

Chip LEDs with Reflector 1208<3.0×2.0 t=1.3mm> Standard Type

SML-010 Series

Emitting Color	Blue	Pure Green	Green(Yellowish Green)	Yellow	Orange	Red	
Material	GaN on SiC	GaP		GaAsP on GaP		GaAlAs on GaAs	
Package Size(mm)	 3020(1208) 3.0×2.0(t=1.3)						
Part No.		SML010BAT	SML-010PT	SML-010MT	SML-010YT	SML-010DT	SML-010VT

note) "-" will be taken out for emitting color B/E series.

Absolute Maximum Ratings (Ta=25°C)

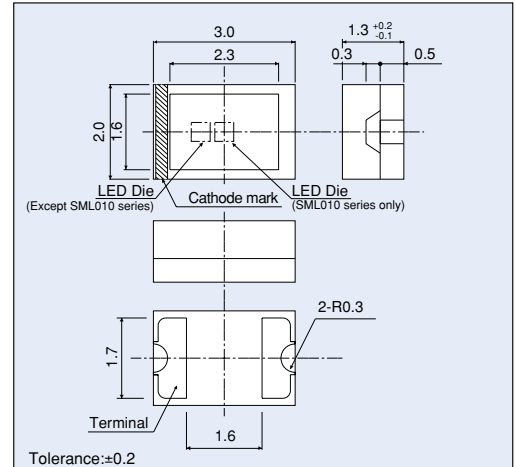
Part No.	Emitting color	Power dissipation Pd (mW)	Forward current If (mA)	Peak forward current *Ifp (mA)	Reverse voltage VR (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
SML010BAT	Blue	94	20	70	5		-40 to +100
SML-010PT	Pure Green						
SML-010MT	Green (Yellowish Green)						
SML-010YT	Yellow	70	25	60	4	-30 to +85	-40 to +85
SML-010DT	Orange						
SML-010VT	Red						
SML-010LT	Red	75	30	75			

*:Duty ≤ 1/5, pulse width ≤ 1ms.

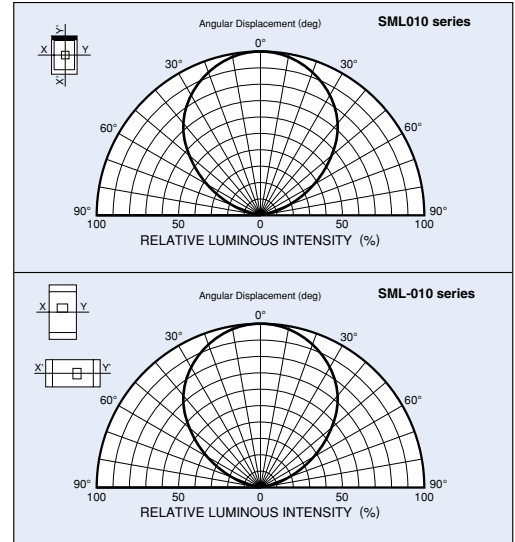
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength		Brightness Iv			
		Typ. (V)	If (mA)	Max. (μA)	VR (V)	Peak λp Typ. (nm)	Half-wave Δλ Typ. (nm)	If (mA)	Min. (mcd)	Typ. (mcd)	If (mA)
SML010BAT		3.8			5	428	65		3.6	9	
SML-010PT		2.2				555			2.2	6.3	
SML-010MT						570			5.6	25	
SML-010YT	Transparent	2.1	20	100	4	585	40	20	2.2	6.3	20
SML-010DT	Colorless	2.0				610			3.6	10	
SML-010VT						650			2.2	6.3	
SML-010LT		1.75				660	25		5.6	16	

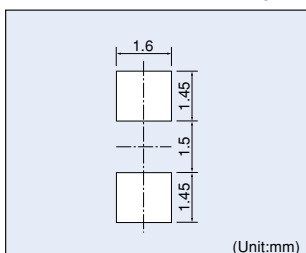
Dimensions (Unit:mm)



Directivity (Typ.)

