

High Power Reflective Mirror Type LED

REFLECTIVE LED AOP-Series

SMD Package with mirror inside

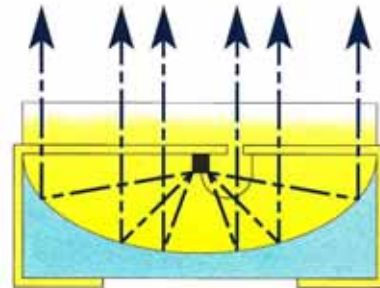


Packed on a precise and compact SMD package with reflective mirror inside, AOP-series realizes greater performance of radiation efficiency (more than 90% of LED chip). Its shaft radiant intensity is about two times as high as the one of the normal molded type LED.

The light from LED chip emitted onto the integral mirror inside of the package is reflected outside as the well-controlled parallel beam with higher performance.

Every spectral peak from Ultraviolet to Infrared are available.

Structure



The light from LED is reflected by the reflective mirror inside of the package and radiated outside as the parallel beam.

Feature

- Irradiate the excellent parallel beam
- High radiant intensity (more than two times as high as the normal mold type LED)
- Pb-free, Surface mounted Model
- Compact size (the height: less than 3mm)
- High reliability

Application

- Various kinds of illumination
(Indoor and outdoor purpose)
- Light source for security system
- Light source for image detection
- Light source for medical analyzer
- Optical transmissions
- Rotary encoders etc.

The data is subject to change without notice due to the improvement.

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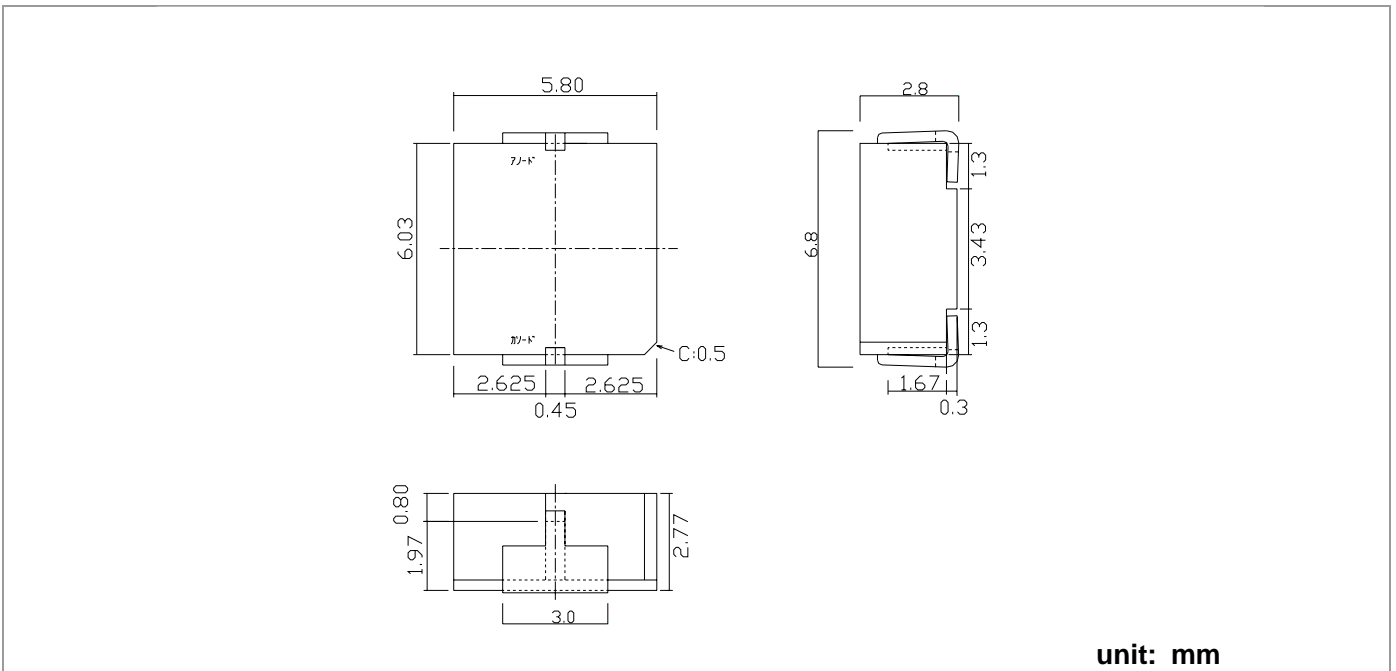
Optical & Electrical Characteristics

Visible LED							
Model No.	Color	Forward Voltage V_F (V)		Wavelength (nm)	Axial luminosity (mcd)		Spectral bandwidth: 50% (°)
		Max	I_F (mA)	λ_P	Typ	I_F (mA)	
AOP3-6305	Red-orange	2.45	20	623	25000	20	± 7.0
AOP3-5905	Yellow	2.6	20	590	19000	20	± 7.0
AOP3-5305	Green	3.8	20	530	18000	20	± 8.5
AOP3-4705	Blue	3.8	20	470	20000	20	± 8.5

