

Optical Components

Rev. 3 [10. 2008]

OL5350L-3-A10,OL5351L-3-A10

OL5353L-3-A10

Preliminary

3mW Coaxial DFB Laser Diode Modules

1. DESCRIPTION

The OL5350L-3-A10,OL5351L-3-A10,OL5353L-3-A10 series consist of an MQW-DFB laser diode, a monitor PD, a single-mode fiber and a coaxial package.

2. FEATURES

- High output power: 3.0mW fiber output power under CW
- Wide operating temperature range: Tc=0 to +75°C
- Side-mode suppression: 30dB
- Multi-quantum-well (MQW) DFB structure
- Internal monitor PD for power control
- Coaxial Package
- No TEC required

3. APPLICATION

- WDM supervisory channel in SDH system with optical in-line amplifier

4. OPTICAL AND ELECTRICAL CHARACTERISTICS

(Tc = 0 to +75°C, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Fiber Output Power	Pf	CW	3			mW
Threshold Current	Ith(25)	CW, Tc=25°C	3.5		60	mA
Operation current	Iop	Pf=3mW, CW			110	mA
Forward Voltage	Vf	Pf=3mW, CW			2	V
Peak Wavelength	λ_p	Pf=3mW, CW	1500	1510	1520	nm
Spectral width	$\Delta\lambda$	Pf=3mW, -20dB,CW			1	nm
Side Mode Suppression Ratio	SMSR	Pf=3mW, CW	30			dB
Tracking Error	TRE	Pf=3mW, Im=const., related to 25°C	-1.0		1.0	dB
Rise/Fall Times	Tr/Tf	Ibias = Ith Pf=3mW, 10-90%			0.5	ns
Photodiode Dark Current	Id	Vrd=5V			1	μ A
Monitor Current	Im	Pf=3mW,CW, Vrd=5V	100		1000	μ A
PD capacitance	Ct	Vrd=5V,f=1MHz		15		pF

$$TRE= 10*\log\{Pf(WCT)/Pf(25^\circ C)\}$$

5.ABSOLUTE MAXIMUM RATING

(Tc = +25°C, unless otherwise specified)

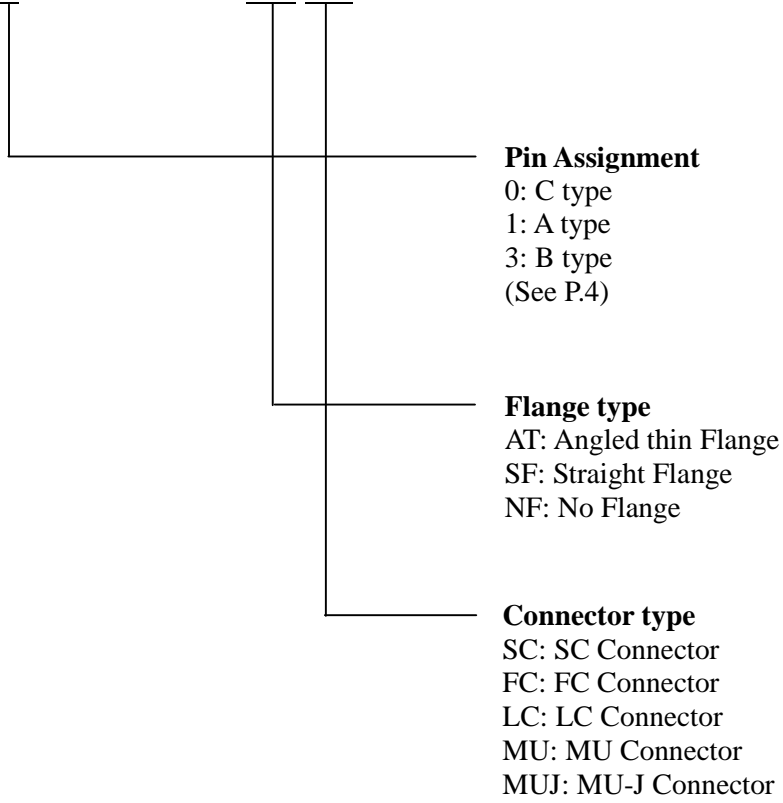
Parameter	Symbol	Rating	Unit
Fiber Output Power	Pf	3.5	mW
LD Forward Current	Ifl	150	mA
LD Reverse Voltage	Vrl	2	V
Photodiode Forward Current	Ifd	10	mA
Photodiode Reverse Voltage	Vrd	15	V
Operating Temperature(Case)	Tc	0 to 75	°C
Storage Temperature	Tstg	-40 to 85	°C
Soldering(Max.10sec.)	Tsld	260	°C

