



# SML-01 Series

3020 (1208)  
3.0 × 2.0mm (t=1.3mm)

### Features

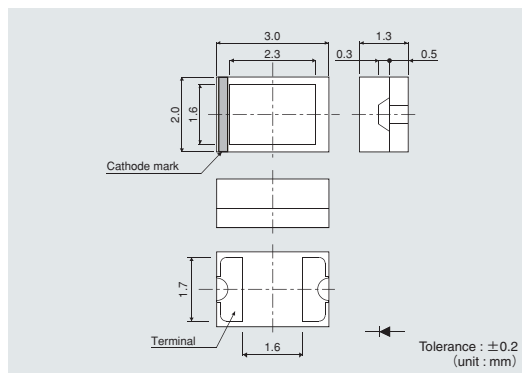
- Reflector type (3.0 × 2.0mm, t=1.3mm)
- Reflector improved the concentration of viewing angle and luminous intensity to the front direction



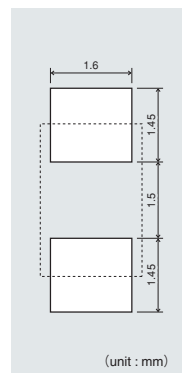
### Specifications

Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)										
			Power Dissipation Pd (mW)	Forward Current If (mA)	Peak Forward Current Ifp (mA)	Reverse Voltage Vr (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V <sub>F</sub> (V)	Reverse Current I <sub>R</sub> (μA)	Dominant Wavelength λ <sub>D</sub> (nm)			Luminous Intensity I <sub>v</sub> (mcd)				
								Typ.	Max.	Max.	Min. <sup>*2</sup>	Typ.	Max. <sup>*2</sup>	I <sub>F</sub> (mA)	Min.	Typ.	I <sub>F</sub> (mA)	
■ SML-012VT(A)	AlGaInP on GaAs	Red	75	30			-40 to +100		2			626	630	636	35.5	71		
■ SML-012V8T			54	20			-40 to +85		2.2			625		635	25	63		
■ SML-013UT			75	30			-30 to +85		2			619	624	629	90	220		
■ SML-012U8T			54	20			-40 to +85		2.2						40	100		
■ SML-012UT			75	30			-40 to +100		2			615	620	625	36	100		
■ SML-011UT							-40 to +100								22	63		
■ SML-012D8T					54	20			-40 to +85	2.2					63	160		
■ SML-012DT				Orange			100 <sup>*1</sup>						602	605	608	36	100	
■ SML-011DT			75	30			-40 to +100	2	10				22	63				
■ SML-012WT(A)													140	280				
■ SML-012Y8T			54	20			-40 to +85	2.2					40	100				
■ SML-013YT		Yellow				5	-40 to +85	-40 to +100	2.1	20	5	587	590	593	20	100	250	20
■ SML-012YT			75	30			-40 to +100	2					36	100				
■ SML-011YT							-40 to +100						22	63				
■ SML-012M8T		Yellowish Green					-40 to +85	2.2			569	572	575	16	40			
■ SML-012P8T		Green	54	20			-40 to +85				557		563	2.5	6.3			
■ SML-012PT(A)			62	25	60 <sup>*1</sup>		-40 to +100	2.1			558	560	564	9	18			
■ SML012ECT		Bluish Green	84					3.3			520	525	535	140	360			
■ SML012EC4T								3.2						56	140			
■ SML013BDT	InGaIn on SiC	Blue	78	20	100 <sup>*1</sup>		-30 to +85			100				90	250			
■ SML012BCT								3.3			465	470	475	36	100			
■ SML012BC4T				84					3.2						22	36		
□ SML013WBDW		White									(x, y)	(0.30, 0.30)	360	900				

