

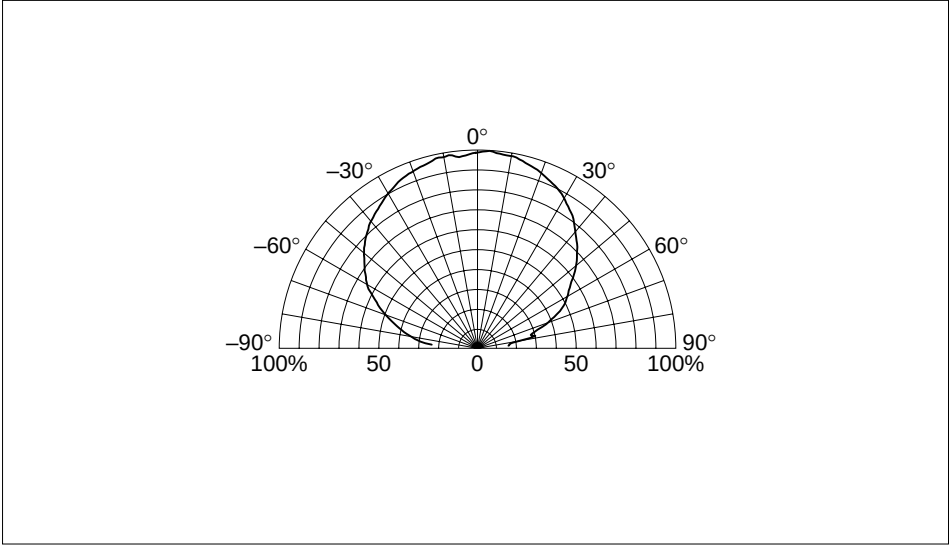
■Surface Mount LEDs with Three Elements

SEC3M00 Series

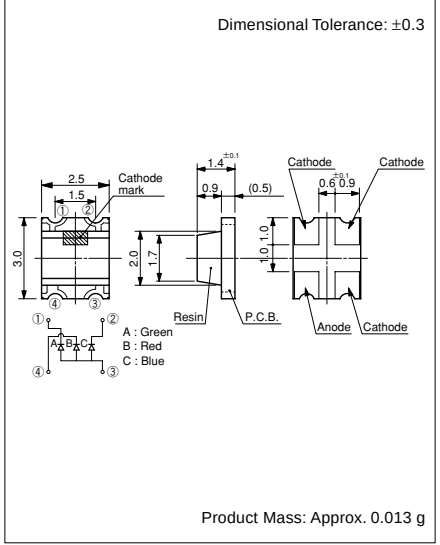
Part Number	Emitting Color		Lens Color	Forward Voltage		Luminous Intensity		Peak Wavelength		Dominant Wavelength		Spectrum Half Bandwidth		Chip Material	Remark
				V _F (V) TYP	MAX	Conditions IF (mA)	I _v (mcd) TYP	λ _P (nm) TYP	Conditions IF (mA)	λ _d (nm) TYP	Conditions IF (mA)	Δλ (nm) TYP	Conditions IF (mA)		
* SECT3M02C-S	Ultrahigh luminosity	A: Blue	Water clear	3.3	4.0	20	34	470	20	465	20	25	20	InGaN	Anode common
		B: Red		1.9	2.5	20	96	635	20	625	20	15	20	AlGaInP	
		C: Green		3.2	4.0	20	162	530	20	520	20	35	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	
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	
P _D	mW	75				120	Same conditions for simultaneous lighting
I _F	mA	30					
ΔI _F	mA/°C	-0.45					25°C or higher f=1kHz, t _w ≤100μs
I _{FP}	mA	100					
V _R	V	4			5		
T _{op}	°C	-30 to +85					
T _{stg}	°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		