

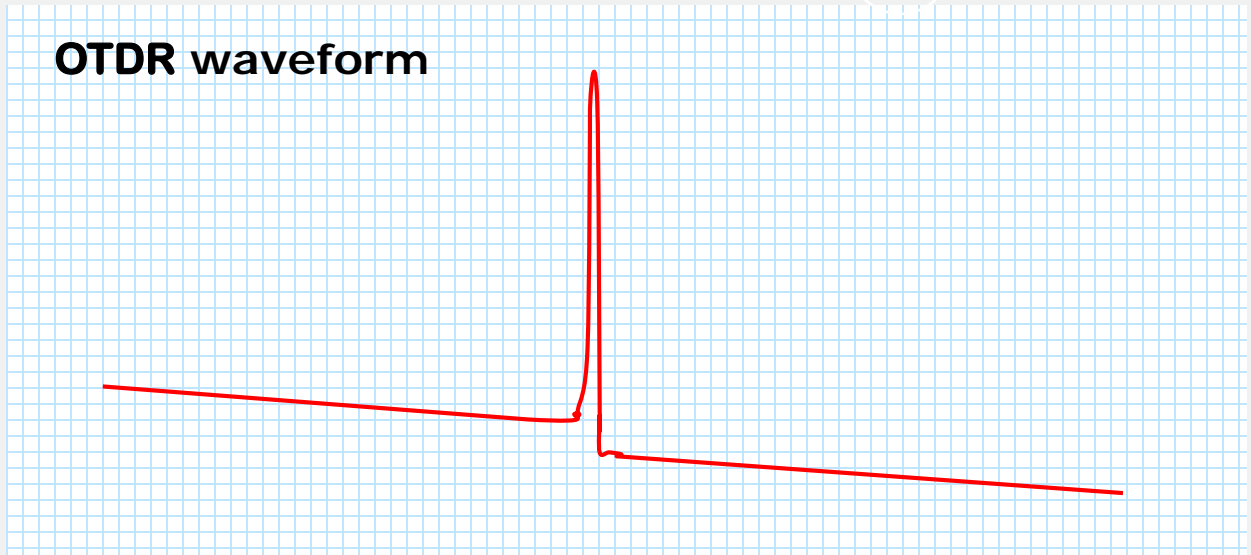
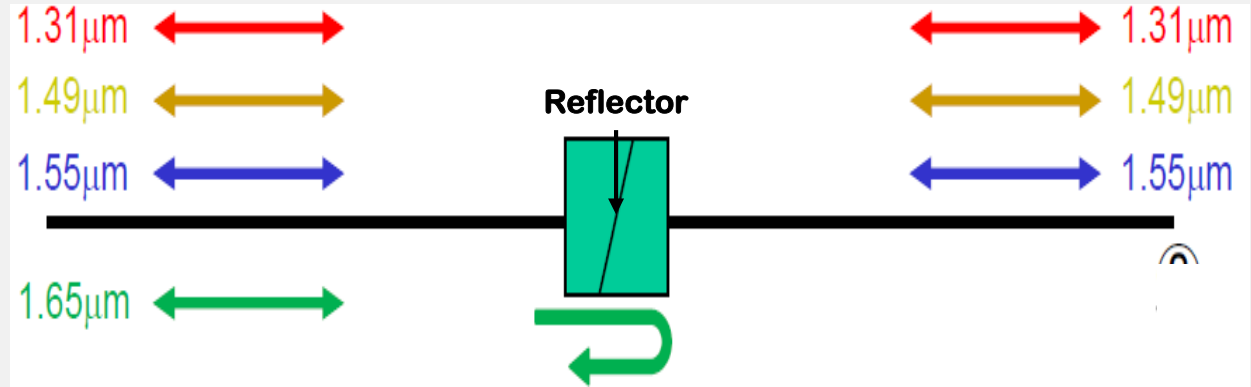
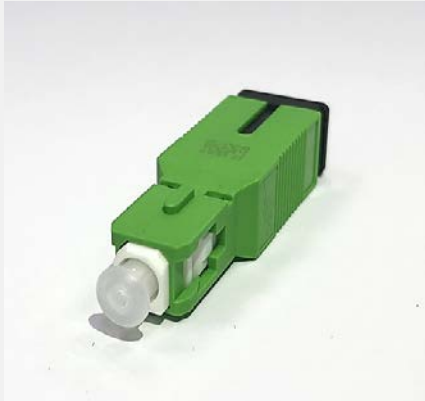
Optical Reflector

