

HIGH LUMINANCE MIRROR TYPE LED AOP1-8805

Infrared LED

◆ Die & Package

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



◆ Absolute Maximum Ratings

Ta = 25°C

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	°C
Storage Temperature	Tstg	-30 ~ +95	°C

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

◆ Electro-optical Characteristics

Ta = 25°C

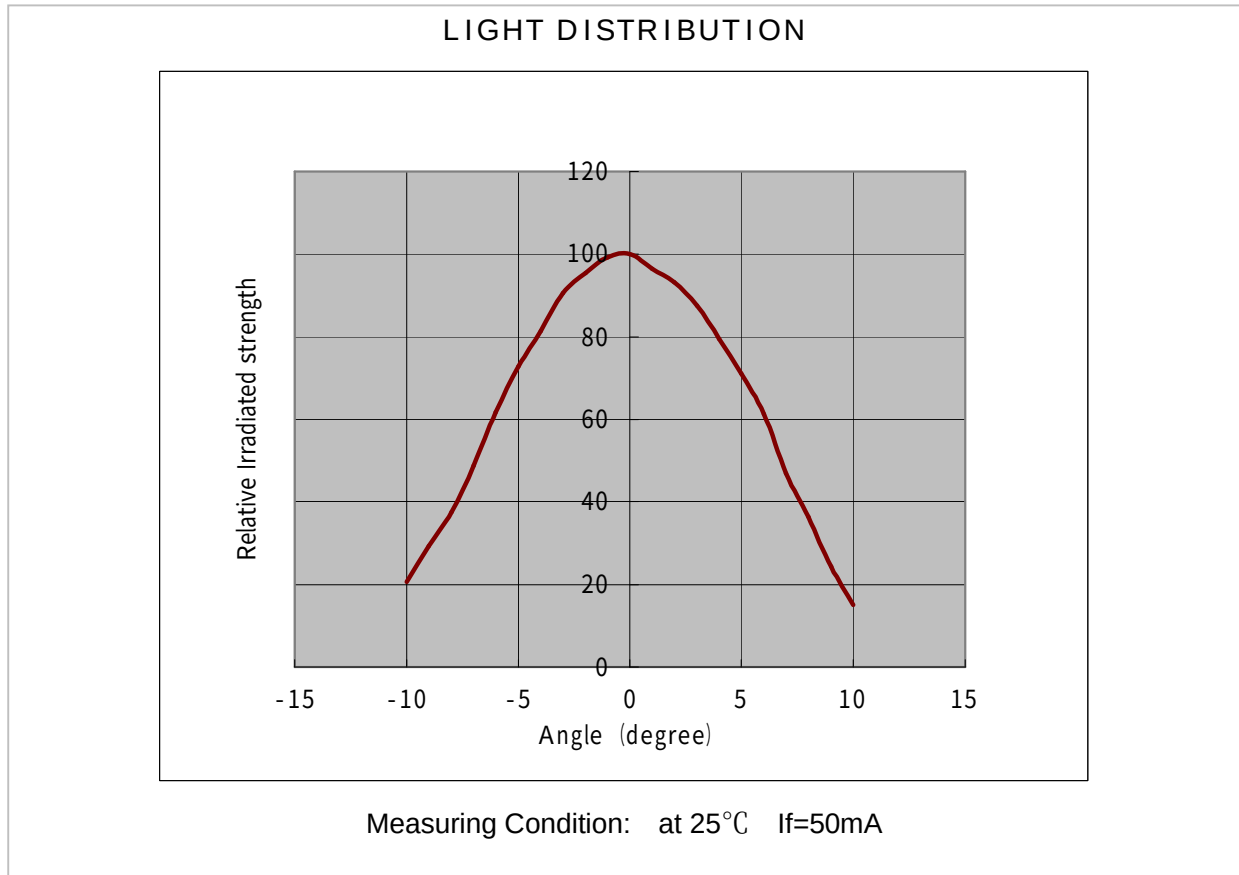
Parameter	Symbol		Value	Unit	
Forward Voltage	V _F	Typ	1.4	V	I _F = 20mA
		Max	1.7		
Reverse Current	I _R	Max	10	μ A	V _R = 5V
Peak Wavelength	λ _p	Typ	870	nm	I _F = 50mA
Spectral Half width	Δλ	Typ	45	nm	I _F = 50mA
Total Radiated Power	P _O	Min	8	mW	I _F = 50mA
		Typ	14		
Peak Radiant Intensity	I _E	Min	150	mW/sr	I _F = 50mA
		Typ	230		
Viewing Half angle	θ 1/2	Typ	± 7.0	°	I _F = 50mA
Response Time	Tr / Tf	Typ.	25.0	ns	

