2.5Gbps 1310nm DFB LD TO-CAN

Model: *AL1310DXXTXX-XX*

Features:

·Wide temperature range operation from -40°C to+85°C
·High slope efficiency
·Speed up to 2.5Gbps
·TO-56 package
·Built-in InGaAs monitor or not

Product Specifications:

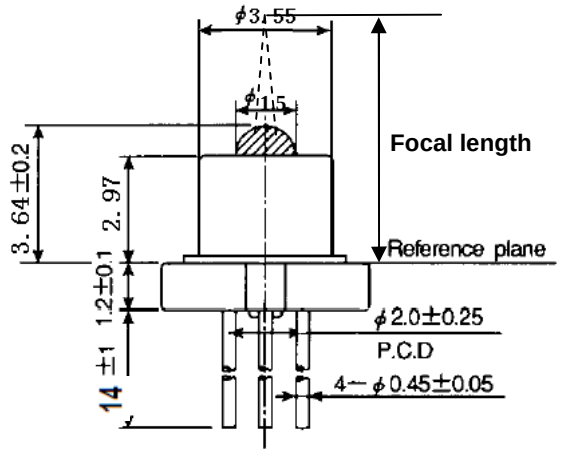
Absolute Maximum Ratings(T=25℃)

Parameter	Symbol	Unit	Min	Max	Note
Storage Temperature	T_{stg}	°C	-40	+100	
Operating Temperature	T_{op}	°C	-40	+85	
Forward current(LD)	I_{fl}	mA		150	
Reverse voltage(LD)	V_r	V		2	
Maximum Power	P_o	mW		10	
Solder Reflow Temperature		℃		260	10 seconds max

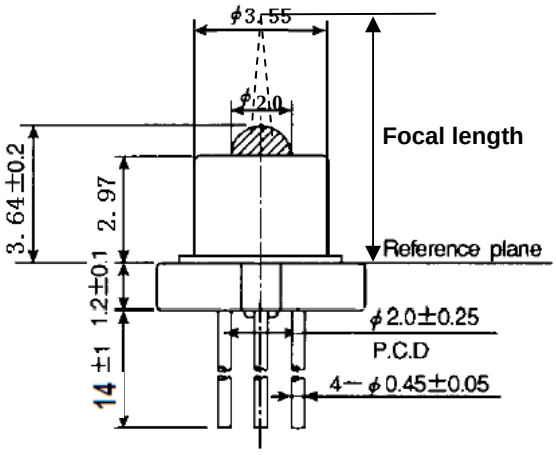
Electro-Optical Characteristics(T=25℃,unless noted otherwise)

Parameter	Symbol	Unit	Min	Typ	Max	Test Condition
Threshold current	I_{th}	mA		8	12	CW, Tc=25℃
				20	30	CW, Tc=85℃
Optical output power	P_o	mW	6	8		CW, Iop=Ith+20mA
			8	10		CW, Iop=Ith+20mA Only for BBL&AL
Slope efficiency	S_e	mW/mA	0.30	0.40		CW, Iop=Ith+20mA
			0.40	0.50		CW, Iop=Ith+20mA Only for BBL&AL
Peak wavelength	l_c	nm	1290	1310	1330	Iop=25mA
Spectral Width	Dl	nm		0.6	1.0	RMS
Rise and Fall time	T_r,T_f	ps			300	CW，Iop=Ith+20mA.10~90%
Monitor current	I_m	μA	120		800	CW, Iop=Ith+20mA
Monitor Dark current	I_d	nA			10	Vr=5V
Beam Divergence Angle	$\theta_{//}$	degree		22		Po=5mw,FWHM
	$\theta_{\perp}$			35		

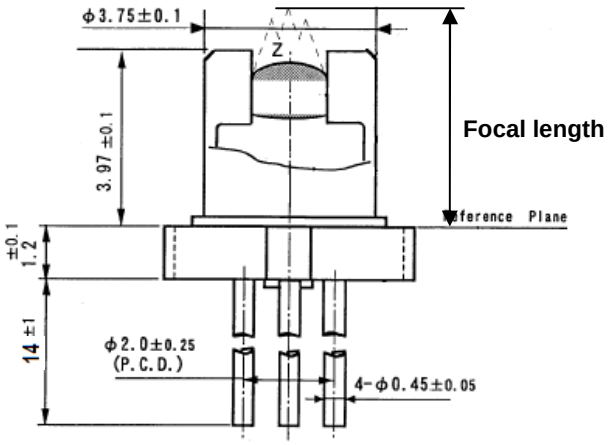
Outline Drawings (in mm):