for PON Network Monitoring

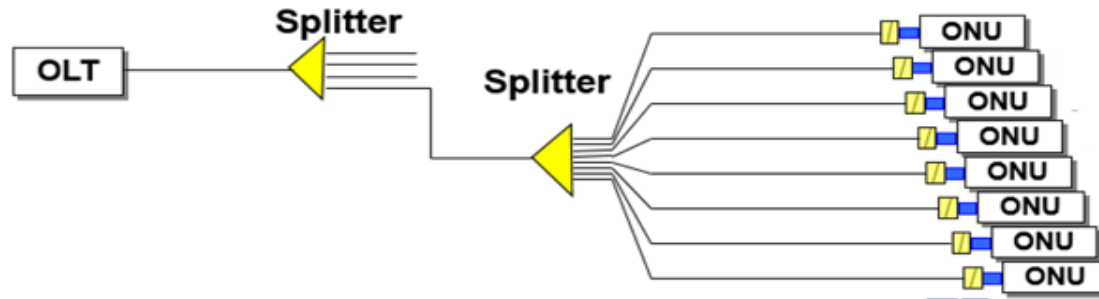
SUMITOMO ELECTRIC INDUSTRIES, LTD.

2020.Jul

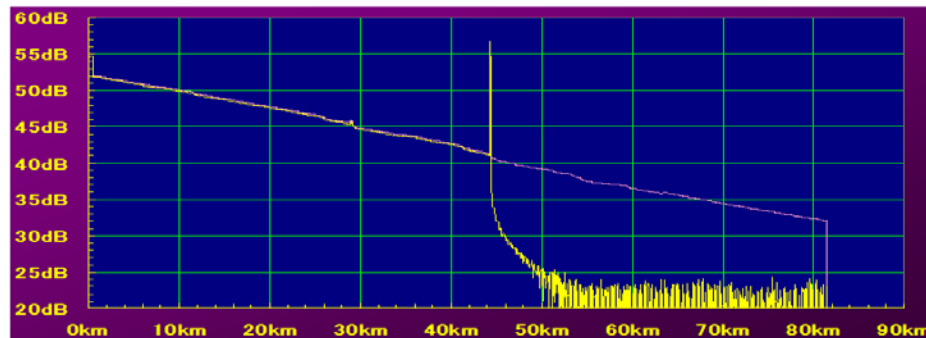
What's Reflector?



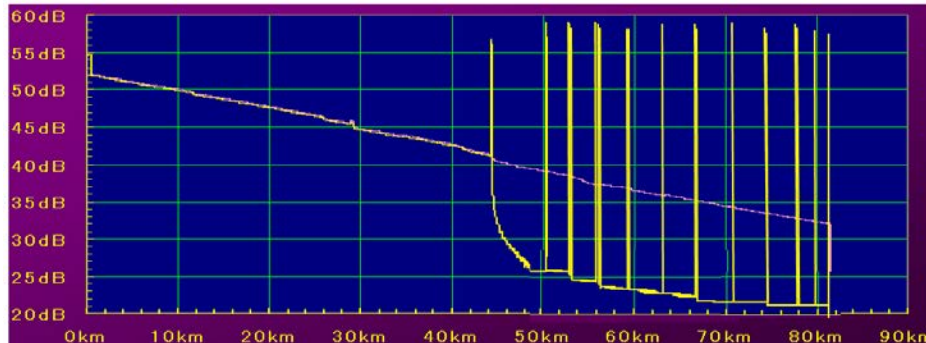
Monitoring for PON with Reflector



**OTDR waveform
without reflector at ONU**



**OTDR waveform
with reflector at ONU**



Why monitoring with reflector ?

1. Pre-test after installation

No Reflector



- Dispatch technician to CO
- Find the user line
- Checkup

With Reflector



- Automatic checkup

Why monitoring with reflector ?

