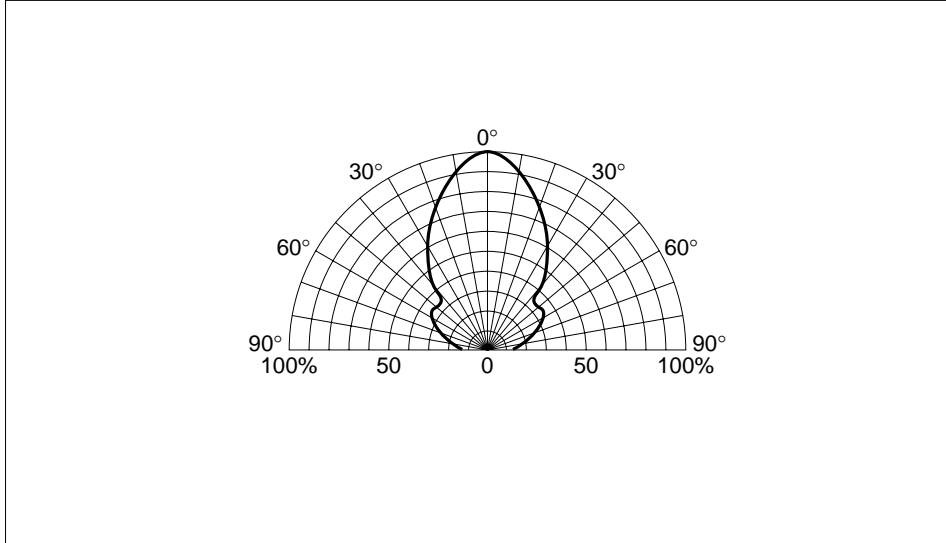


■3.0 × 1.5 Surface Mount LEDs (Inner Lens Type)

SEC1003 Series

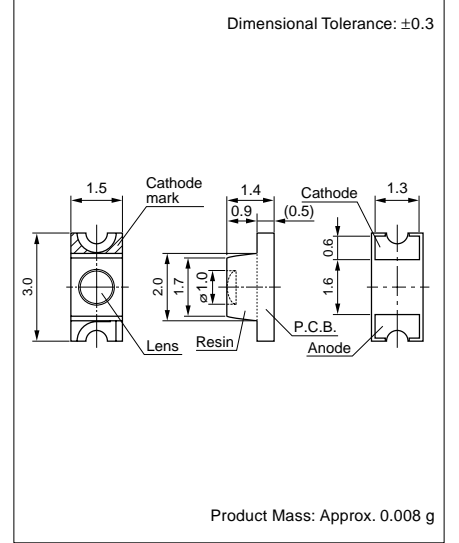
Part Number	Emitting Color	Lens Color	Forward Voltage		Conditions IF (mA)	Luminous Intensity		Peak Wavelength		Dominant Wavelength		Spectrum Half Bandwidth		Chip Material
			VF (V)			Iv (mcd)		λP (nm)		λd (nm)		Δλ (nm)		
			TYP	MAX	TYP		TYP		TYP		TYP		TYP	
SEC1603C	High luminosity red	Water clear	1.7	2.2	10	35	20	660	10	642	10	30	10	GaAlAs
SEC1203C	Red	Water clear	1.9	2.5	10	15	20	630	10	620	10	35	10	GaAsP
SEC1803C	Amber	Water clear	1.9	2.5	10	20	20	610	10	605	10	35	10	GaAsP
SEC1903C	Orange	Water clear	1.9	2.5	10	15	20	587	10	590	10	33	10	GaAsP
SEC1703C	Yellow	Water clear	2.0	2.5	10	35	20	570	10	571	10	30	10	GaP
SEC1403C	Green	Water clear	2.0	2.5	10	33	20	560	10	567	10	20	10	GaP
SEC1403E-TG	Deep green	Transparent green	2.0	2.5	10	15	20	558	10	564	10	20	10	GaP
SEC1503C	Pure green	Water clear	2.0	2.5	10	10	20	555	10	559	10	20	10	GaP
SECU1703C	High luminosity	Yellow	2.1	2.5	20	70	20	572	20	571	20	15	20	AlGaInP
SECU1403C-S		Green	2.1	2.5	20	40	20	562	20	562	20	12	20	AlGaInP
SECU1403C-TG	Green	Water clear	2.1	2.5	20	75	20	564	20	564	20	12	20	AlGaInP
SECS1203C	Ultrahigh luminosity	Red	1.9	2.5	20	100	20	635	20	625	20	15	20	AlGaInP
SECS1803C		Amber	1.9	2.5	3	10	3	615	3	607	20	15	3	AlGaInP
SECS1903C		Orange	Water clear	1.9	2.5	20	70	20	590	20	590	20	15	20

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 _{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
IFP	mA	100			70		f=1kHz, tw≤100μs
VR	V	4		5			
T _{op}	°C	-30 to +85				-30 to +80	
T _{stg}	°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 ^{*1}			70 ^{*2}		f=1kHz, tw≤100μs
VR	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		
T _{op}	°C	-30 to +85		
T _{stg}	°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 _{op}	°C	-30 to +80		
T _{stg}	°C	-30 to +100		