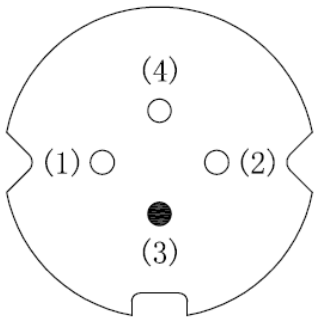
TYPE BL:1.5mm ball lens cap



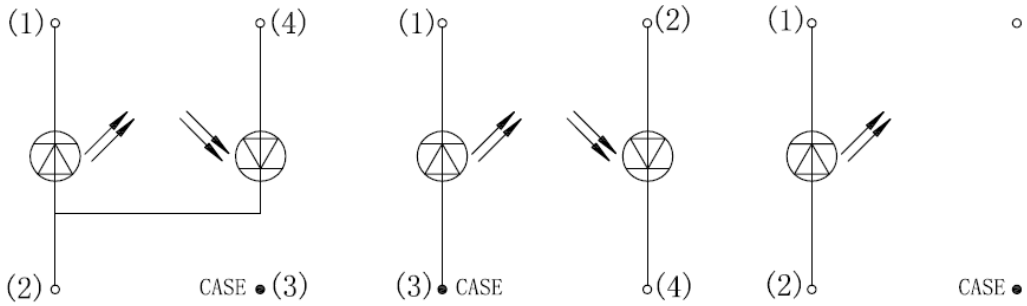
TYPE BBL:2.0mm ball lens cap



TYPE AL:aspherical lens cap



Bottom view

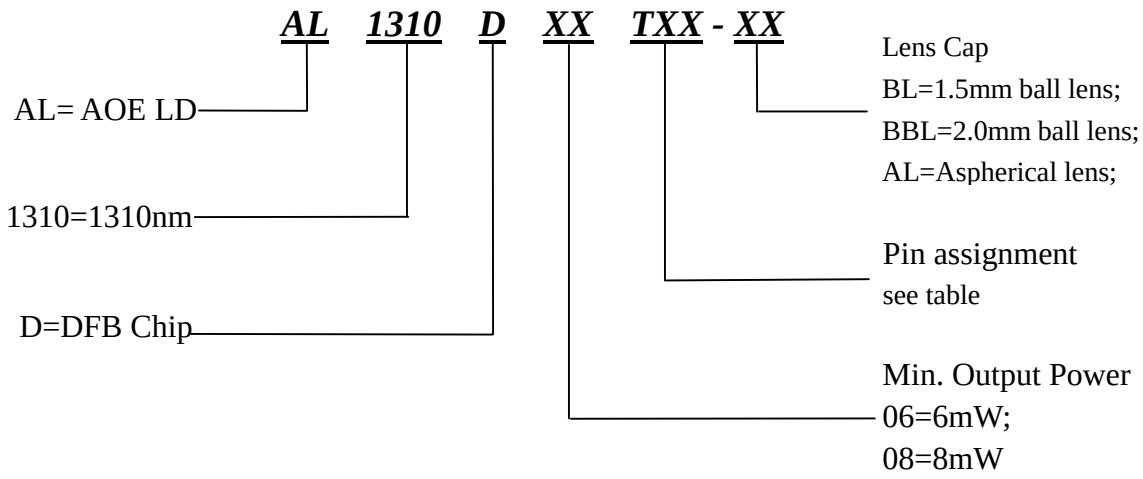


Type ″01″ Type ″02″ Type ″03″

PIN-OUT and Focal Length

Pin Assignment				Focal length	
Number	“01”	“02”	“03”	Type	Length(mm)
PIN 1	LD-	LD-	LD-	BL	6.4±0.2
PIN 2	LD+(PD-)	PD+	LD+	BBL	6.5±0.2
PIN 3	Case	LD+	Case	AL	7.5±0.3
PIN 4	PD+	PD-	/	/	/

Ordering information:



Precaution:

(1) The modules should be handled in the same manner as ordinary semiconductor device to prevent the electro-static damages. For safety keeping and carrying, the modules should be packaged with ESD proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.

(2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.

(3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed.