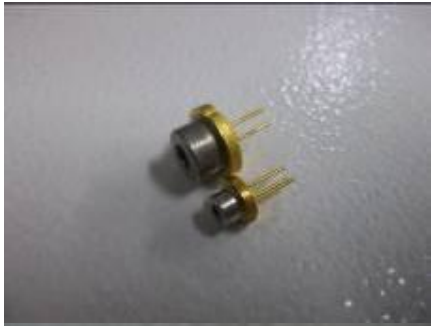




980nm 200mw Laser Diode

Model: AL0980F200TXX-XXFW



Features:

- Output power: 200mW
- Efficient quantum well structure
- Lower threshold current
- Center Wavelength: 980nm
- Package: TO-18 (Φ5.6mm) 、 TO-5 (Φ9mm)

Absolute Maximum Ratings($T=25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Unit	Min	Max	Note
Reverse Voltage	V_r	V	-	2	-
Operating Temperature	T_o	$^{\circ}\text{C}$	-10	30	
Storage Temperature	T_{stg}	$^{\circ}\text{C}$	-10	85	
Solder Reflow Temperature	S_{temp}	$^{\circ}\text{C}$	-	260	10 seconds max

Electro-Optical Characteristics($T=25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Unit	Min	Typ	Max	Test Condition
Optical output power	P_o	mW	200	-	-	$I_{op}=400\text{mA}$
Center wavelength	λ_c	nm	970	980	990	$P_o=200\text{mW}$
Spectral width	$\Delta\lambda$	nm	-	-	5	FWHM, $P_o=200\text{mW}$
Threshold current	I_{th}	mA	-	70	100	
Operating current	I_o	mA	-	300	400	
Operating voltage	V_f	V	-	1.7	2	$P_o=200\text{mW}$
Slope Efficiency	η	W/A	-	0.9	-	
Monitoring current	I_m	μA	-	400	1500	$P_o=200\text{mW}$
Beam divergence	$\theta_{\perp} \times \theta_{//}$	$^{\circ}$	-	40×12	-	FWHM
Wavelength temperature coefficient	$d\lambda/dT$	nm/ $^{\circ}\text{C}$	-	0.3	-	-
Emitting area	-	μm	30 \times 1			-
Polarization Ratio	TE					-

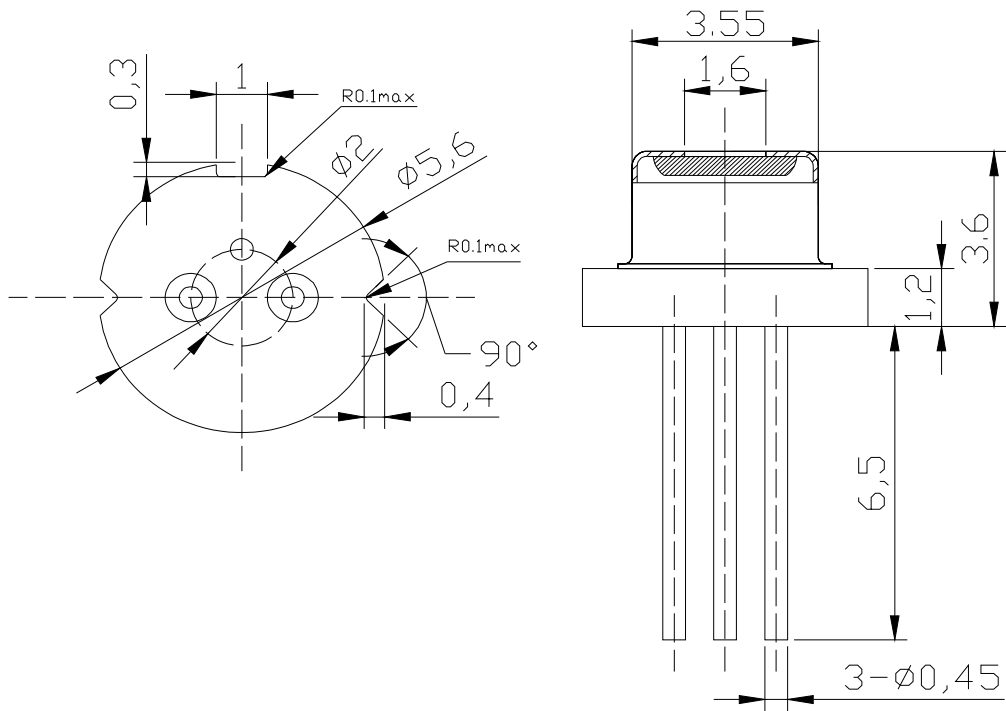
Associated Opto-electronics (Chongqing) Corp. 14# Huayuan Rd., Nanping, Chongqing 400060