2. Proactive maintenance

No Reflector



- Service shut down
- User call to help desk
- Technician rush to user house
- OTDR from ONU side
- Fix fiber breakage

With Reflector



- System predict fiber damage
- Technician fix it in advance

Why monitoring with reflector ?

3. Support of Self-installation

No Reflector



- Appointment with user
- Dispatch technician
- Enter to the ONU point
- Set up and check up

With Reflector



- Send ONU kit to user
- Checkup at Central Office

Why monitoring with reflector ?

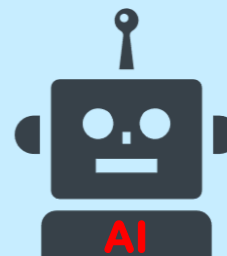
4. Smart monitoring

No Reflector



- Service shut down
- User call to help desk
- Technician rush to user house
- OTDR from ONU side
- Fix fiber breakage

With Reflector



- Smart management of network monitoring, dispatch of technicians, by AI

Sumitomo's reflector



Low loss
High reflection
Low variation



Proven reliability



Flexible
customization capability



Competitive price

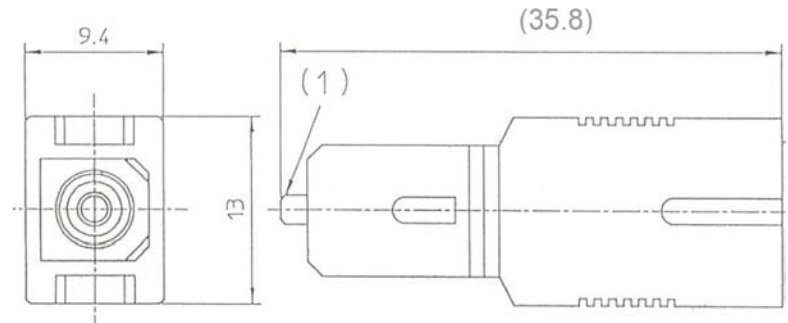
Sumitomo's reflector



Pass band
1260 ~ 1630 nm

Reflect band
1645 ~ 1655 nm

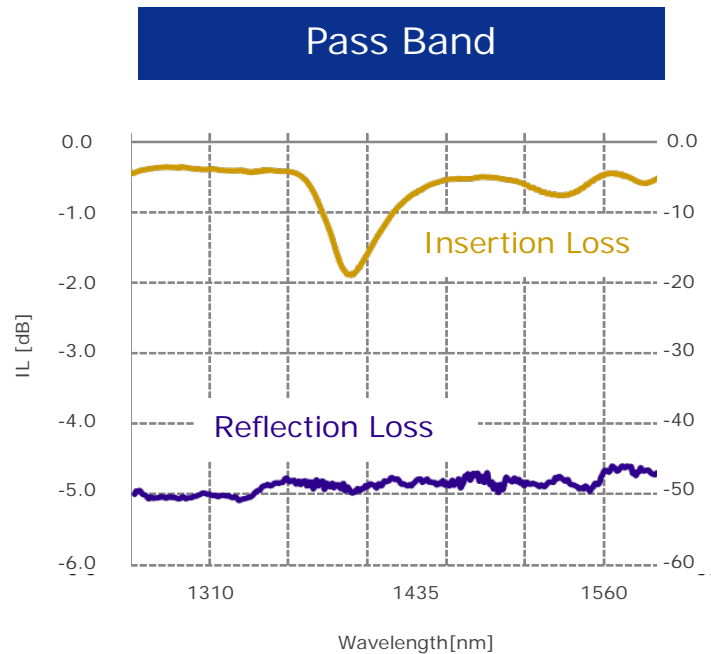
Single Mode Fiber
SC/APC, Adapter Type



Parameters			Min	Max	
Insertion loss	Pass band wavelength	1260nm~1370nm		1.0	XGS-PON(Up), GPON(Up) GPON(Down), NG-PON2(Up/Down) Vide(Down), XG-PON(Down) NG-PON2(Down)
		1460nm~1600nm		1.0	
		1600nm~1625nm		1.0	
		1625nm~1630nm		5.4	
	Reflect band wavelength	1645nm~1655nm	21.7		OTDR
Return loss	Pass band wavelength	1260nm~1580nm	35.0		
		1580nm~1620nm	30.0		
		1620nm~1630nm	20.0		
	Reflect band wavelength	1645nm~1655nm		1.4	

