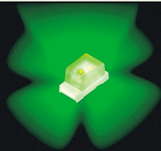
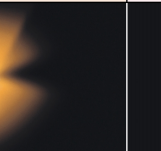


High Brightness Type Mini-molded chip LEDs

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℃)

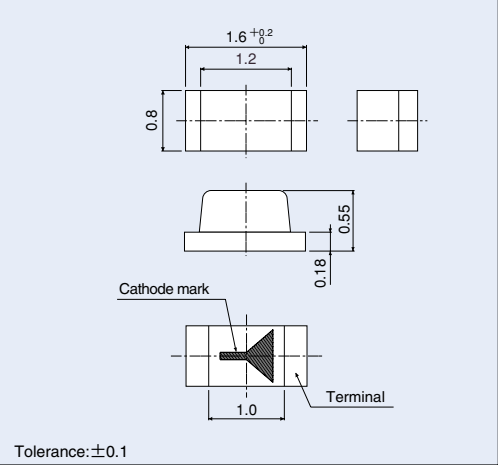
Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current IFP (mA)	Reverse voltage VR (V)	Operating temperature Topr (℃)	Stotage temperature Tstg (℃)
SML-512MW	Green	65	25	100*2	5	-30 to +85	-40 to +85
SML-511WW	Yellow	62		60*1	4	-30 to +85	-40 to +85
SML-512WW		75	30	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 IFP measured under duty ≤1/ 5,pulse width ≤1ms.
*2 IFP measured under duty 1/10, 1kHz

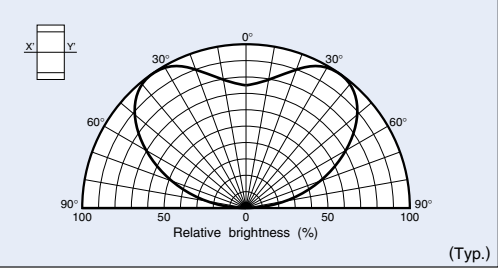
Electrical Optical Characteristics (Ta=25℃)

Part No.	Resin Color	Forward voltage V _F		Reverse current I _R		Light wavelength			Brightness I _v		
		Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	Peak λ _p Typ. (nm)	Half-wave Δλ Typ. (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)
SML-512MW		2.1		100	5	570	18		14	40	20
SML-511WW	Milky White	2.0	20	100	4	590	15	20	22		
SML-512WW				10	5				36	63	
SML-511DW				100	4	611	16		14	40	
SML-512DW				10	5				22	63	
SML-511UW				100	4	630	18		14	40	
SML-512UW				10	5				22	63	

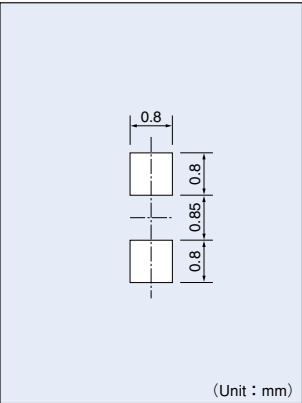
External Dimensions (Unit : mm)



Directivity

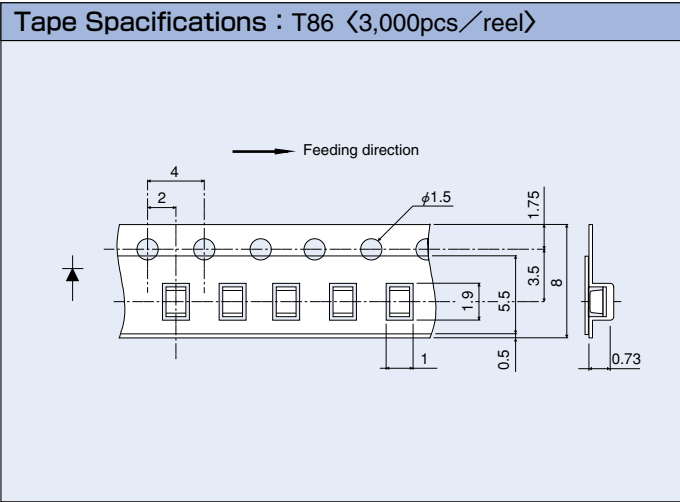


Recommended Pad Layout

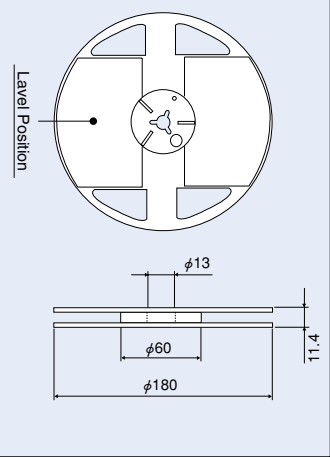


The recommended thickness of the screen mask for soldering is between 100 and 200μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit : mm)

