

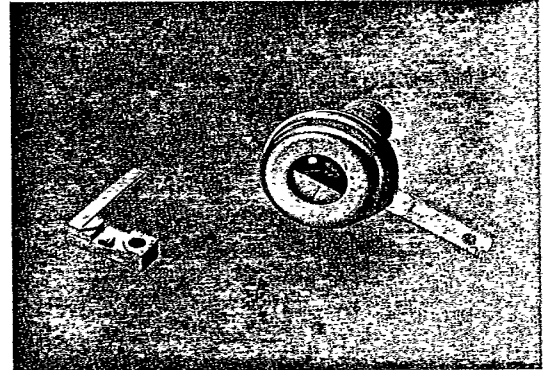
# 1.3μm High Power Laser Diode OL301A-20, OL303A-20, OL301A-100, OL303A-100

## ● DESCRIPTION

OKI OL301A-20, OL303A-20, OL301A-100 and OL303A-100 are 1.3μm InGaAsP/InP high power laser diodes developed as light sources for fiber-optic communications and optical equipment.

## ● FEATURES

- High optical output power:  
20mW (OL301A-20, OL303A-20)  
100mW (OL301A-100, OL303A-100)
- Stable fundamental transverse mode
- Long life, high reliability



## ● ABSOLUTE MAXIMUM RATINGS

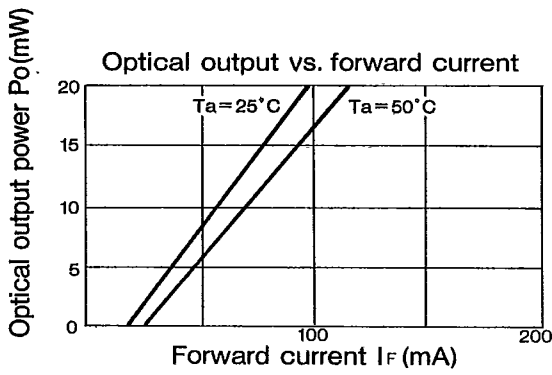
(Ta=25°C)

Parameter	Symbol	Ratings		Unit
		OL301A-20, OL303A-20	OL301A-100, OL303A-100	
Optical Output	Po	25	120	mW
Reverse Voltage	Vr	2	2	V
Operating Temperature	Topr	-20~+50	-20~+50	°C
Storage Temperature	Tstr	-40~+100	-40~+100	°C

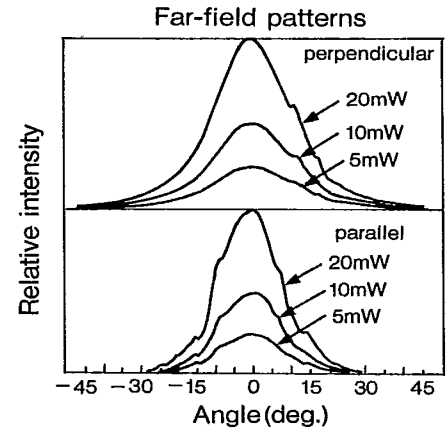
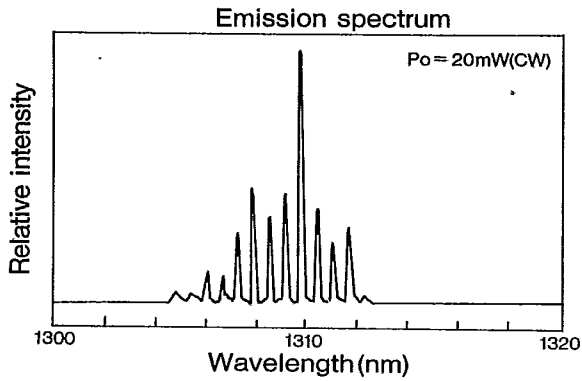
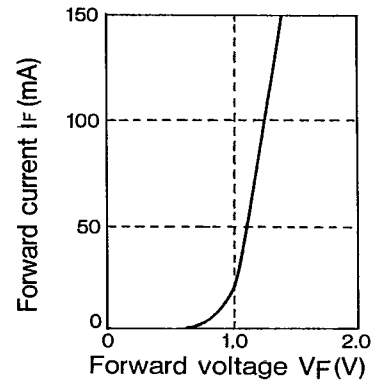
## ● OPTICAL AND ELECTRICAL CHARACTERISTICS

(Ta=25°C)

Parameter	Symbol	Test Conditions	OL301A/OL303A-20			OL301A/OL303A-100			Unit
			MIN	TYP	MAX	MIN	TYP	MAX	
Threshold Current	Ith	—	—	20	35	—	25	50	mA
Operating Current	Iop	Po=20mW	—	100	140	—	—	—	mA
		Po=100mW	—	—	—	—	—	400	
Monitor Output	Pm	Po=5mW	0.75	2	—	—	—	mW	
Peak Wavelength	λp	Po=20mW	1270	1300	1330	—	—	—	nm
		Po=100mW	—	—	—	1270	1300	1330	nm
Spectral Half Width	Δλ	Po=20mW	—	3	5	—	—	—	nm
		Po=100mW	—	—	—	—	5	10	nm
Full Angle at Half Maximum (parallel)	θp	Po=5mW	—	25	35	—	25	35	degree
Full Angle at Half Maximum (perpend.)	θL	Po=5mW	—	35	45	—	35	45	degree

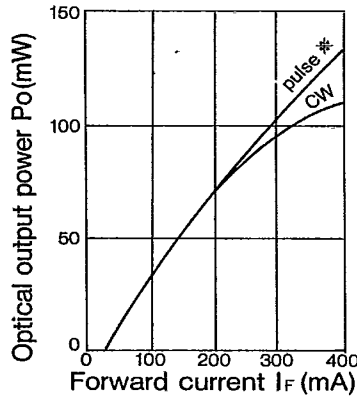


Forward current vs. forward voltage



OL301A-100, OL303A-100

Optical output vs. forward current



\*Pulse width is less than  $5\ \mu\text{s}$ , duty is less than 2%

Forward current vs. forward voltage

