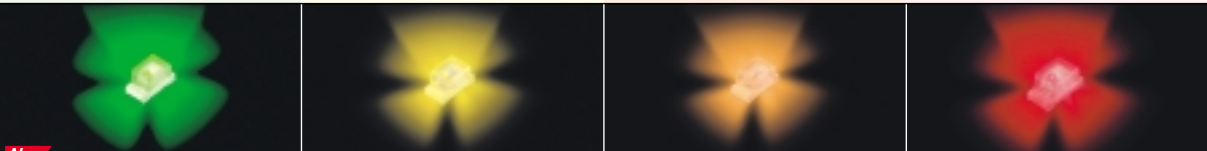


0603<1.6×0.8 t=0.55mm> High Brightness Type

SML-51□ Series

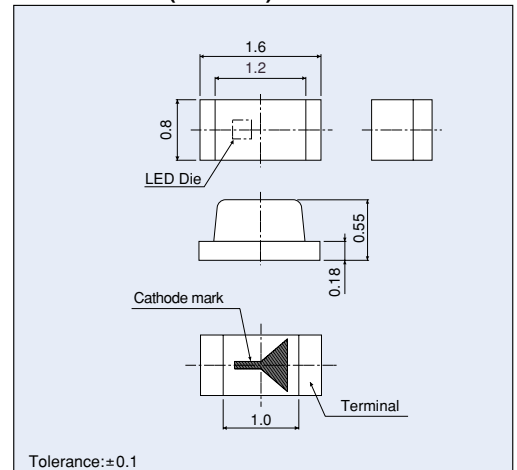
Emitting Color	Green(Yellowish Green)	Yellow	Orange	Red
Material	AlGaInP on GaAs			
Package Size(mm)				
1608(0603) 1.6×0.8(t=0.55)	New SML-512PW(A)	SML-512MW	SML-511WW	SML-512WW
Part No.	SML-511DW	SML-512DW	SML-512CW(A)	SML-511UW
	SML-512UW	SML-512VW(A)		

■ Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation P _D (mW)	Forward current I _F (mA)	Peak forward current I _{FP} (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-512MW	Green (Yellowish Green)	65	25	100 ^{*2}	5	-30 to +85	-40 to +85
SML-511WW	Yellow	62	30	60 ^{*1}	4	-30 to +85	-40 to +85
SML-512WW	Yellow	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	Orange	75	30	100 ^{*2}	5	-40 to +100	-40 to +100
SML-512CW(A)	Orange	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	Red	75	30	100 ^{*2}	5	-40 to +100	-40 to +100
SML-512VW(A)	Red	75	30	100 ^{*2}	5	-40 to +100	-40 to +100
SML-512PW(A)	Green (Yellowish Green)	65	25	100 ^{*2}	5	-30 to +85	-40 to +85

*1:Duty ≤ 1/5, pulse width ≤ 1ms.
*2:Duty 1/10, 1kHz

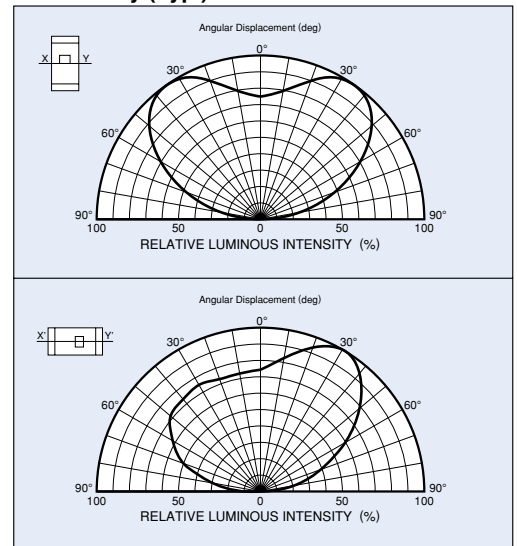
■ Dimensions (Unit:mm)



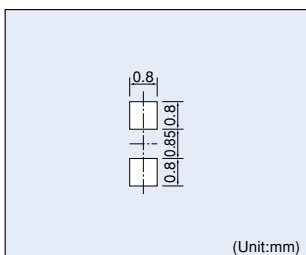
■ Electrical Optical Characteristics (Ta=25°C)

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 (nm)	Half-wave Δλ (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)
SML-512MW	Milky White	2.1	20	100	5	570	18	20	14	40
SML-511WW				100	4	590	15		22	63
SML-512WW				10	5				36	100
SML-511DW				100	4	611	16		14	40
SML-512DW	Pink	2.0	20	10	5	630	18	20	36	112
SML-512CW(A)				10	5	630	18		71	63
SML-511UW				100	4	630	18		14	40
SML-512UW				10	5	639	16		22	63
SML-512VW(A)	Green			100	5	639	16		35.5	56
SML-512PW(A)		2.1	20	100	5	563	15		5.6	14

■ Directivity (Typ.)

