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



SML-212 Series

Emitting Color	Yell	ow	Orange	Red		
Material			AlGaInP on GaAs			
Package Size(mm)					1	
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 Po (mW)	Forward current IF (mA)	Peak forward current IFP (mA)	Reverse voltage VR (V)	Operating temperature T _{opr} (C)	Storage temperature Tstg (C)	
SML-212YT	M all a			60 *1	4	-30 to +85	-40 to +85	
SML-212WT A	Yellow			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	neu			60 *1	4	-30 to +85	-40 to +85	

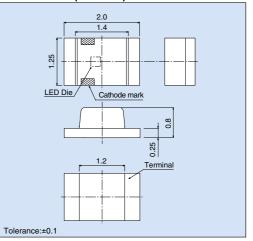
*1:Duty ≤ 1/5, pulse width ≤ 1ms.
 *2:Duty ≤ 1/10, 1kHz

■ Electrical Optical Characteristics (Ta=25°C)

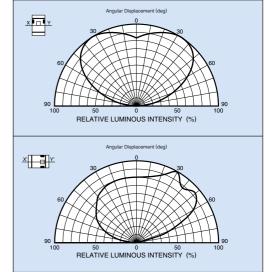
Part No.	Resin Color	Forward voltage Vғ		Reverse current In		Light wavelength Peak Half-wave $\lambda p \Delta \lambda$			Brightness Iv		
		Тур. (V)	lF ∗ (mA)	Max. (µA)	Vr (V)	Typ (nm)	Typ. (nm)	lF∗ (mA)	Min. (mcd)	Typ. (mcd)	lF∗ (mA)
SML-212YT	Transparent Colorless	2.05		100	4	591	15	20	22	63	
SML-212WT A		2.0		10	5	590	15		112	224	
SML-212DT		2.05	20	100	4	611	17		25	63	20
SML-212U2T A		2.0		10	5	625	17		71	140	
SML-212VT		2.05	2.05	100	4	639	20		22	63	

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

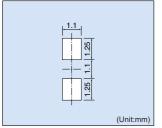
Dimensions (Unit:mm)



Directivity (Typ.)

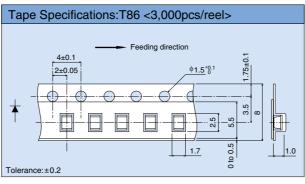


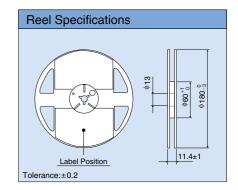
■Recommended Pad Layout



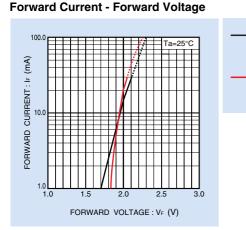
The recommended thickness of the screen mask for soldering is between 100 and 150 μ m. The hole size of the screen mask should be same as the recommended land pattern or smaller.

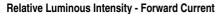
■ Packaging Specifications (Unit:mm)

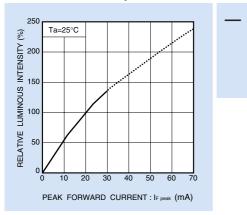




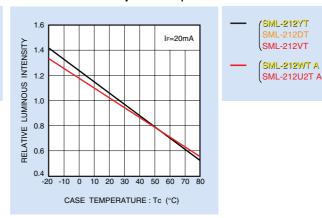
Electrical Characteristic Curves



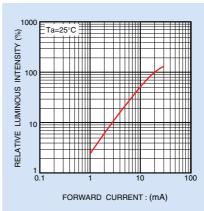




Relative Luminous Intensity - Case Temperature

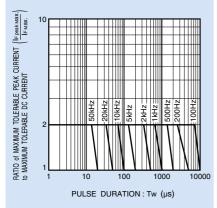








Ratio of Maximum Tolerable Peak Current - Pulse Duration



- (SML-212YT SML-212DT SML-212VT

SML-212YT

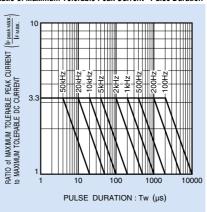
SML-212VT

(SML-212WT A SML-212U2T A

SML-212YT

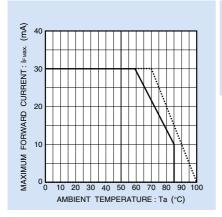
SML-212VT

Ratio of Maximum Tolerable Peak Current - Pulse Duration





Derating





Notes

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Appendix1-Rev2.0

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