Sumitomo's reflector

Loss distribution spectrum



Sumitomo's reflector



**Plug
Jack**



**Field
Installable**



Pigtail

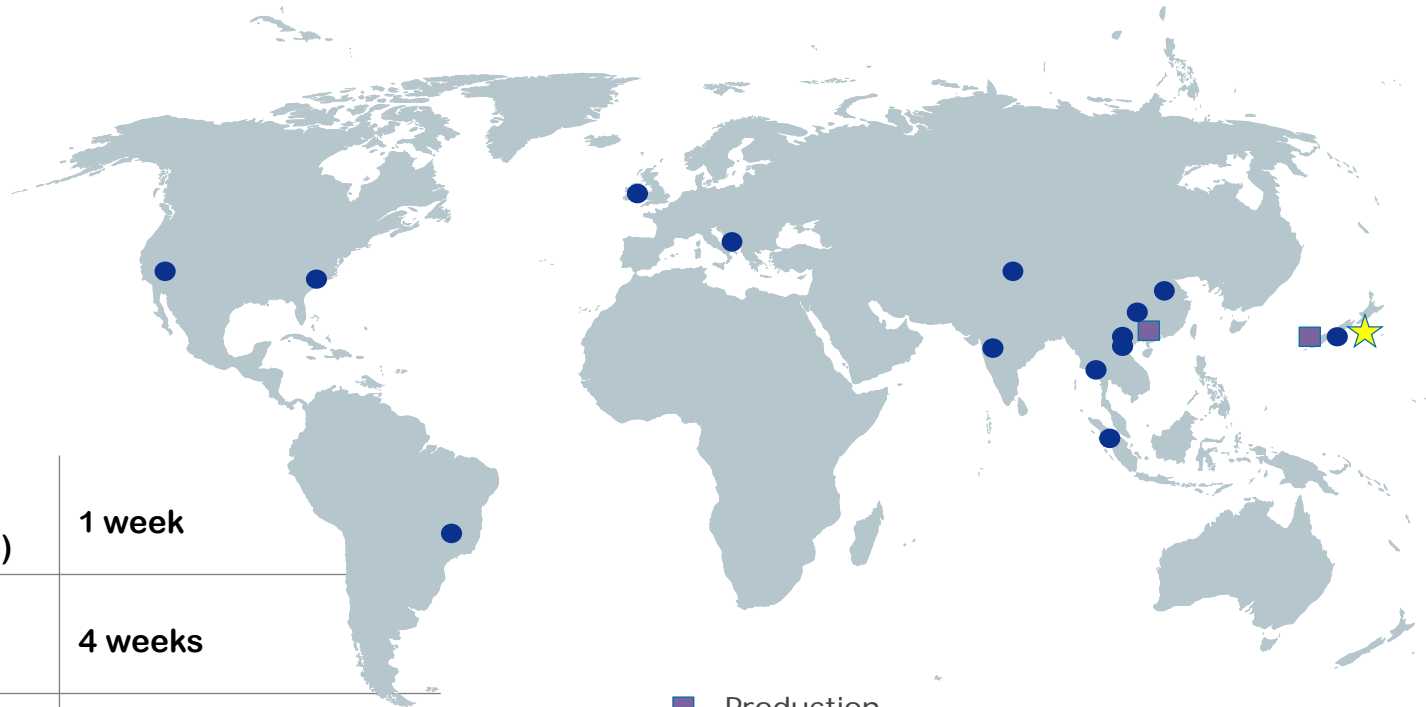


Inline



**Field
Installable
(Splice)**

Business Support



- Production
- Sales
- ★ Headquarter

Lead Time (with stocking scheme)	1 week
Lead Time (with forecast)	4 weeks
Lead Time (without forecast)	8 weeks
Production capacity	50,000pcs+/month
Minimal order quantity	100 pcs

Contact Info

You can see the basic knowledge of how RFTS and Reflector works in your network in the following link.

[Remote monitoring web site](#)

[Showcase @ LinkedIn](#)

Your message/inquiries would be welcomed anytime!

interconnect@info.sei.co.jp

End of slides