

MITSUBISHI LASER DIODES
ML7xx36 SERIES
 1310nm InGaAsP FP LASER DIODES

Notice: Some parametric limits are subject to change

**TYPE
NAME**

ML720AA36S , ML725AA36F

DESCRIPTION

ML7XX36 series are InGaAsP laser diodes which provide a stable, single transverse mode oscillation with emission wavelength of 1310nm and standard continuous light output of 13mW.

ML7XX36 are hermetically sealed devices having the photo diode for optical output monitoring. This is suitable for such applications as FTTH PON(Fiber to the Home passive Optical Network)systems.

FEATURES

- 1310nm typical emission wavelength, FP-LDs
- Wide temperature range operation(-40 to 85°C)
- φ5.6mm TO-CAN with Ball Lens
- High Coupling Power to the fiber (Pf=2.6mW,Typ.)
- Focal Point of Fiber Coupling (DF=6.7mm,Typ.)

APPLICATION

- FTTH PON system

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Conditions	Ratings	Unit
PL	Light output power *	CW	18	mW
VRL	Laser reverse voltage	-	2	V
VRD	PD reverse voltage	-	20	V
IFD	PD forward current	-	2	mA
Tc	Operation temperature	-	-40 to +85	°C
Tstg	Storage temperature	-	-40 to +125	°C

* Total output from the lens

ELECTRICAL/OPTICAL CHARACTERISTICS(Tc=25°C)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Ith	Threshold current	CW	---	5	10	mA
Iop	Operation current	CW, PL=13mW	---	35	45	mA
Vop	Operating voltage	CW, PL=13mW	---	1.2	1.5	V
η	Slope efficiency	CW, PL=13mW	0.35	0.48	---	mW/mA
λc	Center wavelength	CW, PL=13mW	1290	1310	1330	nm
Δλ	Spectral Width	CW, PL=13mW,RMS(-20dB)	---	1.5	3.0	nm
Pf	Fiber Coupling characteristics	CW, PL=13mW,S110/125	1.3	2.6	---	mW
Df	at peak coupling<l>	CW, PL=13mW,S110/125	5.7	6.7	7.3	mm
tr,tf	Rise and Fall time (10%-90%)	Ib=Ith,PL=13mW,10-90%	---	0.3	0.7	nsec
Im	Monitor Current (PD)	CW, PL=13mW, VRD=1V,	0.05	0.2	0.6	mA
Id	Dark Current (PD)	VRD=10V	---	---	0.1	μA
Ct	Capacitance (PD)	VRD=10V, f=1MHz	---	10	20	pF

Note : <l> Df is a distance between reference plane of the base to the fiber.

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OUTLINE DRAWINGS

