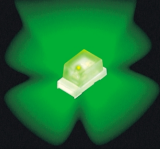
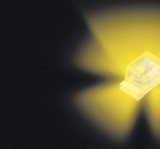
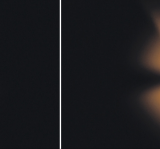
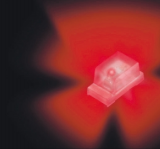


High Brightness Type Mini-molded chip LEDs

SML-51 * Series

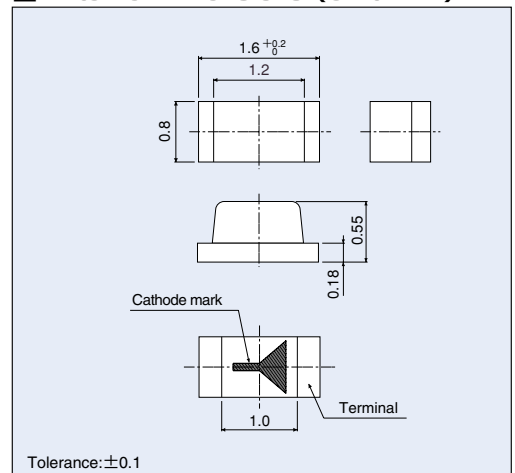
Package Size (mm)	Green	Yellow		Orange		Red	
	AlGaInP on GaAs						
	570nm	590nm		611nm		630nm	
1608 (0603) 1.6×0.8 t=0.55							
	SML-512MW	SML-511WW	SML-512WW	SML-511DW	SML-512DW	SML-511UW	SML-512UW

Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current I _{FP} (mA)	Reverse voltage VR (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-512MW	Green	65	25	100*2	5	-30 to +85	-40 to +85
SML-511WW	Yellow	62		60*1	4	-30 to +85	-40 to +85
SML-512WW		75	100*2	5	-40 to +100	-40 to +100	
SML-511DW	Orange	62	25	60*1	4	-30 to +85	-40 to +85
SML-512DW		75	30	100*2	5	-40 to +100	-40 to +100
SML-511UW	Red	62	25	60*1	4	-30 to +85	-40 to +85
SML-512UW		75	30	100*2	5	-40 to +100	-40 to +100

*1 I_{FP} measured under duty ≤1/5, pulse width ≤1ms.
*2 I_{FP} measured under duty 1/10, 1kHz

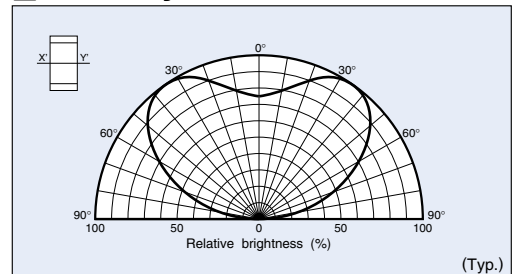
External Dimensions (Unit : mm)



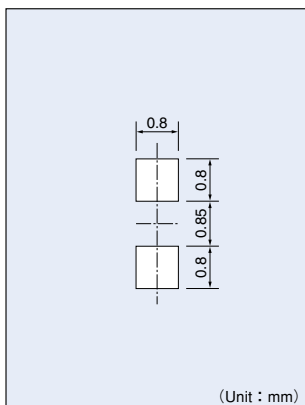
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength			Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Peak λp (nm)	Half-wave Δλ (nm)	IF (mA)	Min. (mcd)	Typ. (mcd)	IF (mA)
SML-512MW	Milky White	2.1	20	100	5	570	18	20	14	40	20
SML-511WW				100	4	590	15		22		
SML-512WW		10	5	611	16	36	63				
SML-511DW		100	4			14	40				
SML-512DW		10	5	630	18	22	63				
SML-511UW		100	4			14	40				
SML-512UW	10	5	22	63							

Directivity

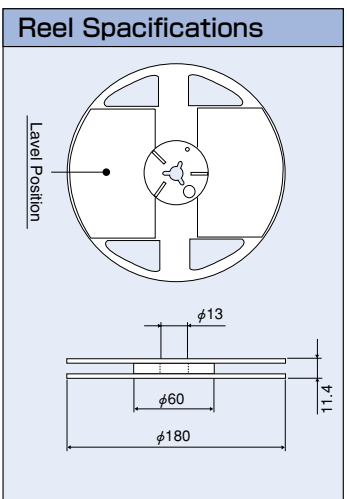
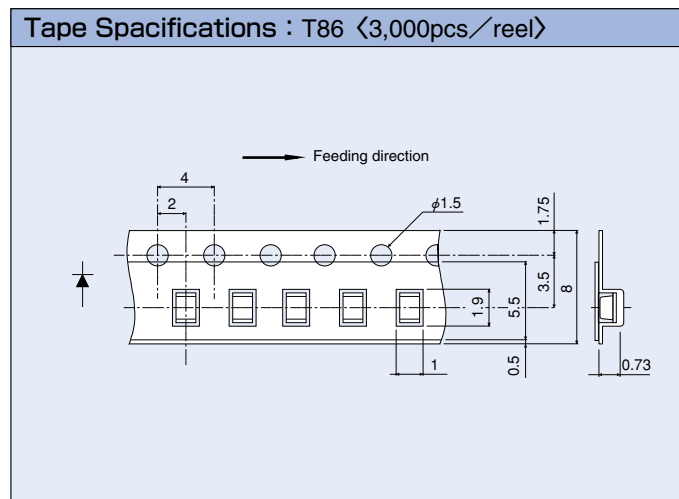


