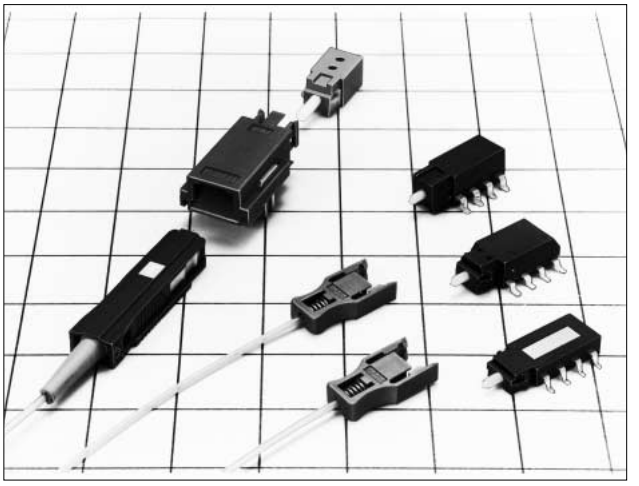
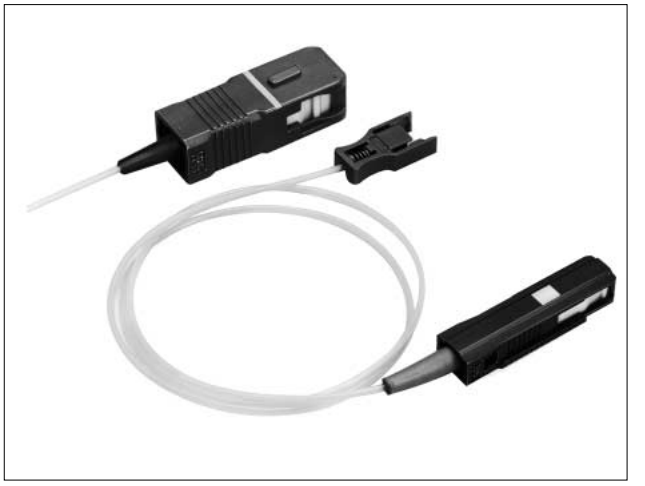
NEW

Fiberoptic Interface Connector for Surface Mount Optical Module

EZ Series

Patents pending





■Features

1. Specifications.

Complies with surface mount optical module interface specification, as standardized by the following companies
(Patent pending):

Oki Electric Industry Co., Ltd.,
Sumitomo Electric Industries, Ltd.
Fujitsu Limited
Hirose Electric Co.,Ltd.

(※)Please ask the company above for EZ module.

2. Detachable structure

Detachable connector/module interface (See Figure 1.), with easy to use simple tools.

-Surface mounted module can be re-soldered
-Module is packaged separating from interface connector
-Easy replaceable interface connector

3. Self aligning mating to the module

Built-in guide rails assure correct alignment and hold of all components. (See Figure 2.)

4. Reduced number of parts

The number of parts has been greatly reduced compared with existing optical connectors (e.g.,FC,SC and MU).

■Applications

Optical terminal equipment, optical relays, optical modules for measuring instruments, etc.

Detachable Connector

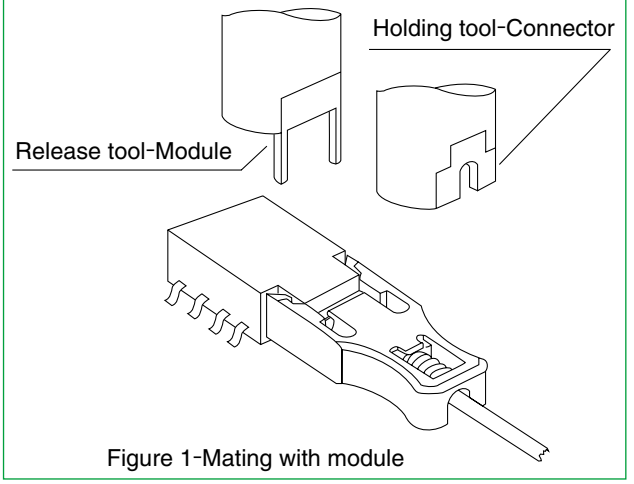


Figure 1-Mating with module

Self aligning mating to module.