The data is subject to change without notice.

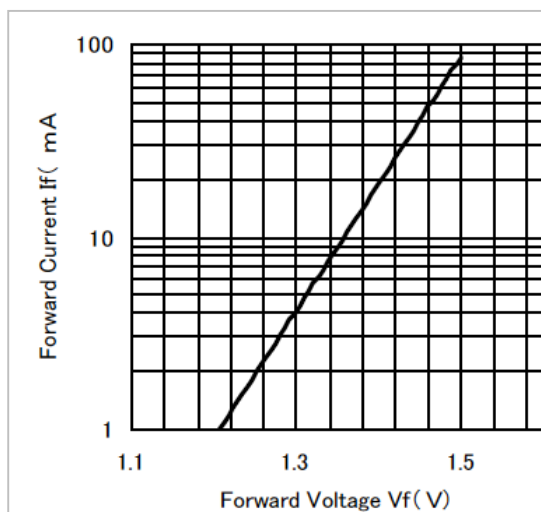
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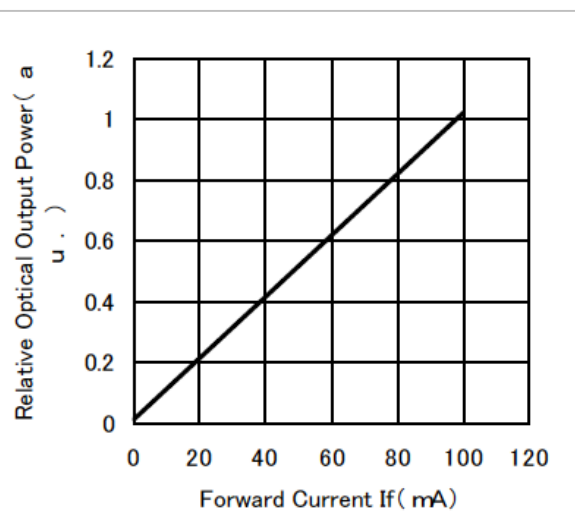
◆ Directional Characteristics (Reference Data)