Recommended Pad Layout



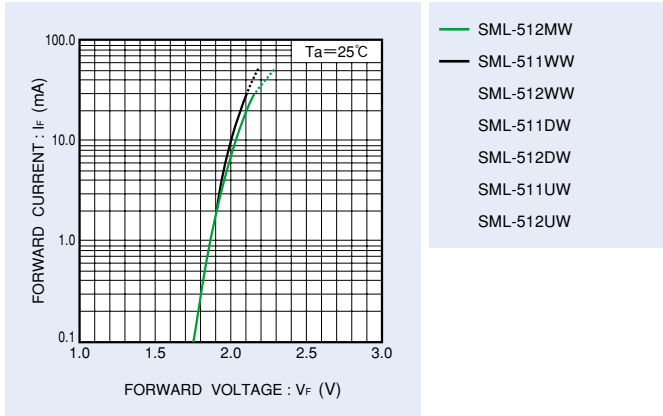
The recommended thickness of the screen mask for soldering is between 100 and 200 μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit : mm)

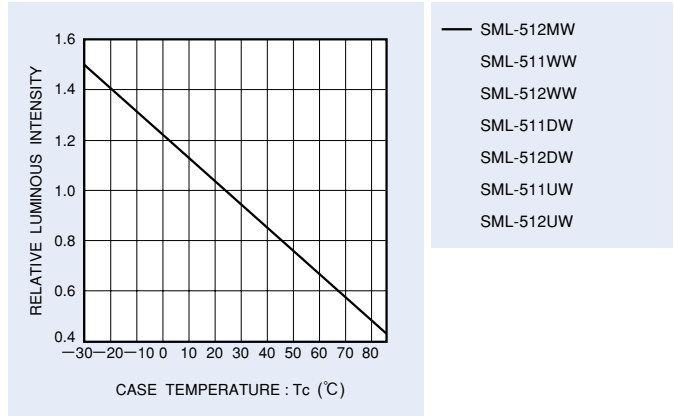


Electrical Characteristic Curves

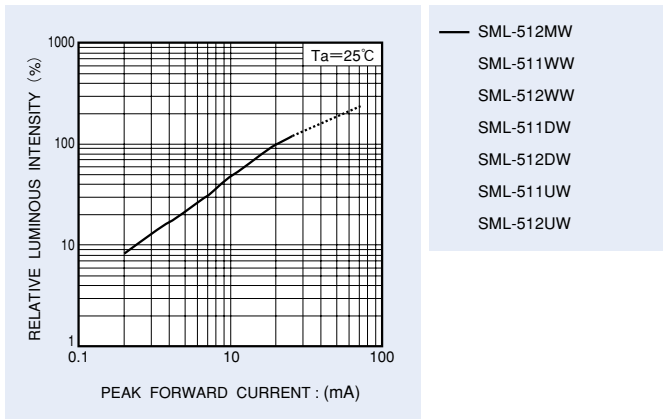
Forward Current - Forward Voltage



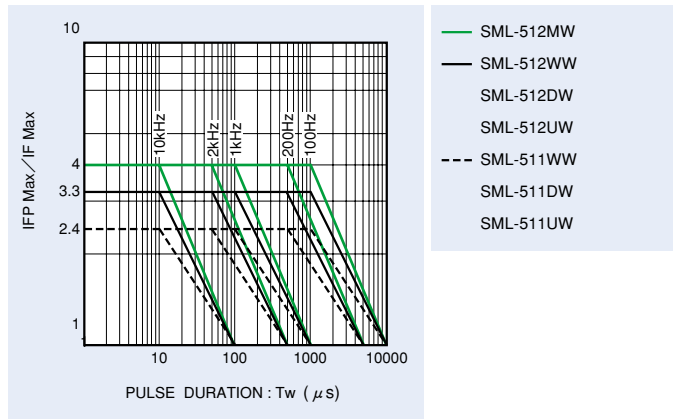
Relative Luminous Intensity - Case Temperature



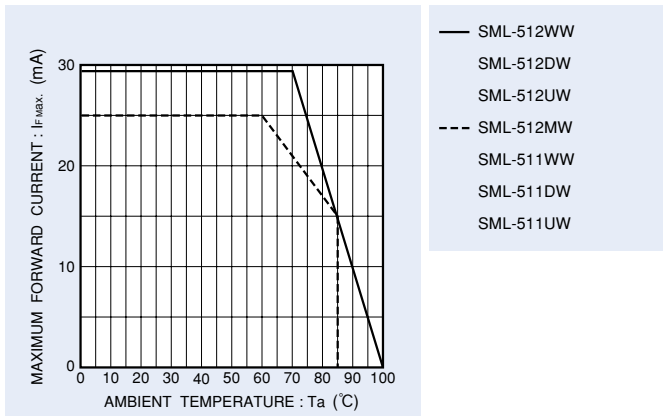
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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