

0805<2.0×1.25 t=0.8mm> High Brightness Type

SML-212 Series

Emitting Color	Yellow		Orange		Red
Material	AlGaInP on GaAs				
Package Size(mm)					
	2012(0805) 2.0×1.25(t=0.8)				
Part No.	SML-212YT	SML-212WT A	SML-212DT	SML-212U2T A	SML-212VT

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-212YT	Yellow			60 *1	4	-30 to +85	-40 to +85
SML-212WT A				100 *2	5	-40 to +100	-40 to +100
SML-212DT	Orange	75	30	60 *1	4	-30 to +85	-40 to +85
SML-212U2T A	Red			100 *2	5	-40 to +100	-40 to +100
SML-212VT				60 *1	4	-30 to +85	-40 to +85

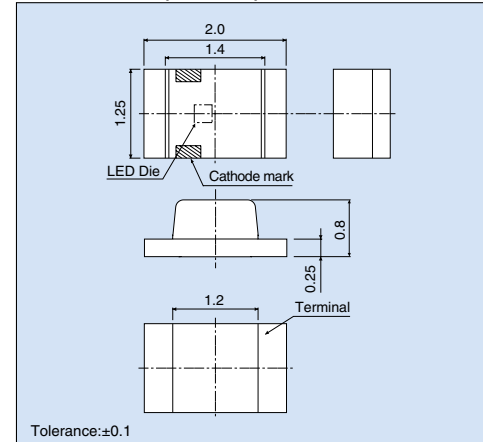
*1:Duty ≤ 1/5, pulse width ≤ 1ms.
*2:Duty ≤ 1/10, 1kHz

Electrical Optical Characteristics (Ta=25°C)

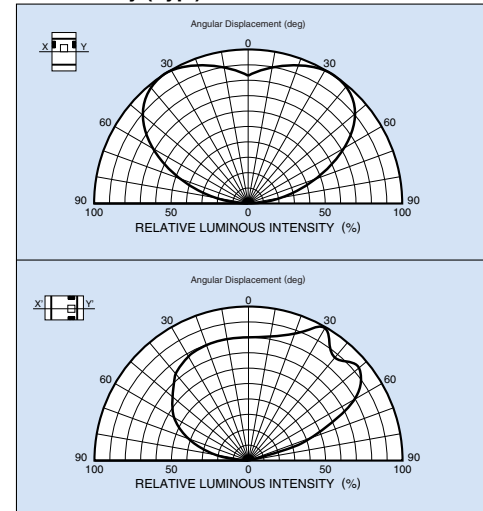
Part No.	Resin Color	Forward voltage V _F		Reverse current I _R		Light wavelength			Brightness I _v		
		Typ. (V)	I _F * (mA)	Max. (μA)	V _R (V)	Peak λ _p (nm)	Half-wave Δλ (nm)	I _F * (mA)	Min. (mcd)	Typ. (mcd)	I _F * (mA)
SML-212YT	Transparent Colorless	2.05		100	4	591	15		22	63	
SML-212WT A		2.0		10	5	590	15		112	224	
SML-212DT		2.05	20	100	4	611	17	20	25	63	20
SML-212U2T A		2.0		10	5	625	17		71	140	
SML-212VT		2.05		100	4	639	20		22	63	

* Pulse width : 30ms (SML-212WT A / SML-212U2T A)

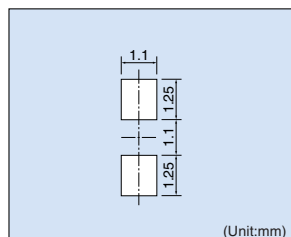
Dimensions (Unit:mm)



Directivity (Typ.)