6.CONNECTOR AND FIBER SPECIFICATIONS

Parameter	Specifications	Unit
Type	SM	---
Mode Field Diameter	9+/-1	μm
Cladding Diameter	125+/-2	μm
Jacket Diameter	900	μm
Length	1000 (Min.)	mm

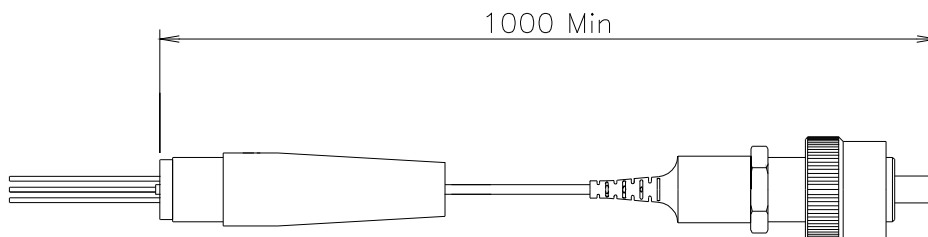
7.ORDERING INFORMATION

OL535 3 L - 3 - A10 - AT LC

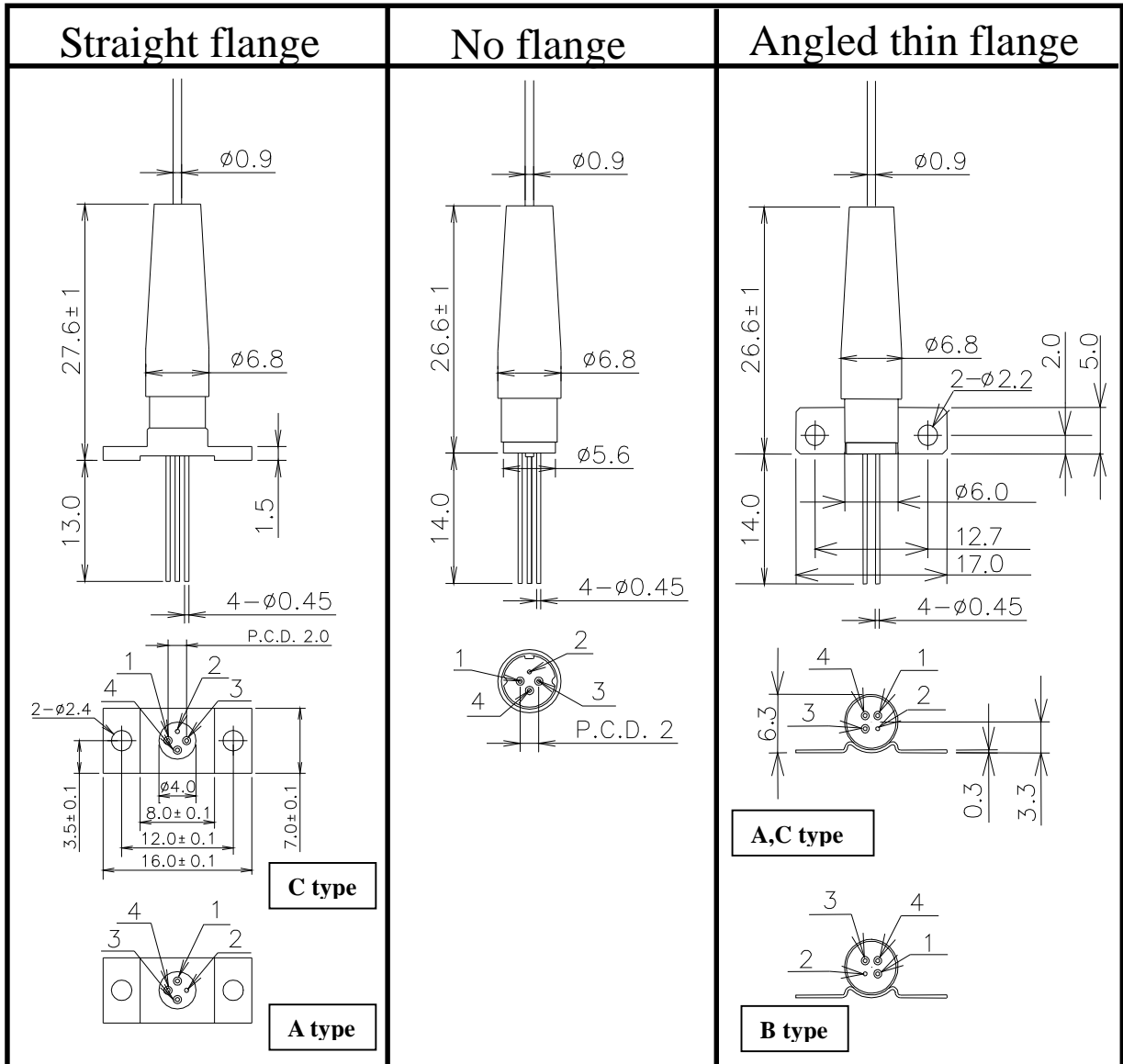


8.OUTLINE DRAWING

Length (mm)




All dimensions in millimeters



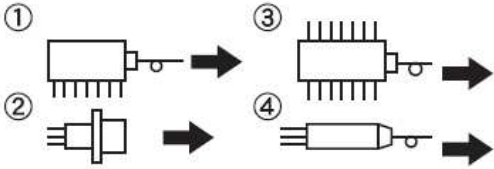
Pin Assignment

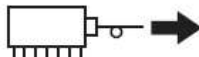
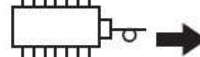

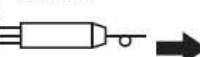
OL5350L (C type)	OL5351L (A type)	OL5353L (B type)																																				
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9. SAFETY INFORMATION ON THIS PRODUCT



PEAK OUTPUT POWER 500mW
 WAVELENGTH 900~1700nm
 CLASS 3B LASER PRODUCT



①  ③ 
 ②  ④ 

AVOID EXPOSURE
 Laser invisible radiation is emitted from the aperture.

Complies with CFR1040.10 and IEC60825-1

<p>Warning</p> <p>Laser Beam</p>	<p>A laser beam is emitted from this laser diode during operation. The invisible or visible laser beam, directly or indirectly, may cause injury to the eye or loss of eyesight.</p> <p>Do not look directly into the laser beam.</p> <p>Avoid exposure to the laser beam, any reflected or collimated beam.</p>
<p>Caution</p> <p>GaAs Product</p>	<p>The product contains gallium arsenide, GaAs. GaAs vapor and powder are hazardous to human health if inhaled, ingested or swallowed.</p> <p>Do not destroy or burn the product.</p> <p>Do not crush or chemically dissolve the product.</p> <p>Do not put the product in the mouth.</p> <p>Observe related laws and company regulations when discarding this product. The product should be excluded from general industrial waste or household garbage.</p>
<p>Caution</p> <p>Optical Fiber</p>	<p>A glass-fiber is attached on the product. Handle with care.</p> <p>When the fiber is broken or damaged, handle carefully to avoid injury from the damaged part or fragments.</p>

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