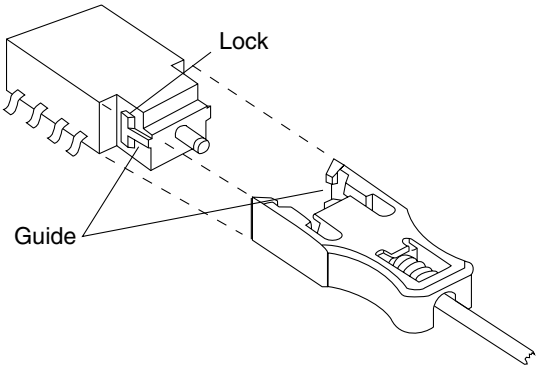


Figure 2-Self aligned locking mating

■Specifications (Note1)

Rating	Operation temperature	-40℃ to 85℃	Storage temperature	-40℃ to 85℃

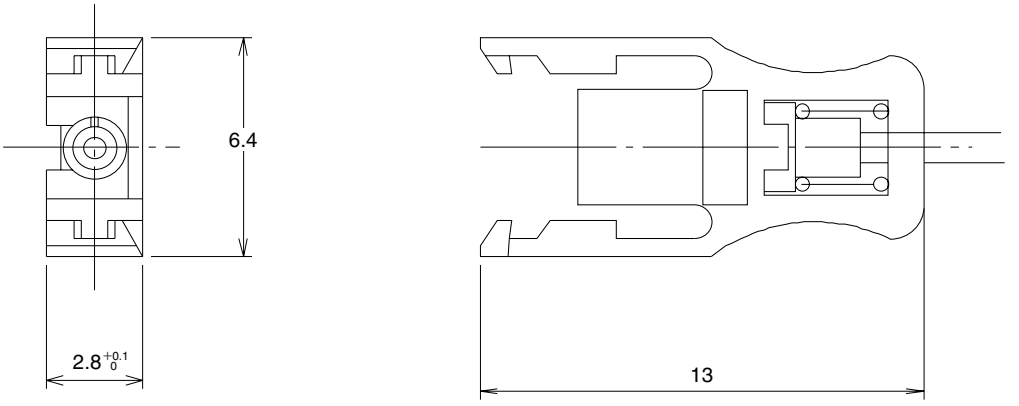
Item		Test Conditions	Requirements
Optical performance	Insertion loss (Note2)	Wavelength 1310 nm (LD)	0.5 dB or less(※Note1)
	Return loss	Wavelength 1310 nm (LD)	40 dB or greater
Mechanical performance	Engagement force	Engagement in axial direction	19.6 N or less
	Holding force of adapter split sleeve	1.249 ±0.0005 mm diameter of ceramic gauge	0.98 N to 3.5 N
	Durability(Mating/Unmating)	30 times	Optical performance must be met after the test. No damage, cracks, or loose parts.
	Vibration	Vibration frequency range: 10 to 55 Hz, single amplitude of 0.75 mm Acceleration: 98.1 m/s², for 2 hours in each of 3 directions	
	Shock	Acceleration of 981 m/s², 6 ms operation time Sine half-wave waveform, for 10 cycles in each of the 3 axes	
Enviremental performance	Humidity resistance	85%, 85℃	
	Rapid change of temperature	Temperature: -40℃ to 85℃, 42 cycles	
	Heat resistance	Temperature: 85℃	
	Cold resistance	Temperature: -40℃	
	Salt-fog test	48 hours exposure to 5% brine	No excessive corrosion observed

(※Note1): Specified in the temperature of 25℃, humidity 60% or less.
Note2: When connected with master cable or measurements.

