

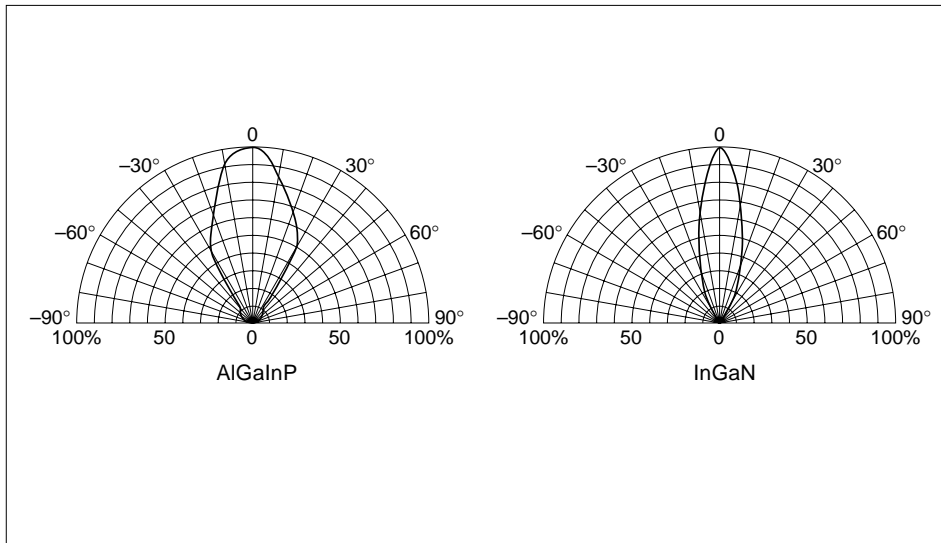
■5φ Round Wide Viewing Angle LEDs

SEL1010XM 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) TYP	MAX	Conditions IF (mA)	I <sub>v</sub> (mcd) TYP	Conditions IF (mA)	λ <sub>P</sub> (nm) TYP	Conditions IF (mA)	λ <sub>d</sub> (nm) TYP	Conditions IF (mA)	Δλ (nm) TYP	Conditions IF (mA)			
* SELU1610CXM-S	Ultrahigh luminosity	Deep red	Water clear	2.0	2.5	20	350	20	650	20	639	20	20	20	AlGaInP	
SELU1210CXM		Red	Water clear	2.0	2.5	20	280	20	635	20	625	20	15	20	AlGaInP	
SELU1810CXM		Amber	Water clear	2.0	2.5	20	570	20	615	20	607	20	15	20	AlGaInP	
* SELU1B10CXM-S		Light amber	Water clear	2.0	2.5	20	350	20	598	20	595	20	16	20	AlGaInP	
SELU1910CXM-S		Orange	Water clear	2.0	2.5	20	450	20	591	20	590	20	15	20	AlGaInP	
* SELU1710CXM		Yellow	Water clear	2.1	2.5	20	300	20	572	20	571	20	15	20	AlGaInP	
* SELU1410CXM-S		Green	Water clear	2.1	2.5	20	150	20	560	20	562	20	12	20	AlGaInP	
* SELT1D10CXM-S		Pure green	Water clear	3.3	4.0	20	3200	20	512	20	520	20	35	20	InGaN	
* SELS1L10CXM-S		Aqua blue	Water clear	3.6	4.0	20	1500	20	486	20	488	20	30	20	InGaN	
SELS1E10CXM-M		Blue	Water clear	3.7	4.2	20	1000	20	468	20	470	20	25	20	InGaN	
SELT1E10CXM-S		Blue	Water clear	3.3	4.0	20	1000	20	460	20	465	20	25	20	InGaN	
SELT1E10WXM-S		Blue	Diffused white	3.3	4.0	20	255	20	460	20	465	20	25	20	InGaN	
SELK1E10CXM-D		High luminosity	Blue	Water clear	3.6	4.0	20	200	20	468	20	470	20	30	20	GaN on Si

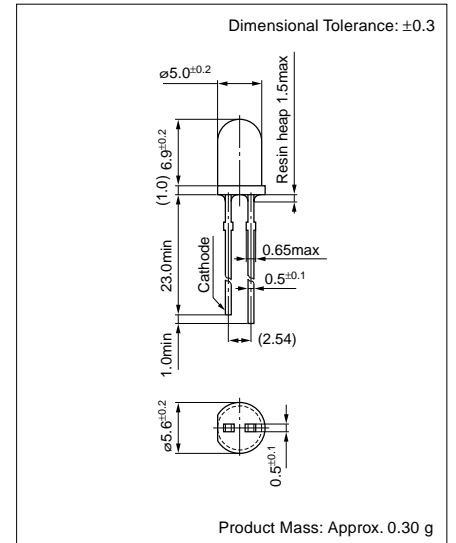
\* Mass production in preparation

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	
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		