

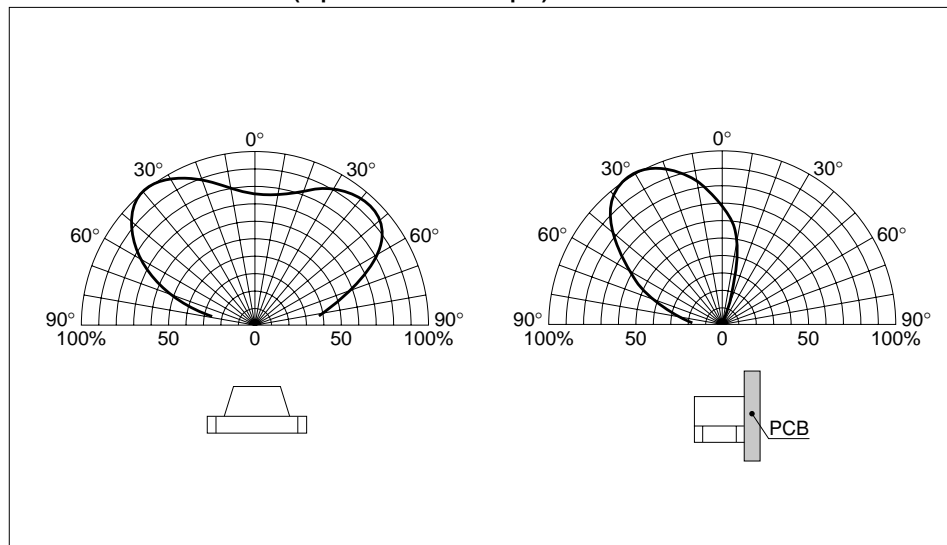
Side View Surface Mount LEDs

SEC4001 Series

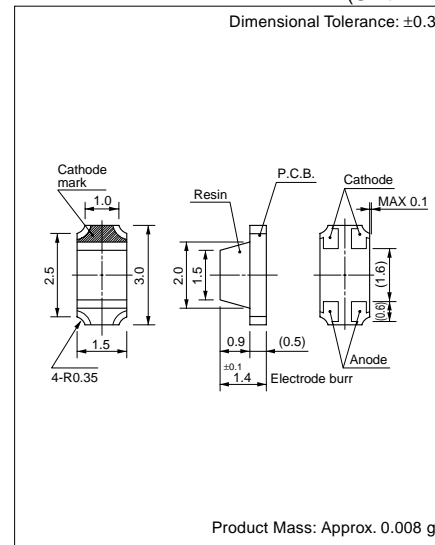
Part Number	Emitting Color		Lens Color	Forward Voltage			Luminous Intensity		Peak Wavelength		Dominant Wavelength		Spectrum Half Bandwidth		Chip Material
				V <sub>F</sub> (V)	Conditions IF (mA)	I <sub>v</sub> (mcd)	Conditions IF (mA)	λ <sub>P</sub> (nm)	Conditions IF (mA)	λ <sub>d</sub> (nm)	Conditions IF (mA)	Δλ (nm)	Conditions IF (mA)		
				TYP	MAX		TYP		TYP		TYP		TYP		
SEC4201C	Red		Water clear	1.9	2.5	10	10	20	630	10	620	10	35	10	GaAsP
* SEC4801C	Amber		Water clear	1.9	2.5	10	16	20	610	10	605	10	35	10	GaAsP
SEC4901C	Orange		Water clear	1.9	2.5	10	13	20	587	10	590	10	33	10	GaAsP
* SEC4701C	Yellow		Water clear	2.0	2.5	10	25	20	570	10	571	10	30	10	GaP
* SEC4401C	Green		Water clear	2.0	2.5	10	22	20	560	10	567	10	20	10	GaP
* SEC4401E-TG	Deep green		Transparent green	2.0	2.5	10	11	20	558	10	564	10	20	10	GaP
SEC4501C	Pure green		Water clear	2.0	2.5	10	8.0	20	555	10	559	10	20	10	GaP
SECU4401C-TG	High luminosity	Green	Water clear	2.1	2.5	20	25	20	564	20	564	20	12	20	AlGaInP
* SECT4D01C-S	Ultrahigh luminosity	Pure green	Water clear	3.3	4.0	20	150	20	525	20	520	20	35	20	InGaN
* SECT4E01C-S	luminosity	Blue	Water clear	3.3	4.0	20	50	20	468	20	465	20	25	20	InGaN

\*Mass production in preparation

Directional Characteristics (representative example)



External Dimensions (Unit: mm)



## 5-1 Visible Light LEDs

### Absolute Maximum Ratings

#### ●Visible Light Unicolor Lamp

Parameter	Unit	Ratings					Conditions
		GaP	GaAsP	GaAlAs	AlGaInP	InGaN	
PD	mW	75			120		
IF	mA	30					
ΔIF	mA/°C	-0.45					25°C or higher
IFP	mA	100			70		f=1kHz, tw≤100μs
VR	V	3		5			
T <sub>op</sub>	°C	-30 to +85				-30 to +80	
T <sub>stg</sub>	°C	-30 to +100					

#### ●Visible Light Bicolor Lamp

Parameter	Unit	Ratings					Conditions
		GaP	GaAsP	GaAlAs	AlGaInP	InGaN	
PD	mW	75			120		Same conditions for simultaneous lighting
IF	mA	30					
ΔIF	mA/°C	-0.45					25°C or higher
IFP	mA	100			70		f=1kHz, tw≤100μs
VR	V	4		5			
T <sub>op</sub>	°C	-30 to +85				-30 to +80	
T <sub>stg</sub>	°C	-30 to +100					

#### ●Visible Light Unicolor Surface Mount LEDs

Parameter	Unit	Ratings					Conditions
		GaP	GaAsP	GaAlAs	AlGaInP	InGaN	
IF	mA	30			20		
ΔIF	mA/°C	-0.45					25°C or higher
IFP	mA	100 <sup>*1</sup>			70 <sup>*2</sup>		f=1kHz, tw≤100μs
VR	V	3		5			
T <sub>op</sub>	°C	-30 to +85				-30 to +80	
T <sub>stg</sub>	°C	-30 to +100					

\*1: 70mA for SEC1005/1007 Series  
\*2: 50mA for SEC1005/1007 Series

#### ●Visible Light Bicolor Surface Mount LEDs

Parameter	Unit	Ratings		Conditions
		SEC2002/2004		
PD	mW	75 (Same conditions for simultaneous lighting)		
IF	mA	30		
ΔIF	mA/°C	-0.45		25°C or higher
IFP	mA	70		f=1kHz, tw≤100μs
VR	V	4		
T <sub>op</sub>	°C	-30 to +85		
T <sub>stg</sub>	°C	-30 to +100		

#### ●Visible Light Three Element Surface Mount LEDs

Parameter	Unit	Ratings		Conditions
		SECT3M02C-S		
		Red	Green/Blue	
PD	mW	75	120	When one chip lights up (same as green/blue for simultaneous lighting)
IF	mA	30		
ΔIF	mA/°C	-0.45		25°C or higher
IFP	mA	70	50	f=1kHz, tw≤100μs
VR	V	5		
T <sub>op</sub>	°C	-30 to +80		
T <sub>stg</sub>	°C	-30 to +100		