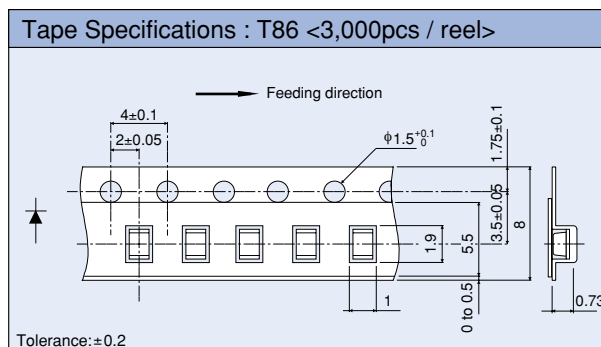


■ Recommended Pad Layout

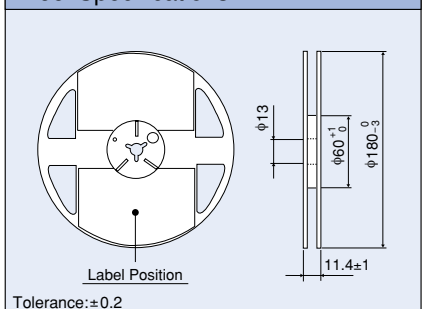


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

■ Packaging Specifications (Unit : mm)

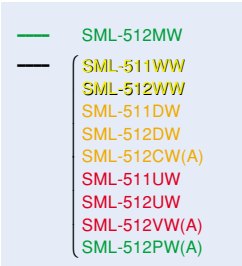
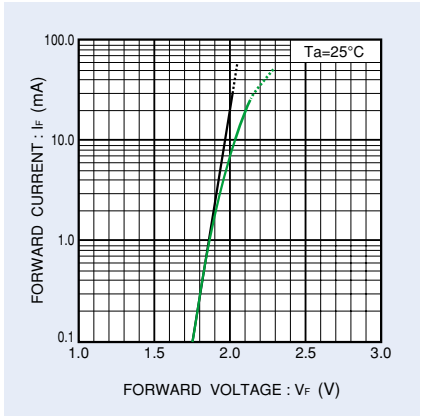


Reel Specifications

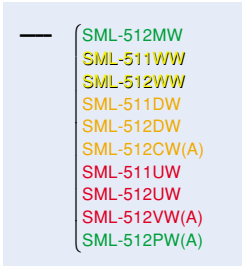
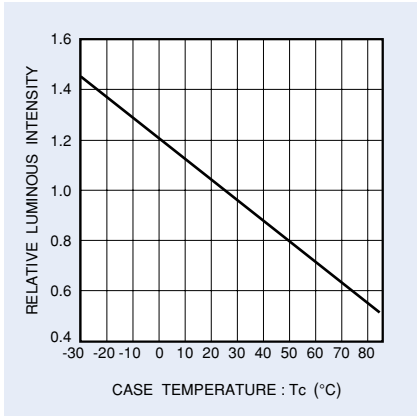


■ Electrical Characteristic Curves

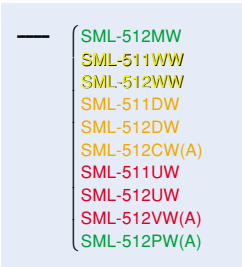
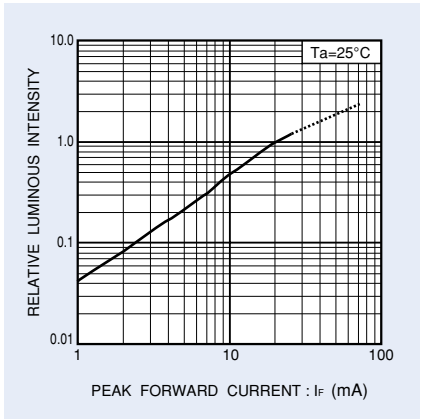
Forward Current - Forward Voltage



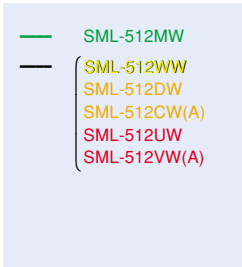
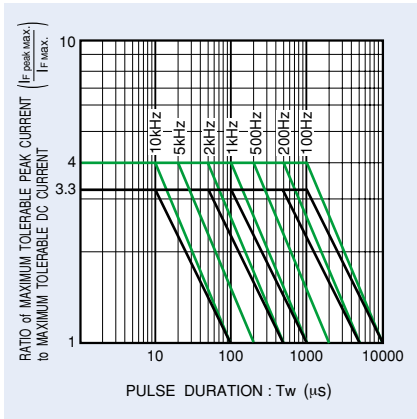
Relative Luminous Intensity - Case Temperature



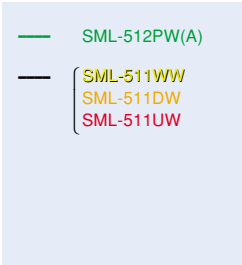
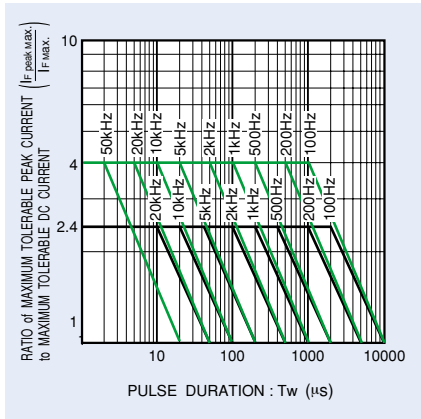
Relative Luminous Intensity - Forward Current



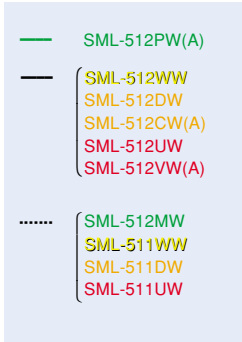
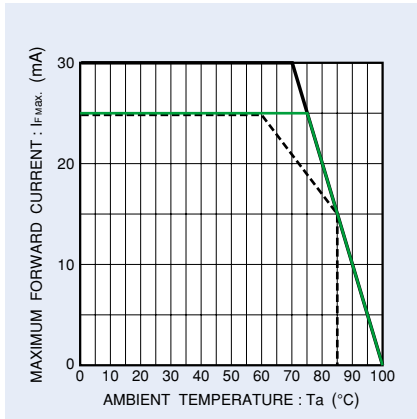
Ratio of Maximum Tolerable Peak Current - Pulse Duration



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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