Tel: 023-62925588

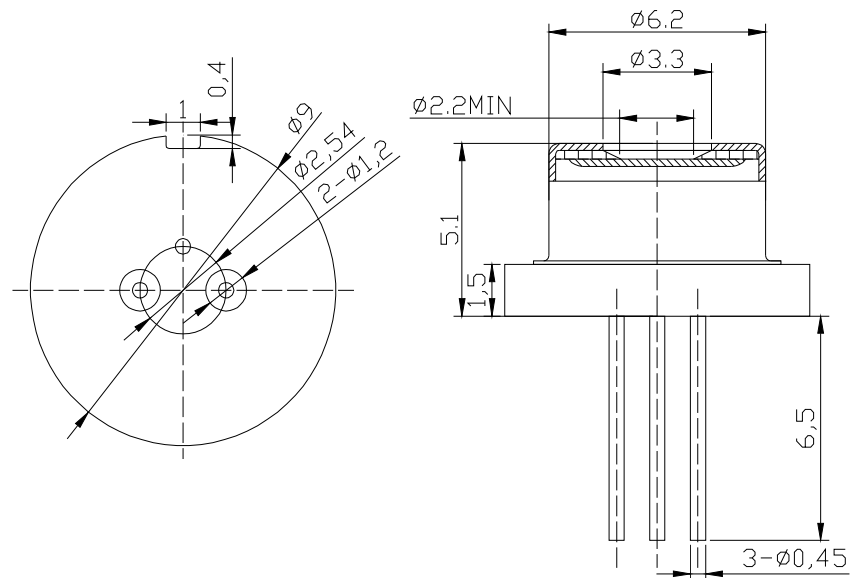
Fax: 023-62804240

Web: www.aocq.com

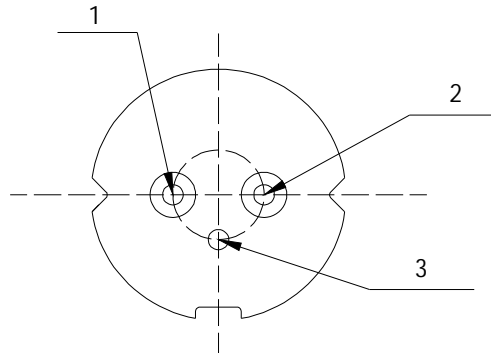
Outline Drawings (TO-18) (in: mm)



Outline Drawings (TO-5) (in: mm)

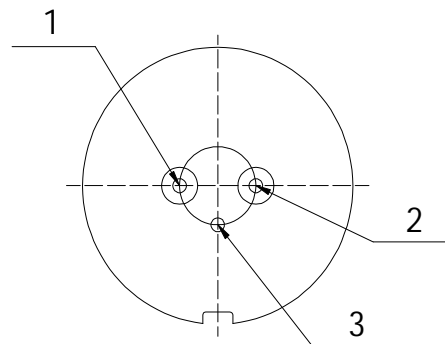


Pin Assignment (TO-18) (Bottom View)



Pin Assignment			
Type \ Pin	1	2	3
01	PD Anode	LD Cathode	LD Anode/PD Cathode
03	-	LD Cathode	LD Anode