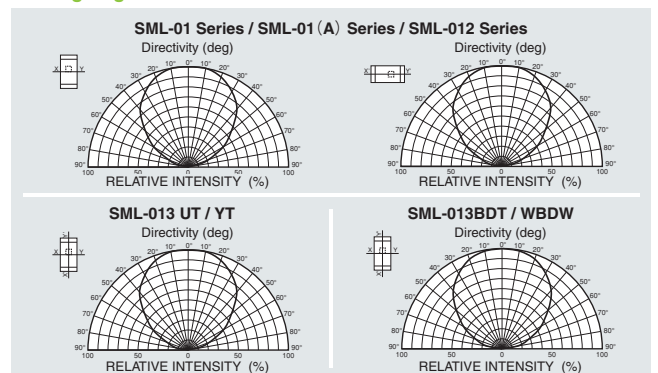
### Dimensions



### Recommended Solder Pattern



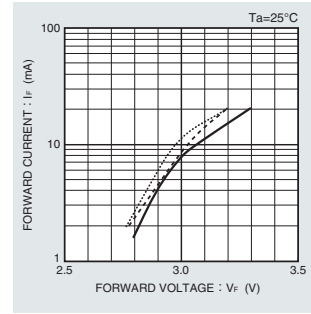
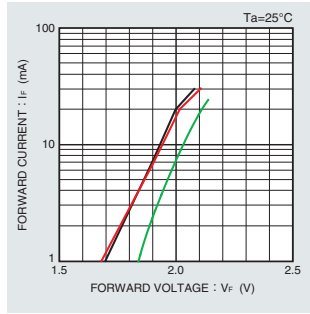
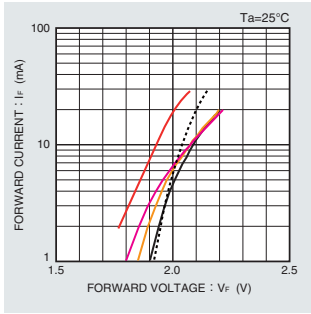
### Viewing Angle



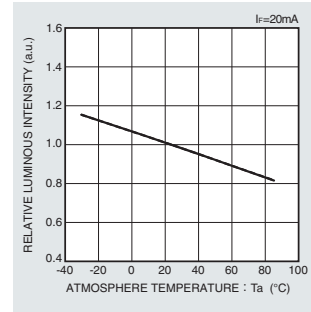
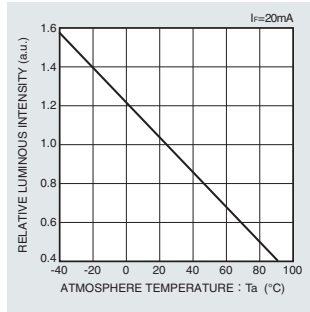
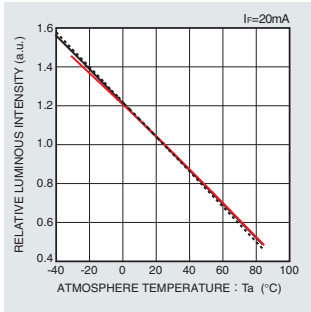
\* 1: Duty 1/10, 1kHz / \* 2: Reference

Electrical Characteristics Curves

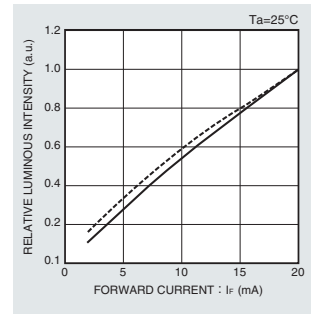
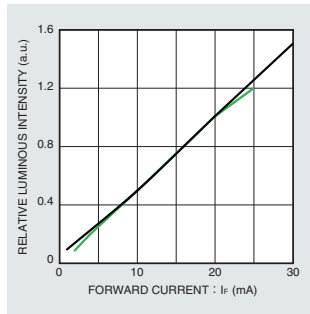
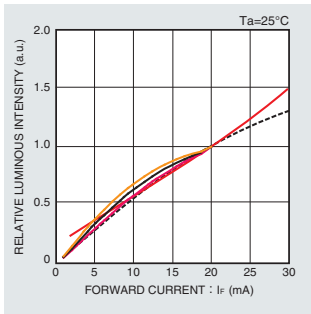
Forward Current-Forward Voltage



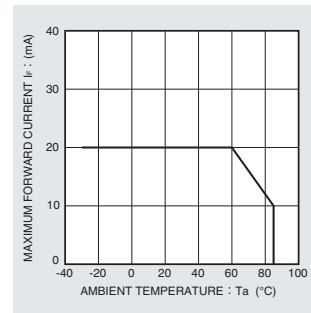
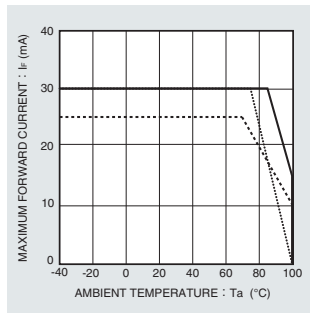
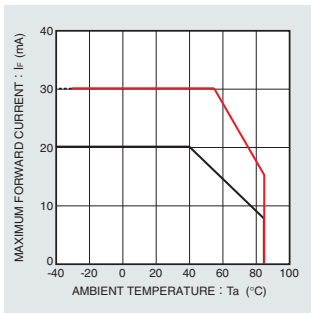
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



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