■Materials

Part name	Material	Notes
Plug casing	PPS	UL94V-0
Spring	Piano wire or stainless steel	
Split sleeve	Copper alloy or zirconia	
Ferrule	Zirconia	

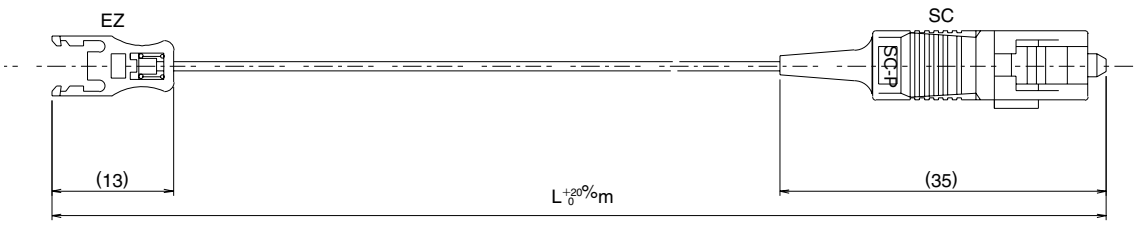
■Dimensions



※ All dimensions in mm.

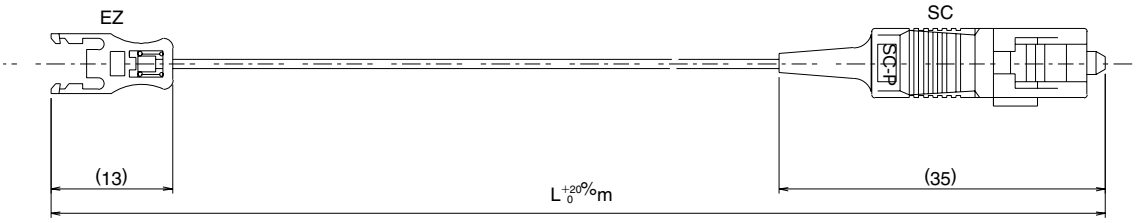
■Cable assemblies

1. With SC connector



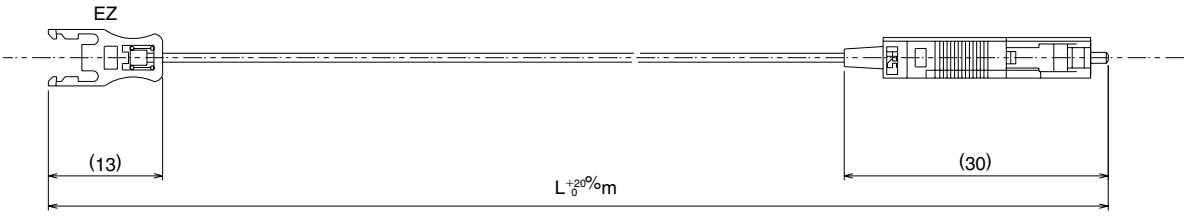
Product No.	Optical fiber	Polishing form	Length	Notes
EZ-H1-SC-0.5M	SM-9.5/125	AdPC	0.5m	SC connector
EZ-H1-SC-1.0M	SM-9.5/125	AdPC	1m	SC connector

2. With FC connector



Product No.	Optical fiber	Polishing form	Length	Notes
EZ-H1-FC-0.5M	SM-9.5/125	AdPC	0.5m	FC connector
EZ-H1-FC-1.0M	SM-9.5/125	AdPC	1m	FC connector

