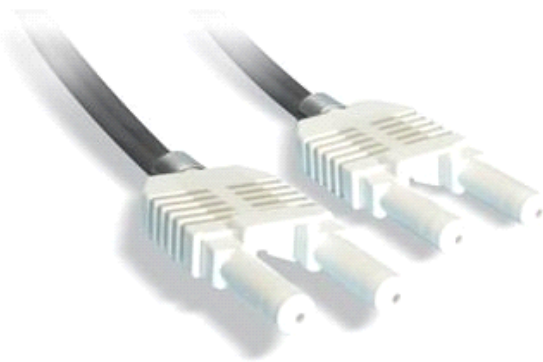
Cladding color: Black or other color

Typical Attenuation: $<180\text{dB/km}$

Working Temperature: $-55^{\circ}\text{C}-+85^{\circ}\text{C}$

Length: 1000mm, (special length: 0-100m)

Quality standard: ROHS, CE



Structure