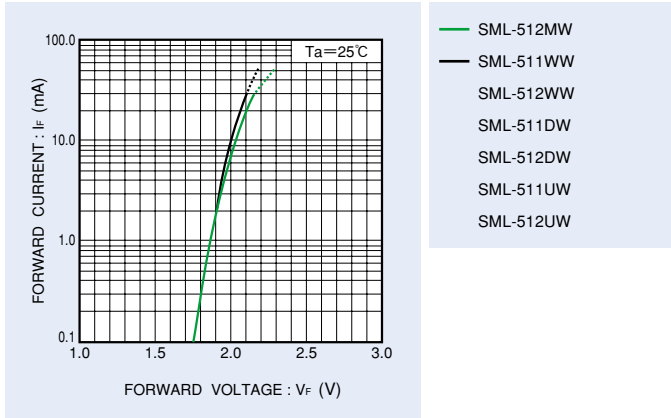


Reel Specifications

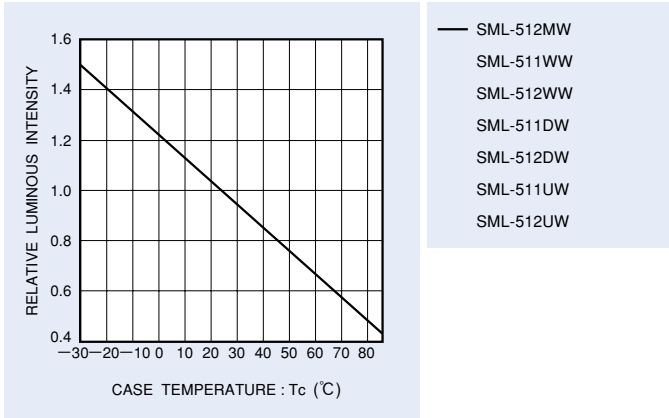


Electrical Characteristic Curves

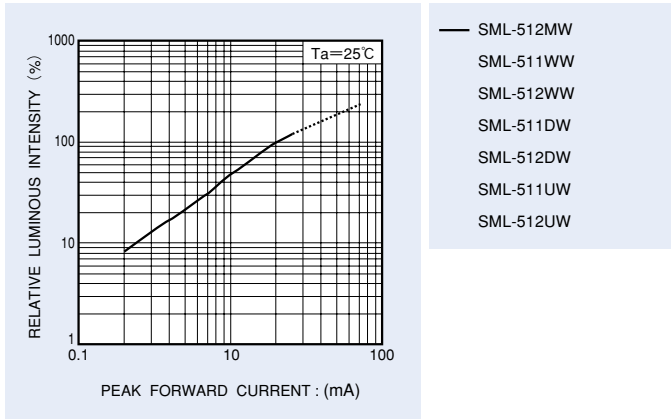
Forward Current - Forward Voltage



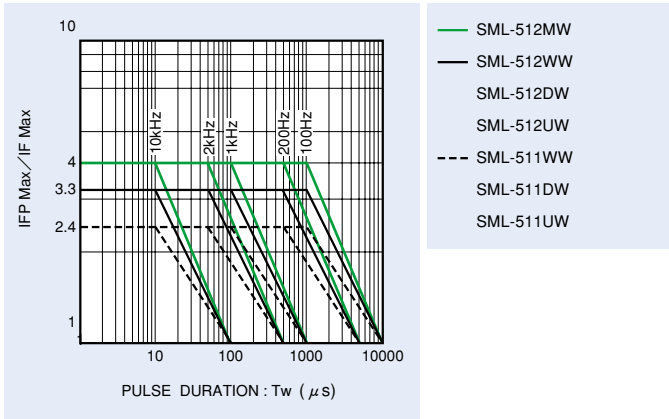
Relative Luminous Intensity - Case Temperature



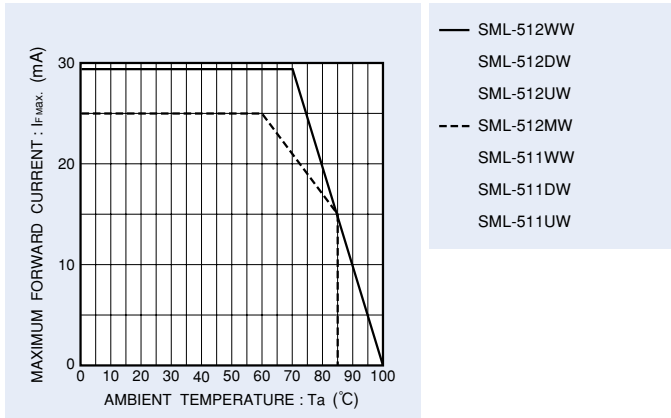
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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