

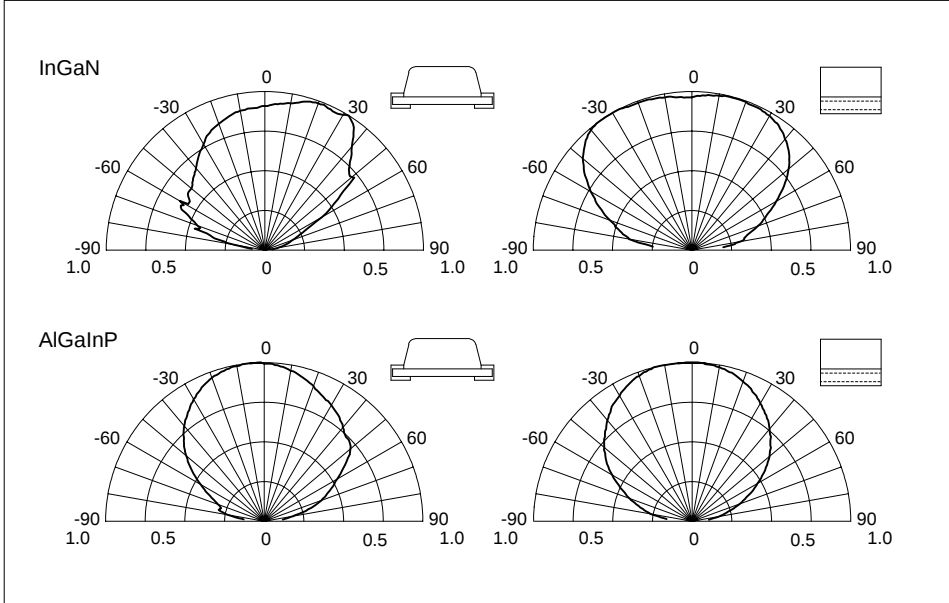
■1.6 × 0.8 Miniature Surface Mount LEDs

SEC1005 Series

Part Number	Emitting Color	Lens Color	Forward Voltage			Luminous Intensity		Peak Wavelength		Dominant Wavelength		Spectrum Half Bandwidth		Chip Material
			VF (V)		Conditions IF (mA)	Iv (mcd)	Conditions IF (mA)	λP (nm)	Conditions IF (mA)	λd (nm)	Conditions IF (mA)	Δλ (nm)	Conditions IF (mA)	
			TYP	MAX										
SECU1605C-S	Deep red	Water clear	1.9	2.5	10	25	10	650	10	639	10	20	10	AlGaInP
SECU1205C-S	Red	Water clear	1.9	2.5	10	45	10	635	10	625	10	20	10	AlGaInP
SECU1805C-S	Amber	Water clear	1.9	2.5	10	50	10	615	10	607	10	17	10	AlGaInP
SECU1905C-S	Orange	Water clear	1.9	2.5	10	40	10	591	10	589	10	15	10	AlGaInP
* SECK1D05C-S	Green	Water clear	3.8	4.3	10	45	10	514	10	520	10	40	10	GaN on Si
SECT1D05C-S	Pure green	Water clear	3.3	3.8	10	180	10	520	10	526	10	35	10	InGaN
SECS1L05C-S	Aqua blue	Water clear	3.1	3.6	10	50	10	486	10	490	10	45	10	InGaN
SECK1L05C-S	Aqua blue	Water clear	3.5	4.1	10	20	10	488	10	490	10	30	10	GaN on Si
* SECT1E05C-S	Blue	Water clear	3.3	3.8	10	40	10	460	10	466	10	25	10	InGaN
* SECK1E05C-S	Blue	Water clear	3.6	4.0	10	10	10	470	10	472	10	30	10	GaN on Si

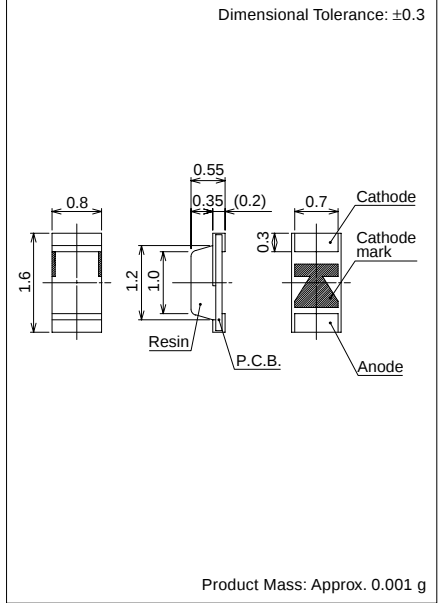
*Mass production in preparation

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
I _{FP}	mA	100					f=1kHz, tw≤100μs
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	
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		
Top	°C	−30 to +80		
Tsta	°C	−30 to +100		