High-Power REFLECTIVE MIRROR TYPE LED
AOP6-4710HP2

Visible LED

By installing a large size LED die (900μm×900μm) in an existing compact square package with reflective mirror inside, and using the special lead-frame, AOP6-series can be operated with higher power.
By supplying higher forward current (350mA), 110cd can be realized.

◆ Features

- ➢ Extremely high radiant intensity
- ➢ Can be operated with higher current
- ➢ Excellent beam luminous flux without any collimator lens
- ➢ Perfect uniformity ration of illuminance
- ➢ Compact size(height:Max.5mm)
- ➢ Narrower beam ray can be realized by using lens

◆ Absolute Maximum Ratings

Ta = 25℃

Parameter	Symbol	Value	Unit
Forward Current (DC)	I_F	500 *1	mA
Pulse Forward Current	I_{FRM}	5 *2	A
Reverse Voltage (DC)	V_R	5	V
Operating Temperature	Topr	-30 ~ +75	℃
Storage Temperature	Tstg	-30 ~ +80	℃
Junction Temp	T_J	125	℃

*1 The rating without heat sink

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

◆ Electro-optical Characteristics

Ta = 25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward Voltage	V_F	3.0	3.4	3.9	V	I_F = 350mA
Reverse Current	I_R			2	μ A	V_R = 5V
Peak Wavelength	λ_p	465	470	475	nm	I_F = 350mA
Spectral Half width	⊿λ		22		nm	I_F = 350mA
Total Radiated Power	P_O	115			mW	I_F = 350mA
Peak Luminous Intensity	I_E	300	140		cd	I_F = 350mA *3
Viewing Half angle	θ 1/2		±8.0		deg	I_F = 350mA
Lead temperature *4	T_L			60	℃	---

*3 The rating without heat sink

*4 The temperature at lead neck

The data is subject to change without notice.

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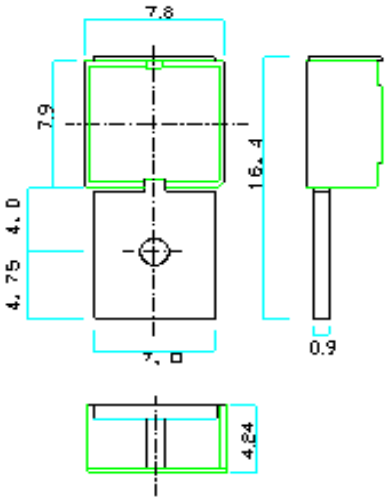
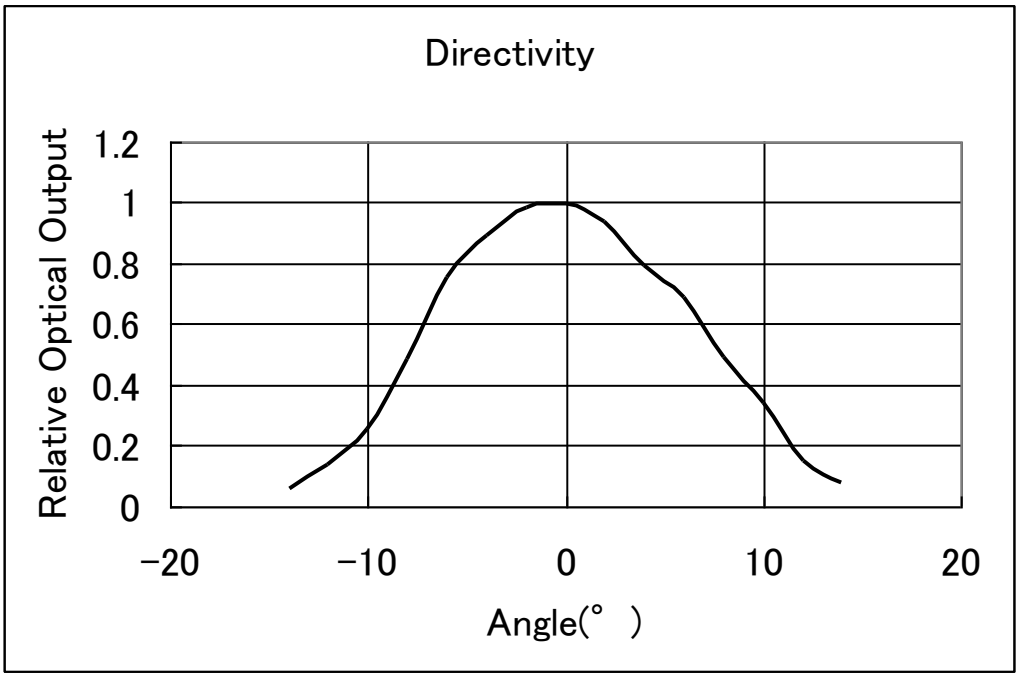
◆ External Condition (Reference Drawing)



