

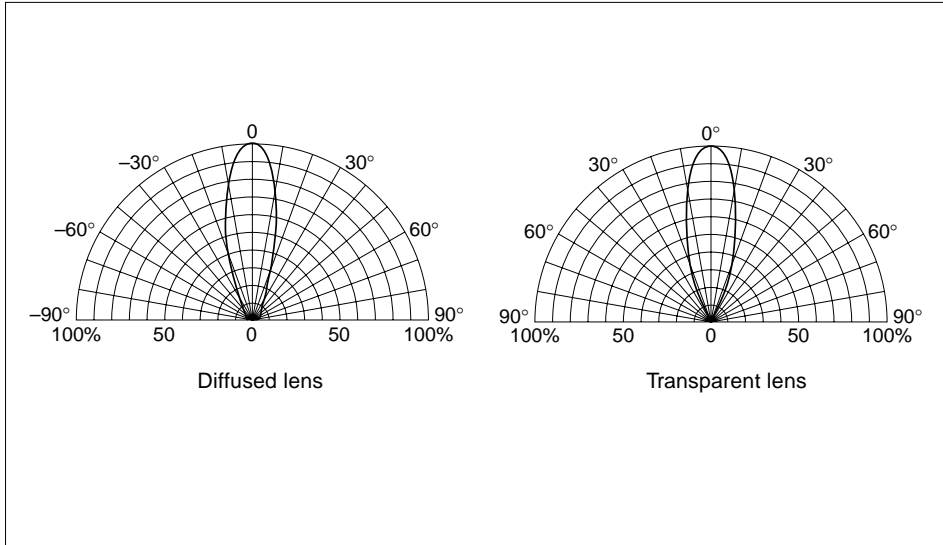
■5φ Round Narrow Viewing Angle LEDs

SEL1050M Series (available as Direct Mount)

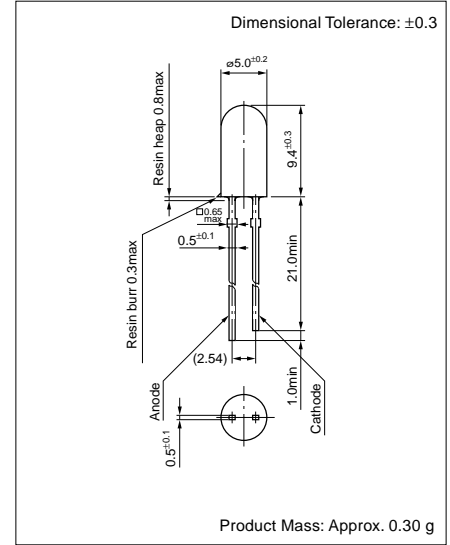
Part Number	Emitting Color	Lens Color	Forward Voltage		Conditions IF (mA)	Luminous Intensity		Peak Wavelength		Dominant Wavelength		Spectrum Half Bandwidth		Chip Material	
			V <sub>F</sub> (V) TYP	MAX		I <sub>v</sub> (mcd) TYP	Conditions IF (mA)	λ <sub>P</sub> (nm) TYP	Conditions IF (mA)	λ <sub>d</sub> (nm) TYP	Conditions IF (mA)	Δλ (nm) TYP	Conditions IF (mA)		
SEL1250RM	Red	Diffused red	1.9	2.5	10	48	20	630	10	620	10	35	10	GaAsP	
SEL1250SM	Red	Transparent red	1.9	2.5	10	75	20	630	10	620	10	35	10	GaAsP	
SEL1850AM	Amber	Transparent orange	1.9	2.5	10	90	20	610	10	605	10	35	10	GaAsP	
SEL1850DM	Amber	Diffused orange	1.9	2.5	10	60	20	610	10	605	10	35	10	GaAsP	
SEL1950KM	Orange	Transparent orange	1.9	2.5	10	96	20	587	10	590	10	33	10	GaAsP	
SEL1450EKM	Green	Transparent green	2.0	2.5	10	190	20	560	10	567	10	20	10	GaP	
SEL1450GM-YG	Green	Diffused green	2.0	2.5	10	120	20	560	10	567	10	20	10	GaP	
SEL1550CM	Pure green	Water clear	2.0	2.5	10	72	20	555	10	559	10	20	10	GaP	
SEL1E50CM-S	Blue	Water clear	4.0	4.6	10	80	10	430	10	466	10	65	10	GaN	
SELU1250CM	Ultrahigh luminosity	Red	2.0	2.5	20	900	20	635	20	625	20	15	20	AlGaInP	
SELT1D50CM-S		Pure green	Water clear	3.3	4.0	20	6500	20	512	20	520	20	35	20	InGaIn
SELT1E50CM-S		Blue	Water clear	3.3	4.0	20	2000	20	460	20	465	20	25	20	InGaIn

\* 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		