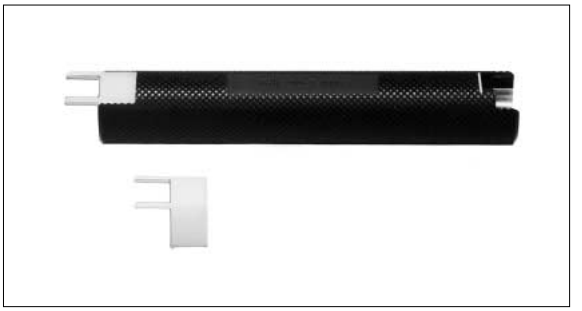
3. With MU connector



Product No.	Optical fiber	Polishing form	Length	Notes
EZ-H1-MU-0.5M	SM-9.5/125	AdPC	0.5m	MU connector
EZ-H1-MU-1.0M	SM-9.5/125	AdPC	1m	MU connector

•Shown are examples of the series.
For information on specific lengths or connectors, contact Hirose Sales Office nearest you.

■Release / Holding tool

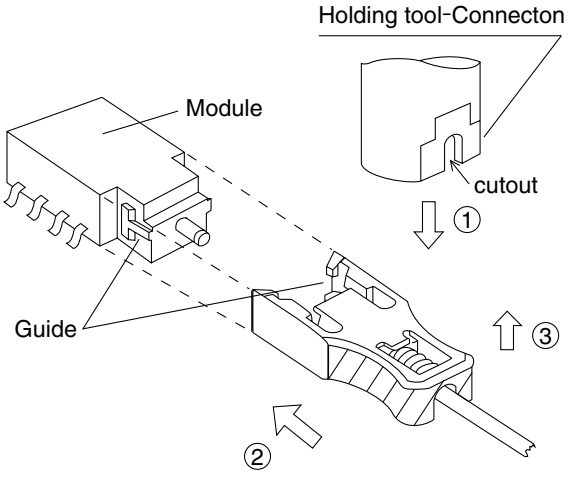


Product No.	Notes
EZ-T1-001	Release/Holding tool
EZ-T1-001-H	Replacement part of release tool

※If the release tool (EZ-T-001) is damaged, replace it with replacement part (EZ-T1-001-H).

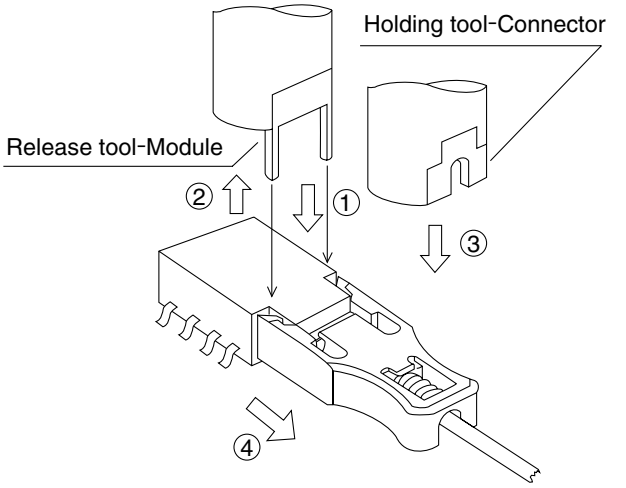
◆Usage of the tools

1. Mating sequence



① Place the hoding tool(in the direction shown) over the EZ connector, making sure that the FO cable clears the cutout.
② Mate the connector with the module untill the firm locking.
③ Remove the holding tool in the direction opposite to the initial direction.

2. Unmating sequence



① Insert both pins of the release tool between module and EZ connector as shown in the figure.
this will release the latches on the connector.
② Remove the release tool in a upward direction.
③ Place the connector holding tool over the EZ connector as shown in the figure.
④ Unmate the connector from the module by holding the connector holding tool.
⑤ Remove the holding tool in a upward direction.

◆Usage precautions

1. When separating the connector from the optical module, use the special jig so as not to apply an excessive load to the optical module and the connector.
2. Do not apply a pulling force of 4.9 N or greater to the cable.
3. Do not bend the cable at a radius less than the permissible curve.
4. Use a ferrule tip cleaner for 0.125 mm diameter to clean the ferrule surface.
After cleaning, be careful that industrial paper waste or other dirt does not remain on the ferrule tip.