

High-Power REFLECTIVE MIRROR TYPE LED AOP6-5310HP2

Visible LED

By installing a large size LED die (900 μ m \times 900 μ m) 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), 220cd 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°C

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	--	mW
Forward Current (DC)	I _F	750 ^{*1}	mA
Pulse Forward Current	I _{FRM}	5 ^{*2}	A
Reverse Voltage (DC)	V _R	5	V
Operating Temperature	Topr	-30 ~ +75	°C
Storage Temperature	Tstg	-30 ~ +80	°C
Junction Temp	T _J	115	°C

*1 The rating with heat sink

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

◆ Electro-optical Characteristics

Ta = 25°C

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	520	525	530	nm	I _F = 350mA
Spectral Half width	$\Delta\lambda$		22		nm	I _F = 350mA
Total Radiated Power	P _O	115			mW	I _F = 350mA
Peak Radiant Intensity	I _E	180	220		cd	I _F = 350mA ^{*3}
Viewing Half angle	$\theta_{1/2}$		± 12		deg	I _F = 350mA
Lead temperature ^{*4}	T _L			60	°C	---

*3 The rating without heat sink

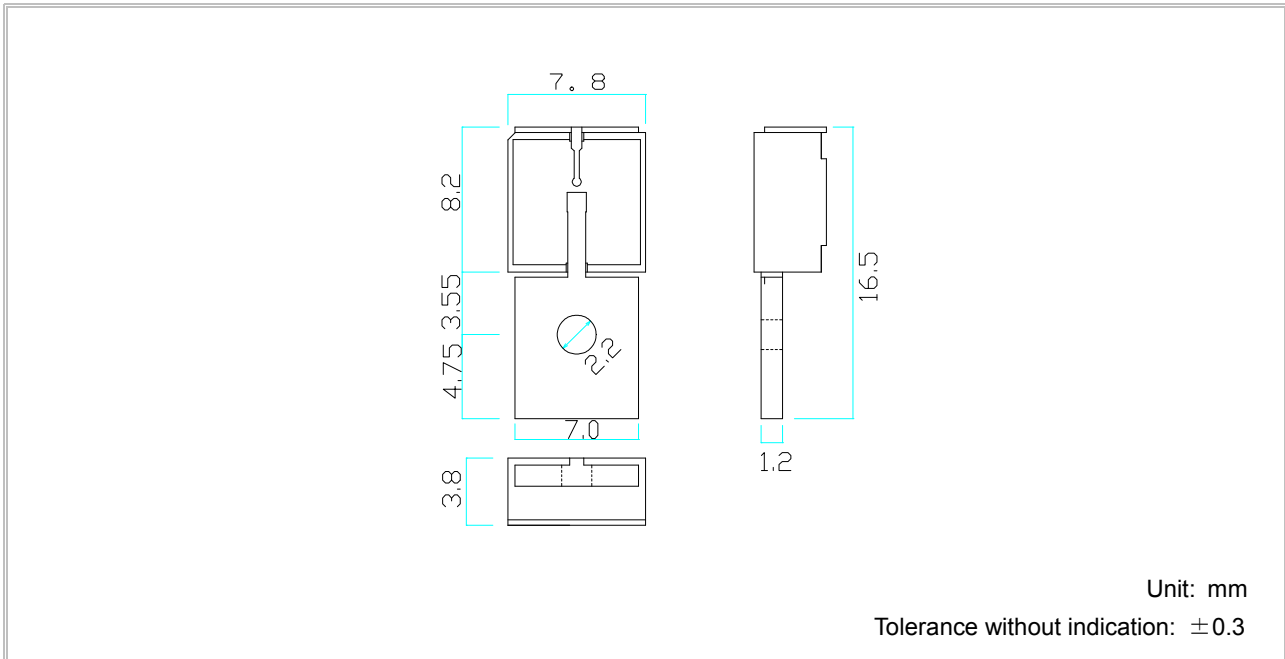
*4 The temperature at lead neck

The data is subject to change without notice.

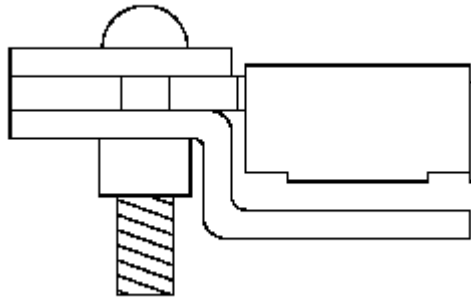
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◆ External Condition (Reference Drawing)



◆ The way to cling to a heat sink



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°C.)