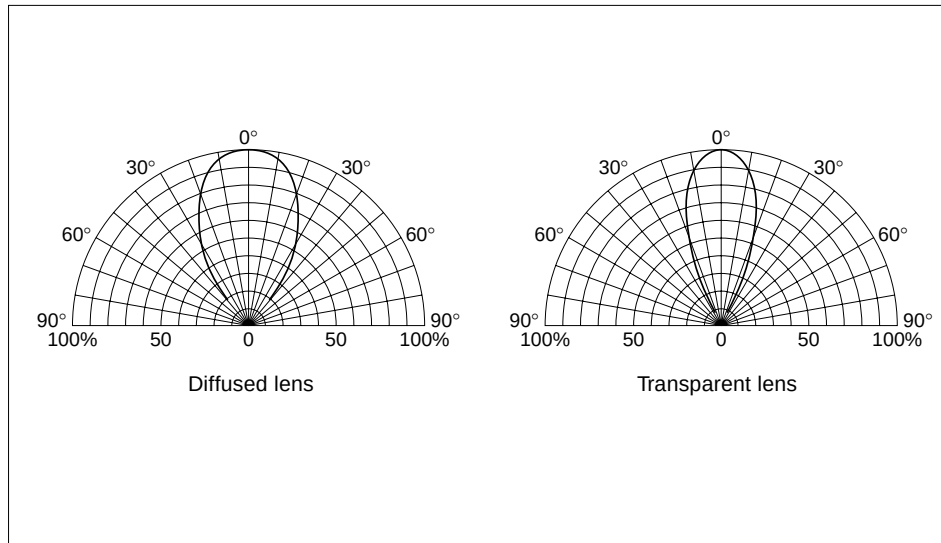


■4φ Round Standard LEDs

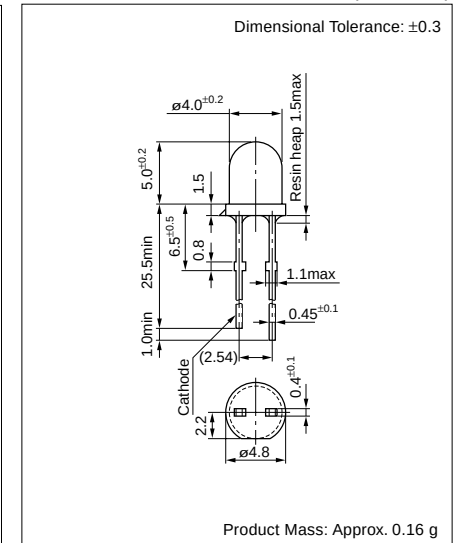
SEL4010 Series

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) TYP	Conditions IF (mA)	λP (nm) TYP	Conditions IF (mA)	λd (nm) TYP	Conditions IF (mA)	Δλ (nm) TYP		
				TYP	MAX										
SEL4110R	Deep red		Diffused red	2.0	2.5	10	1.7	5	700	10	625	10	100	10	GaP
SEL4110S	Deep red		Transparent red	2.0	2.5	10	2.4	5	700	10	625	10	100	10	GaP
SEL4210R	Red		Diffused red	1.9	2.5	10	17	20	630	10	620	10	35	10	GaAsP
SEL4210S	Red		Transparent red	1.9	2.5	10	30	20	630	10	620	10	35	10	GaAsP
SEL4810A	Amber		Transparent orange	1.9	2.5	10	20	10	610	10	605	10	35	10	GaAsP
SEL4810D	Amber		Diffused orange	1.9	2.5	10	15	10	610	10	605	10	35	10	GaAsP
SEL4910A	Orange		Transparent orange	1.9	2.5	10	26	10	587	10	590	10	33	10	GaAsP
SEL4910D	Orange		Diffused orange	1.9	2.5	10	16	10	587	10	590	10	33	10	GaAsP
SEL4710K	Yellow		Transparent yellow	2.0	2.5	10	36	10	570	10	571	10	30	10	GaP
SEL4710Y	Yellow		Diffused yellow	2.0	2.5	10	14	10	570	10	571	10	30	10	GaP
SEL4410E	Green		Transparent green	2.0	2.5	10	87	20	560	10	567	10	20	10	GaP
SEL4410G	Green		Diffused green	2.0	2.5	10	34	20	560	10	567	10	20	10	GaP
SEL4510C	Pure green		Water clear	2.0	2.5	10	45	20	555	10	559	10	20	10	GaP
SELU4410CKT-S	Ultrahigh luminosity	Green	Water clear	2.1	2.5	20	170	20	560	20	562	20	12	20	AlGaInP

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	
Tstq	°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 _{sta}	°C	−30 to +100		