Lead Frame: Silver/Sn plated Cupper

Unit: mm
Tolerance without indication: ±0.3

◆ Directivity



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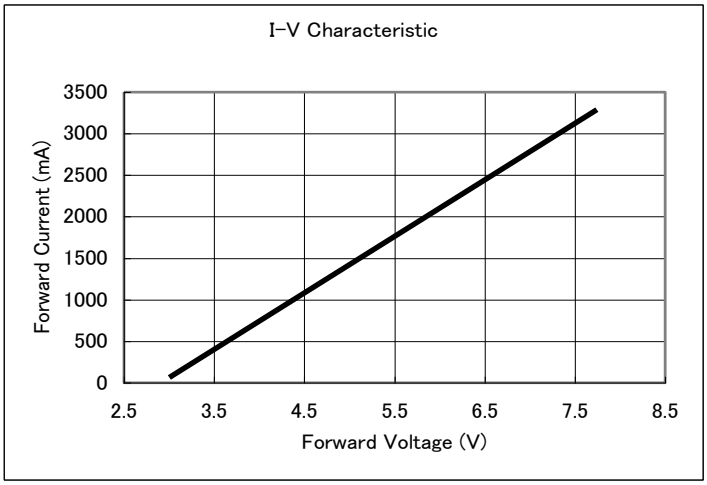
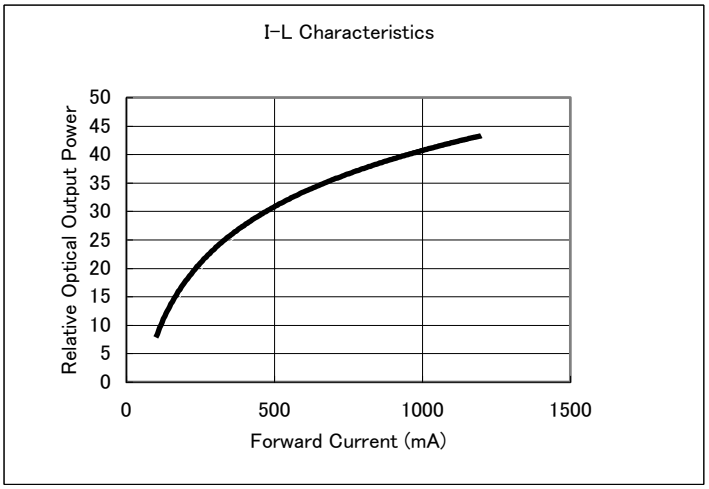
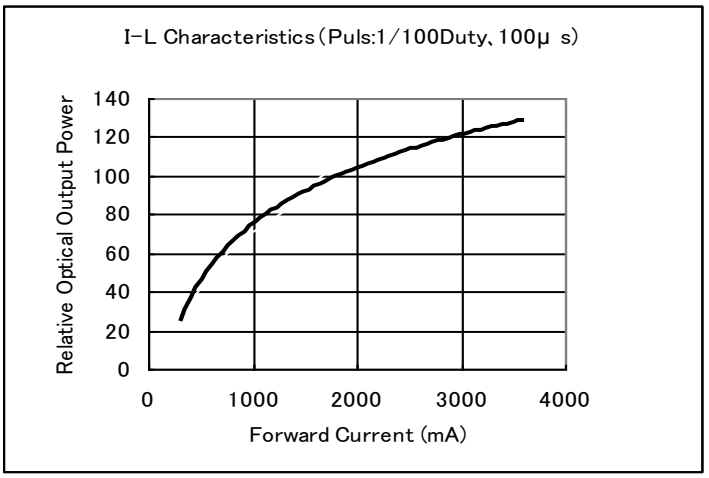
◆ Electric-Optical Characteristics







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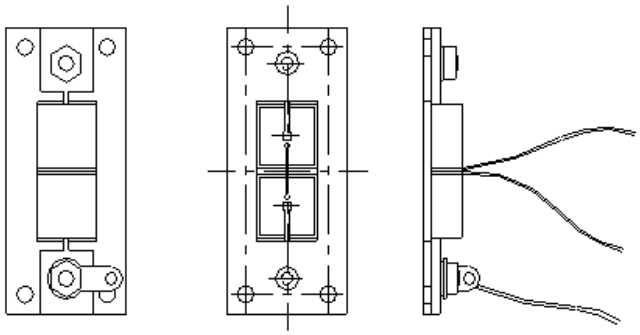
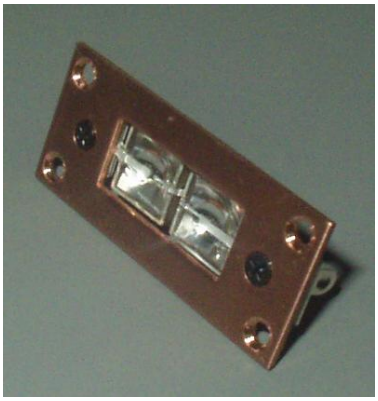
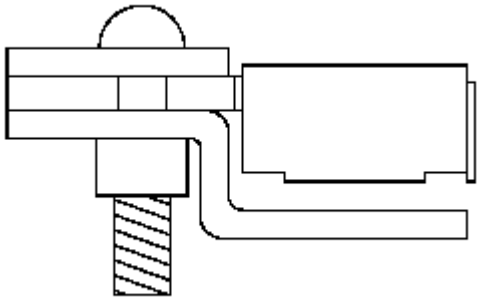
◆ **The way to cling to Heat sink**

Ex1.

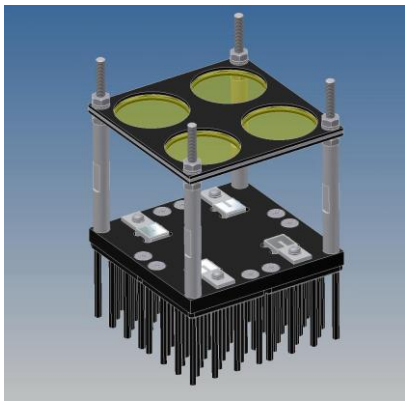




Ex2.



Ex3.



Note: LED generates heat when it is used with higher current. Then, please note the following instructions when using the Reflective Mirror Type LED.

1. *Do not light the LED only, or the LED would be destroyed with high electrical current.*
2. *Light the LED only after assembling onto PCB with proper **heat-sink**.*
3. *Mount and pinch the LED with a hole between heat-sink PCB and screw the lead and PCB with **mechanical method** like clips or vis (screws).*
4. *Do not mount the LED by soldering, or the LED would be destroyed with high temperature. (Max. heat-neck temperature: 60℃.)*