HIGH LUMINANCE MIRROR TYPE LED
AOP1-8810P2

Infrared LED

◆ Die & Package

Item	Value
Peak wavelength (typ)	870 nm
Die Materials	GaAlAs
Package	SMD mirror type

◆ Absolute Maximum Ratings

Ta = 25℃

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	200	mW
Forward Current (DC)	I_F	100	mA
Pulse Forward Current (**	I_{FRM}	700	mA
Reverse Voltage (DC)	V_R	5	V
Operating Temperature	Topr	-30 ~ +85	℃
Storage Temperature	Tstg	-30 ~ +90	℃

** I_{FRM}: PW(Pulse width)≦100 μ sec, duty≦1/100

◆ Electro-optical Characteristics

Ta = 25℃

Parameter	Symbol		Value	Unit	
Forward Voltage*	V_F	Typ Max	1.4 1.7	V	I_F = 50mA
Reverse Current	I_R	Max	10	μ A	V_R = 5V
Peak Wavelength	λ_p	Typ	870	nm	I_F = 50mA
Spectral Half width	$\triangle\lambda$	Typ	45	nm	I_F = 50mA
Total Radiated Power	P_O	Min Typ	8 14	mW	I_F = 50mA
Peak Radiant Intensity	I_E	Min Typ	500 700	mW/sr	I_F = 50mA
Viewing Half angle	θ 1/2	Typ	±4.0	°	I_F = 50mA
Response Time	Tr / Tf	Typ.	25	ns	

** Revised on July 10, 2006*

The data is subject to change without notice.

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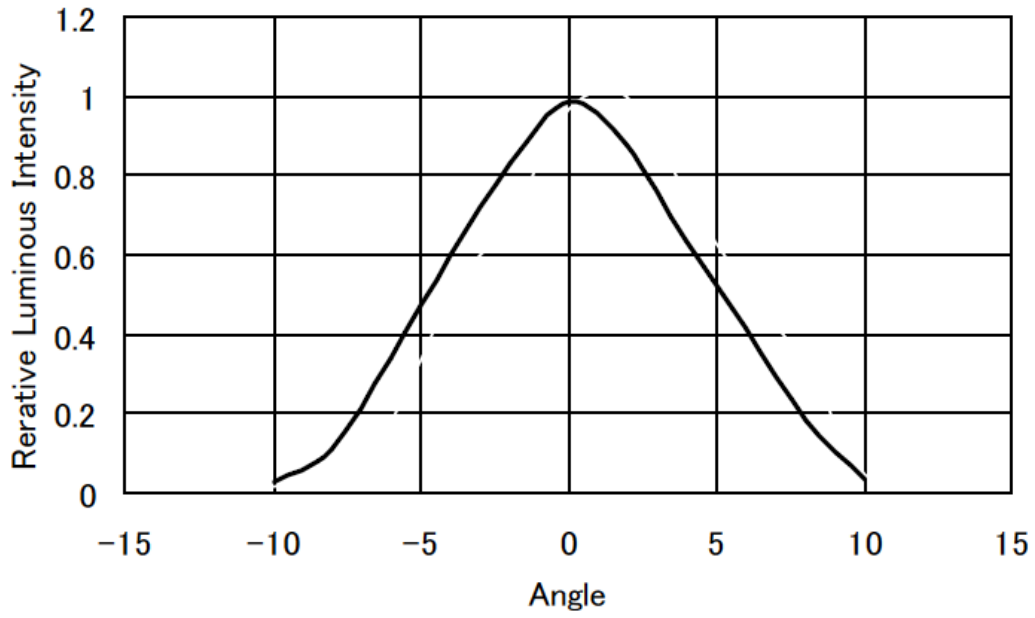
◆ Directional Characteristics (Reference Data)