◆ Forward Current vs. Forward Voltage



◆ Radiated Power vs. Forward Current



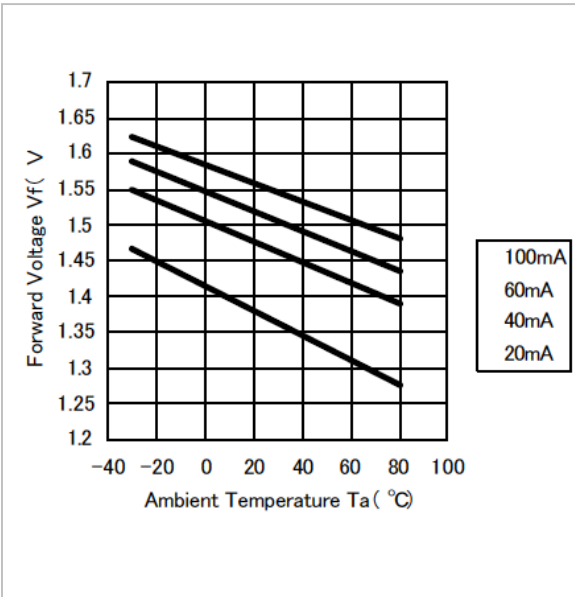
Measuring Condition: 25°C

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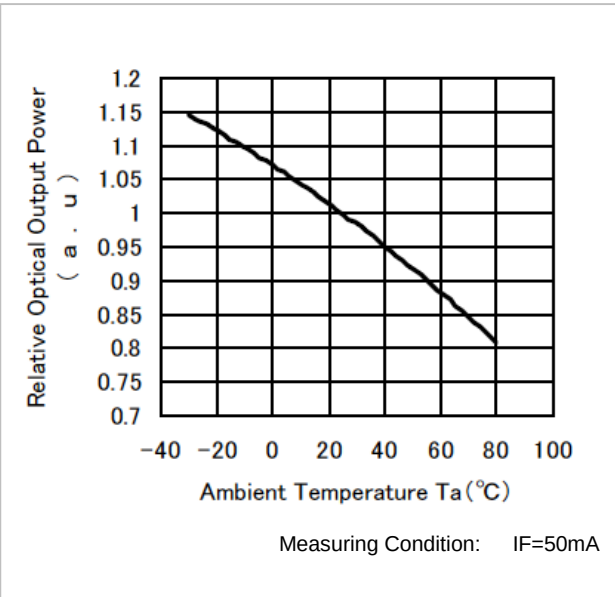
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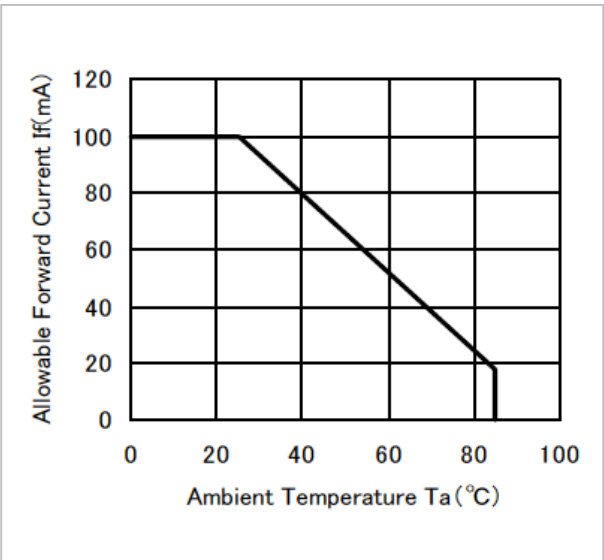
◆ Forward Voltage vs. Temperature



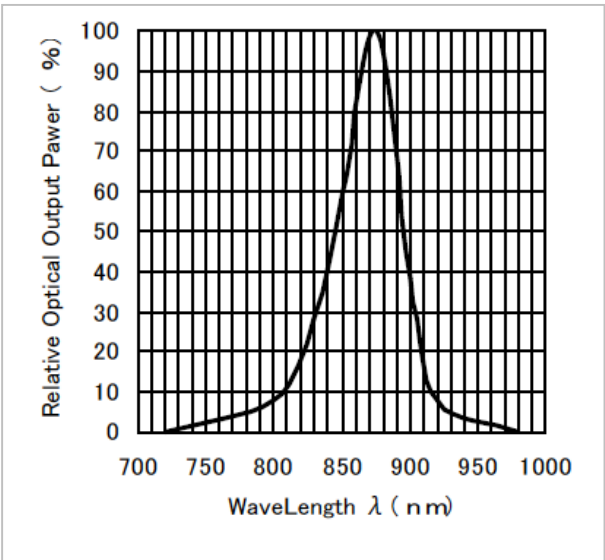
◆ Radiated Power vs. Temperature



◆ Forward Current vs. Temperature



◆ Wavelength



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◆ External Condition (Reference Drawing)

