

OLx207L-5 Series

5mW Laser Diode DIL Modules with Single Mode Fiber, Built in Cooler, Isolator.

1. DESCRIPTION

OLx207L-5 Series are Laser Diodes in DIL package with single mode fiber.

2. FEATURES

- Single mode fiber output : Po=5mW
- Includes monitor PD for power control
- Multi-quantum-well (MQW) DFB structure
- Thermo-electric cooler
- Built-in optical isolator

3. APPLICATION

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

4. OPTICAL AND ELECTRICAL CHARACTERISTICS

(T_{LD}= 25°C, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit	
Threshold Current	I _{th}	CW	---	---	30	mA	
Operation current	I _{op}	Po=5mW, CW	---	---	100	mA	
Forward Voltage	V _f	Po=5mW, CW	---	---	3	V	
Peak Wavelength	λ _p	Po=5mW , CW	OL4207L-5	1470	1480	1490	nm
			OL5207L-5A	1505	1510	1515	nm
			OL5207L-5B	1505	1520	1525	nm
			OL6207L-5A	1615	1625	1635	nm
			OL6207L-5B	1640	1650	1660	nm
Spectral width	Δλ	Po=5mW, CW, -20dB	---	---	1	nm	
Side Mode Suppression Ratio	SMSR	Po=5mW, CW	30	---	---	dB	
Isolation	---	T _c =-5 to 65°C	20	---	---	dB	
Rise Time	τ _r	I _{bias} = I _{th}	---	---	0.5	ns	
Fall Time	τ _f	Po=5mW, 10-90%	---	---	0.5	ns	
Photodiode Dark Current	I _D	V _r (PD)=5V	---	---	1	μA	
Monitor Current	I _m	Po=5mW, CW, V _r (PD)=5V	50	---	---	μA	
PD Capacitance	C _t	V _r (PD)=5V, f=1MHz	---	15	---	pF	
Cooler Capacity	ΔT	Po=5mW	40	---	---	°C	
Cooler Current	I _c	ΔT=40°C, Po=5mW	---	---	1.2	A	
Cooler Voltage	V _c	ΔT=40°C, Po=5mW	---	---	2.4	V	
Thermistor Resistance	R _{th}	T _{thm} = 25 °C	9.5	---	10.5	kΩ	

5.ABSOLUTE MAXIMUM RATING

(Tc= 25°C, unless otherwise specified)

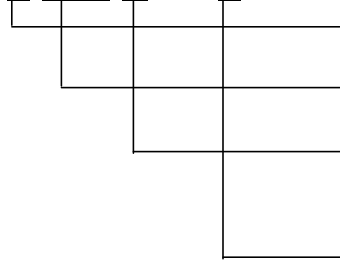
Parameter	Symbol	Rating	Unit
Fiber Output Power	Po	6	mW
LD Reverse Voltage	VR	2	V
Photodiode Forward Current	IF	10	mA
Photodiode Reverse Voltage	VR(PD)	20	V
Cooler Curent	Ic	1.4	A
Operating Case	Tc	-5 to 65	°C
Storage Temperature	Tstg	-40 to 85	°C
Lead Soldering	-	260 (10sec)	°C

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	1 (Min.)	m
Connector	FC/SPC	---

7.ORDERING INFORMATION

OL 5 207 L - 5 A



Wavelength

3: 1.3μ m ,4: 1.48μm, 5: 1.5μm 6: 1.6μm

Package Number

Device Structure

N: FP Laser L: DFB Laser

Optical Output Power

Laser in mW

Peak Wavelength(Typ.)	Oki Part Number
1480nm	OL4207L-5
1510nm	OL5207L-5A
1625nm	OL6207L-5A
1650nm	OL6207L-5B

8.OUTLINE DRAWING

All dimensions in millimeters
 Tolerances unless noted +/-0.5
 Package No. 207(Unit: mm)