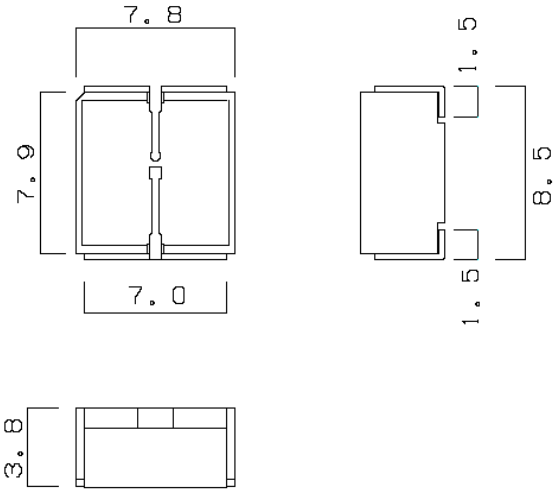
LIGHT DISTRIBUTION



Measuring Condition: at 25℃ I_F=50mA

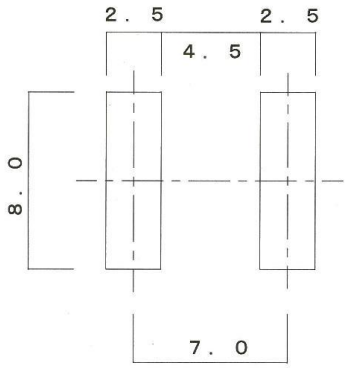
◆ External Condition (Reference Drawing)

Unit: mm



C cut side:cathod

Recommended Pad Pattern geometry



*Soldering iron tip: Max. 320℃
*Soldering time: Max. 3 sec.
Note: Please note not to heat the lead-neck portion.

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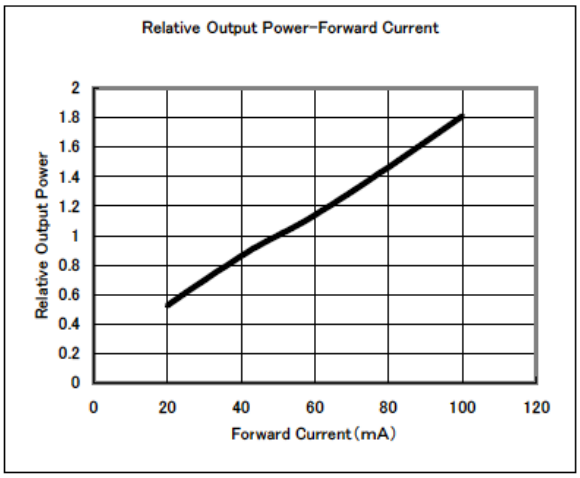
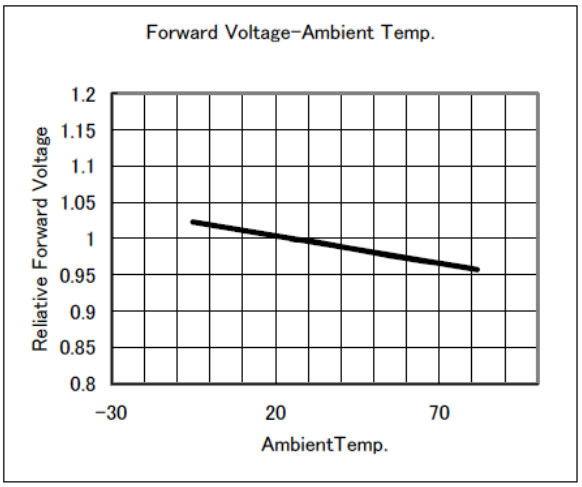
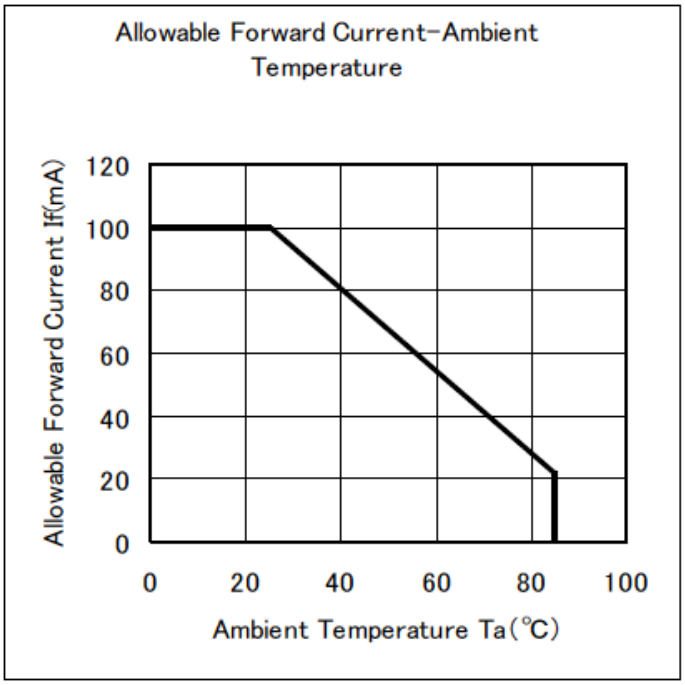
◆ Optical & Electrical Characteristic Curve







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