

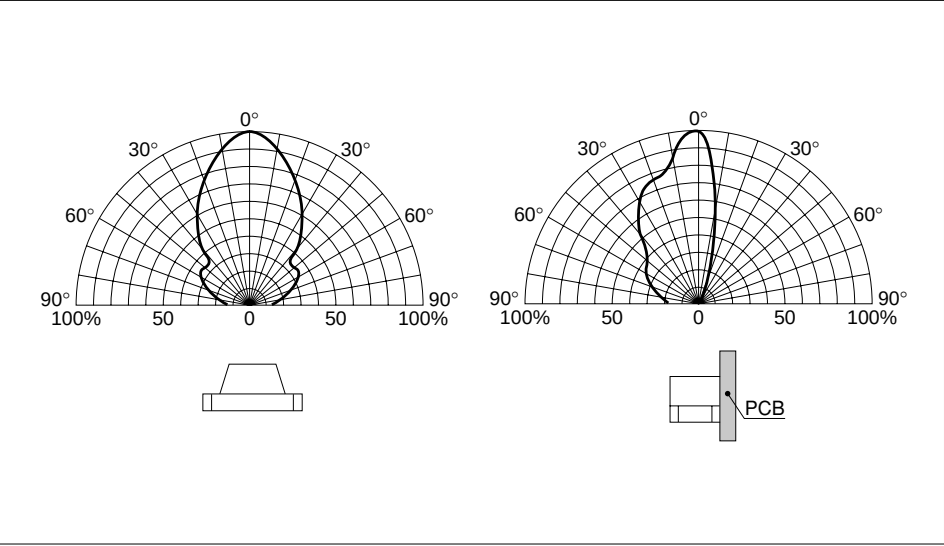
Side View Surface Mount LEDs (Inner Lens Type)

SEC4003 Series

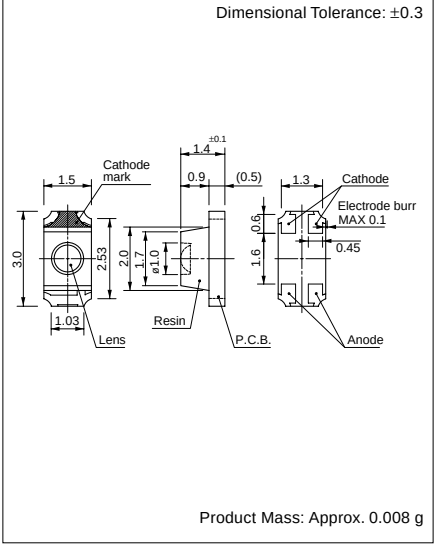
Part Number	Emitting Color	Lens Color	Forward Voltage			Luminous Intensity		Peak Wavelength		Dominant Wavelength		Spectrum Half Bandwidth		Chip Material
			VF		Conditions IF (mA)	Iv (mcd) TYP	Conditions IF (mA)	λP (nm) TYP	Conditions IF (mA)	λd (nm) TYP	Conditions IF (mA)	Δλ (nm) TYP	Conditions IF (mA)	
			TYP	MAX										
* SEC4203C	Red	Water clear	1.9	2.5	10	15	20	630	10	620	10	35	10	GaAsP
* SEC4803C	Amber	Water clear	1.9	2.5	10	20	20	610	10	605	10	35	10	GaAsP
* SEC4903C	Orange	Water clear	1.9	2.5	10	15	20	587	10	590	10	33	10	GaAsP
* SEC4703C	Yellow	Water clear	2.0	2.5	10	35	20	570	10	571	10	30	10	GaP
* SEC4403C	Green	Water clear	2.0	2.5	10	33	20	560	10	567	10	20	10	GaP
* SEC4403E-TG	Deep green	Transparent green	2.0	2.5	10	15	20	558	10	564	10	20	10	GaP
SEC4503C	Pure green	Water clear	2.0	2.5	10	10	20	555	10	559	10	20	10	GaP

*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	
P _D	mW	75				120	
I _F	mA	30					
ΔI _F	mA/°C	-0.45					25°C or higher
I _{FP}	mA	100				70	f=1kHz, tw≤100μs
V _R	V	3	5				
T _{op}	°C	-30 to +85				-30 to +80	
T _{stg}	°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 f=1kHz, tw≤100μs
IFP	mA	100					
VR	V	4			5		
Top	°C	-30 to +85					
Tstg	°C	-30 to +100					

●Visible Light Unicolor Surface Mount LEDs

Parameter	Unit	Ratings					Conditions
		GaP	GaAsP	GaAlAs	AlGaInP	InGaN	
I _F	mA	30				20	
ΔI _F	mA/°C	-0.45				-0.27	25°C or higher
I _{FP}	mA	100 ^{*1}				70 ^{*2}	f=1kHz, tw≤100μs
V _R	V	3	5				
T _{op}	°C	-30 to +85				-30 to +80	
T _{stg}	°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	
Top	°C	−30 to +85	
Tstg	°C	−30 to +100	

●Visible Light Three Element Surface Mount LEDs

Parameter	Unit	Ratings		Conditions
		SECT3M02C-S		
		Red	Green/Blue	
P _D	mW	75	120	When one chip lights up (same as green/blue for simultaneous lighting)
I _F	mA	30		
ΔI _F	mA/°C	−0.45		25°C or higher
I _{FP}	mA	70	50	f=1kHz, t _w ≤100μs
V _R	V	5		
T _{op}	°C	−30 to +80		
T _{stg}	°C	−30 to +100		