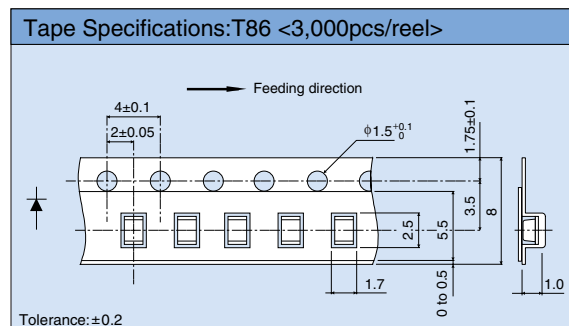


Recommended Pad Layout

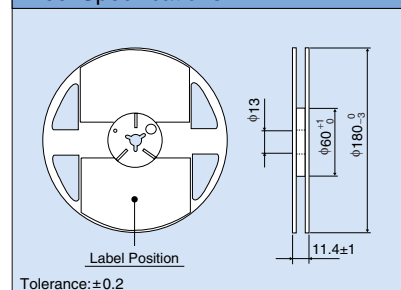


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

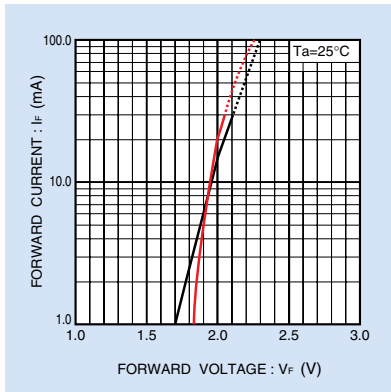


Reel Specifications



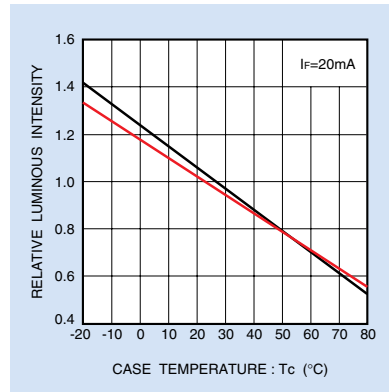
Electrical Characteristic Curves

Forward Current - Forward Voltage



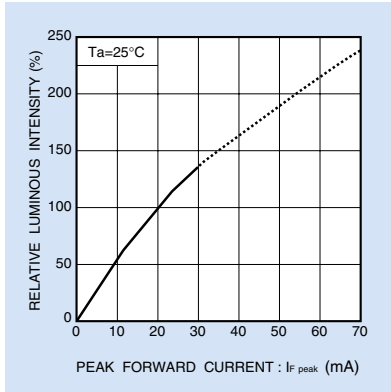
— SML-212YT
 — SML-212DT
 — SML-212VT
 - - - SML-212WT A
 - - - SML-212U2T A

Relative Luminous Intensity - Case Temperature



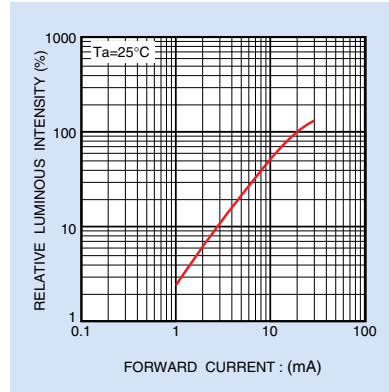
— SML-212YT
 — SML-212DT
 — SML-212VT
 - - - SML-212WT A
 - - - SML-212U2T A

Relative Luminous Intensity - Forward Current



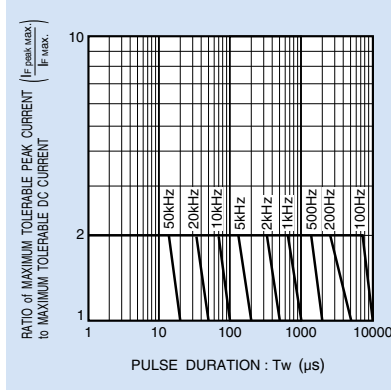
— SML-212YT
 — SML-212DT
 — SML-212VT
 - - - SML-212WT A
 - - - SML-212U2T A

Ratio of Maximum Tolerable Peak Current - Pulse Duration



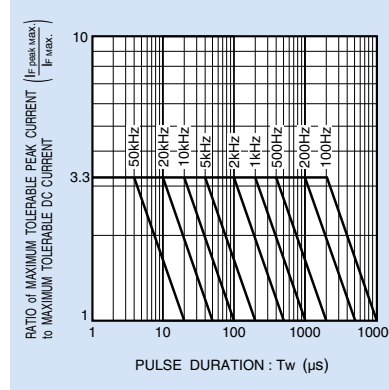
— SML-212YT
 — SML-212DT
 — SML-212VT
 - - - SML-212WT A
 - - - SML-212U2T A

Ratio of Maximum Tolerable Peak Current - Pulse Duration



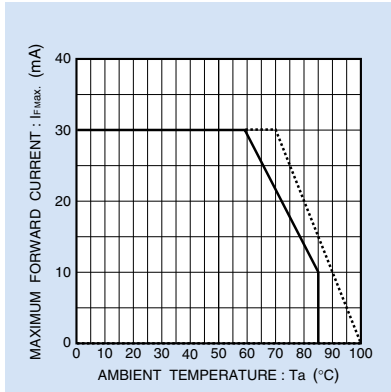
— SML-212YT
 — SML-212DT
 — SML-212VT
 - - - SML-212WT A
 - - - SML-212U2T A

Ratio of Maximum Tolerable Peak Current - Pulse Duration



— SML-212YT
 — SML-212DT
 — SML-212VT
 - - - SML-212WT A
 - - - SML-212U2T A

Derating



— SML-212YT
 — SML-212DT
 — SML-212VT
 - - - SML-212WT A
 - - - SML-212U2T A

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