Infrared LED								
Model No.	Forward Voltage V_F (V)		Radiant intensity I_E (mW/sr)		Wavelength (nm)	Output Power P_O (mW)		Spectral bandwidth: 50% (°)
	Max	I_F (mA)	Typ.	I_F (mA)	λ_P	Typ.	I_F (mA)	
AOP1-7805	1.95	20	220	50	785	14.0	50	± 7
AOP1-8105	1.70	50	150	50	810	3.5	50	± 7
AOP1-8505	2.3	20	220	50	850	18.0	50	± 7
AOP1-8805	1.7	50	230	50	875	14.0	50	± 7
AOP2-9405	1.45	50	160	50	940	13.0	50	± 7

* Please ask us if you need LED with the other spectral peak.

External Dimension



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REFLECTIVE LED AOP5-Series

SMD Package with mirror inside: Larger size

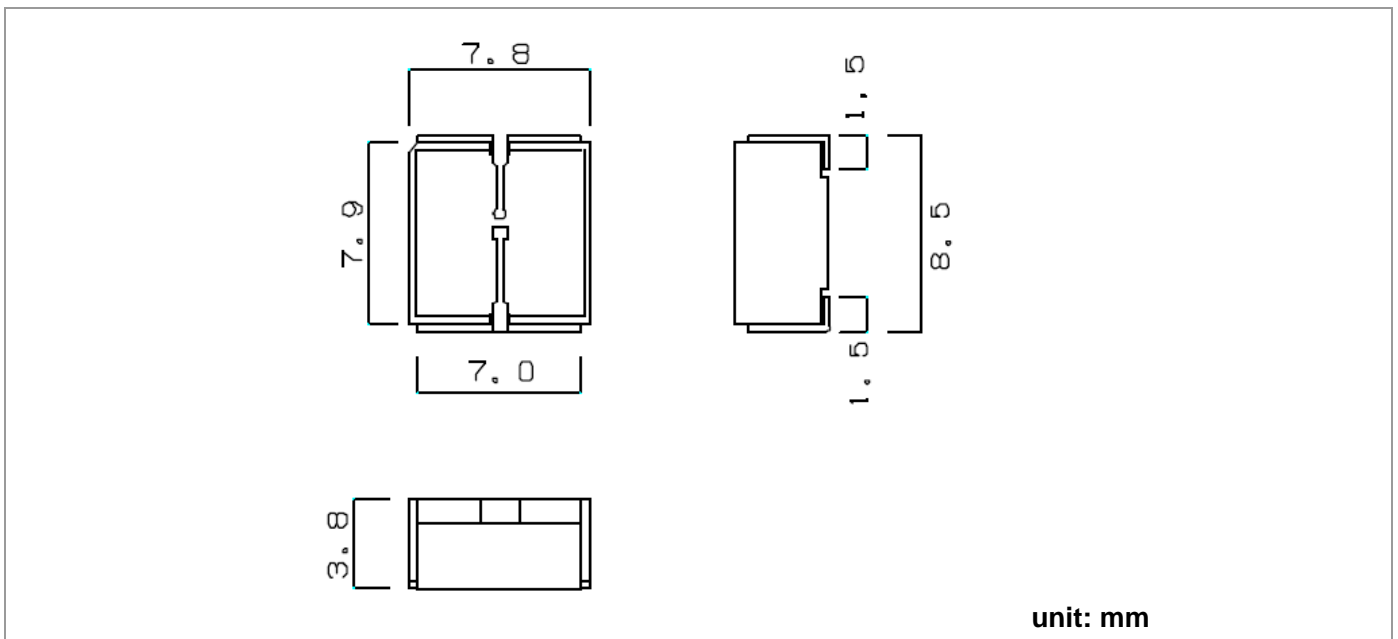
Optical & Electrical Characteristics

Visible LED							
Model No.	Color	Forward Voltage V_F (V)		Wavelength (nm)	Axial luminosity (mcd)		Spectral bandwidth: 50% (°)
		Max	I_F (mA)	λ_P	Typ	I_F (mA)	
AOP5-6310N1	Red-orange	2.45	20	625	30000	20	± 4.0
AOP5-5310T1	Green	3.8	20	530	20000	20	± 5.0
AOP5-4710T1	Blue	3.8	20	470	35000	20	± 5.0

Infrared LED						
Model No.	Forward Voltage [V_F] (V)		Radiant intensity at 50mA I_E (mW/sr)	Wavelength (nm)	Output Power at 50mA [P_O] (mW)	Spectral bandwidth: 50% (°)
	Max	I_F (mA)		λ_P	Typ.	
AOP5-8510P1	1.7	20	700	850	14.0	± 4
AOP5-8810P1	1.7	50	700	875	18.0	± 4
AOP5-9410P1	1.45	50	650	940	13.0	± 4

* Please ask us if you need LED with the other spectral peak.

External Dimension



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