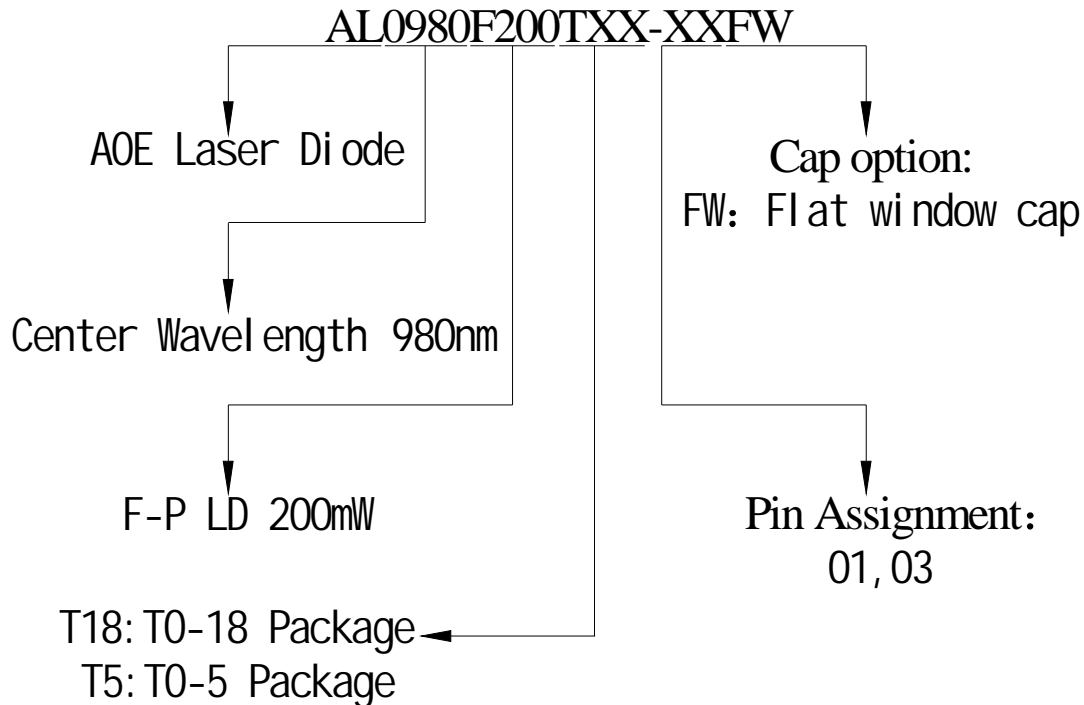
Pin Assignment (TO-5) (Bottom View)



Pin Assignment			
Type \ Pin	1	2	3
01	PD Anode	LD Cathode	LD Anode/PD Cathode
03	-	LD Cathode	LD Anode



Ordering information:



Precaution:

- (1) The laser diodes 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. For assembling, 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 damages.
- (3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed.
- (4) A voltage stabilizer should be taken into consideration for the power supply, and shock voltage should be avoided during the process of switching on and off of the supply in order to prevent the device from damaging.

Warning: Direct exposure of one's eyes to the laser beam or long time exposure of one's skin to the beam must be avoided.



文件类型

产品规格书

文件编号

AOE/GJS-15-2012

文件名称

980nm200mW TO 封装
激光器规格书

版次

1.1

总页数

4

修改记录

版次	修改内容	修改/日期	审核/日期	批准/日期	生效日期
1.1	1: 中心波长参数的测试条件由 $I_{op}=300mA$ 调整为 $P_o=200mW$. 2: 光谱宽度参数的测试条件由 $FWHM, I_{op}=300mA$ 调整为 $FWHM, P_o=200mW$. 3: 监视电流的最大值由 $600\mu A$ 调整为 $1500\mu A$. 4: AL0980F200T18-XXFW 的管座下边缘至管帽顶端距离由 $3.5mm$ 调整为 $3.6mm$; AL0980F200T5-XXFW 的管座下边缘至管帽顶端距离由 $5.0mm$ 调整为 $5.1mm$, 管帽外径由 $6.4mm$ 调整为 $6.2mm$.	陈亮 2016.11.29	樊洋 2016.11.29	江石屏 2016.11.29	2016.12.1

会签

编制	陈亮	审核	樊洋	批准	江石屏
编制部门	功率光源生产部	生效日期	2016.12.1		