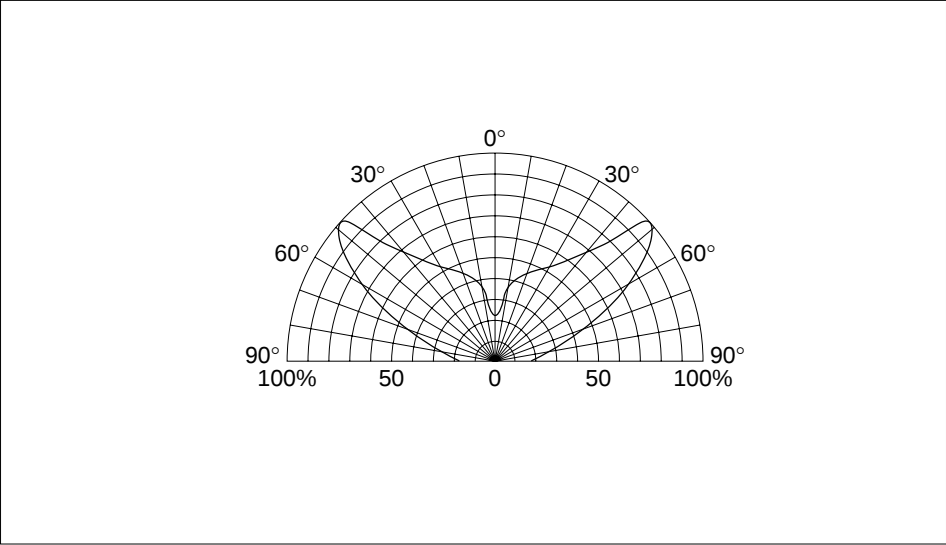


■5φ Inverted-Cone LEDs (for lighting-panels and illumination)

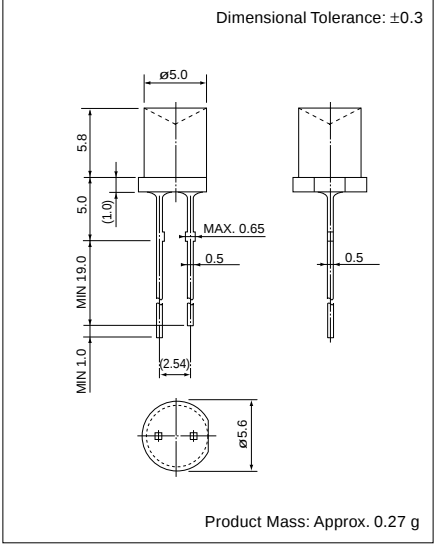
SEL1013M Series

Part Number	Emitting Color		Lens Color	Forward Voltage		Conditions IF (mA)	Luminous Intensity		Conditions IF (mA)	Peak Wavelength		Conditions IF (mA)	Dominant Wavelength		Conditions IF (mA)	Spectrum Half Bandwidth		Chip Material
				VF (V)			Iv (mcd)			λP (nm)			λd (nm)			Δλ (nm)		
SELK1E13CM-D	High luminosity	Blue	Water clear	3.6	4.0	20	10	20	20	468	20	20	470	20	20	30	20	GaN on Si
SELT1E13CM		Blue	Water clear	3.1	4.0	20	40	20	20	458	20	20	465	20	20	25	20	InGaN
SELT1WA13CM		White	Water clear	3.1	4.0	20	200	20	20	Chromaticity: x=0.300, y=0.295								InGaN
SELT1WC13CM		Bulb Light	Water clear	3.1	4.0	20	180	20	20	Chromaticity: x=0.452, y=0.412								InGaN
SELT1WD13CM		Fancy blue green	Water clear	3.1	4.0	20	180	20	20	Chromaticity: x=0.170, y=0.365								InGaN
SELT1WE13CM		Light pink	Water clear	3.1	4.0	20	220	20	20	Chromaticity: x=0.356, y=0.289								InGaN
SELT1WF13CM		Light blue green	Water clear	3.1	4.0	20	180	20	20	Chromaticity: x=0.200, y=0.300								InGaN
SELT1WH13CM		Fancy green	Water clear	3.1	4.0	20	280	20	20	Chromaticity: x=0.260, y=0.460								InGaN
SELT1WJ13CM		Fancy pink	Water clear	3.1	4.0	20	200	20	20	Chromaticity: x=0.382, y=0.268								InGaN
SELT1WK13CM		Fancy red purple	Water clear	3.1	4.0	20	150	20	20	Chromaticity: x=0.421, y=0.221								InGaN

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	
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		