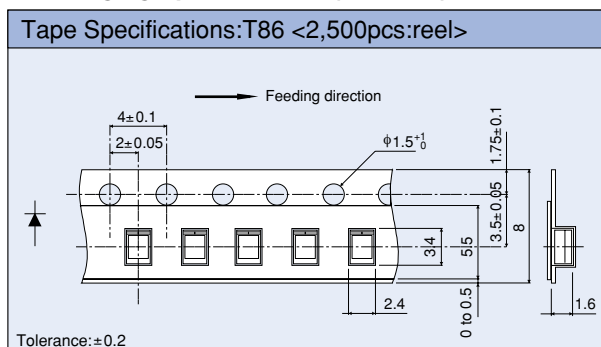


Recommended Pad Layout

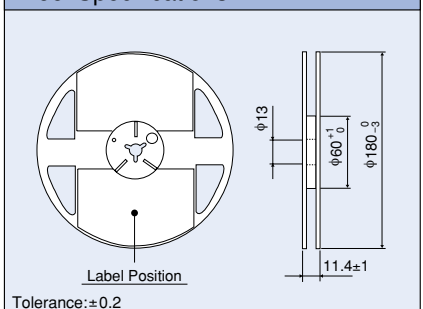


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

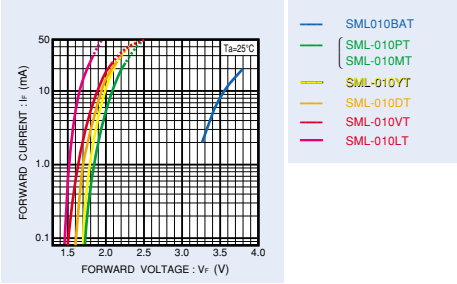


Reel Specifications

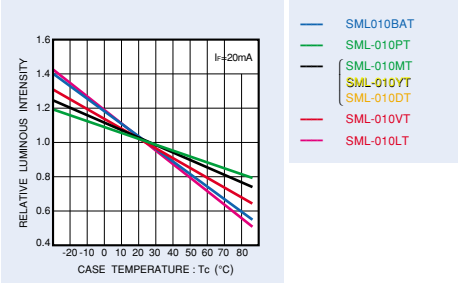


■ Electrical Characteristic Curves

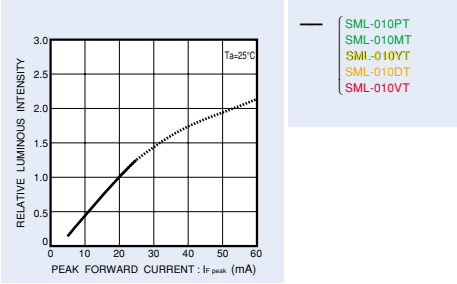
Forward Current - Forward Voltage



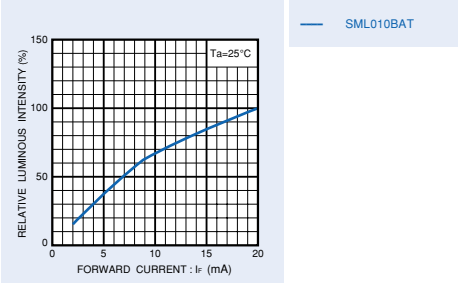
Relative Luminous Intensity - Case Temperature



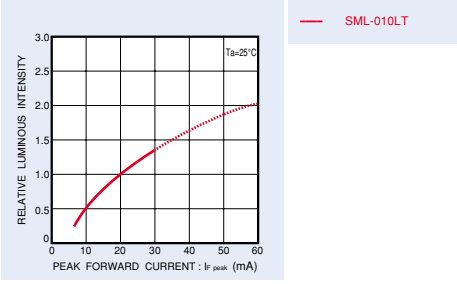
Relative Luminous Intensity - Forward Current



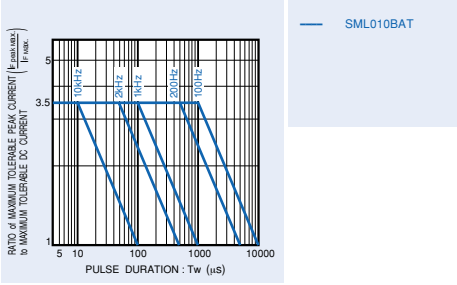
Relative Luminous Intensity - Forward Current



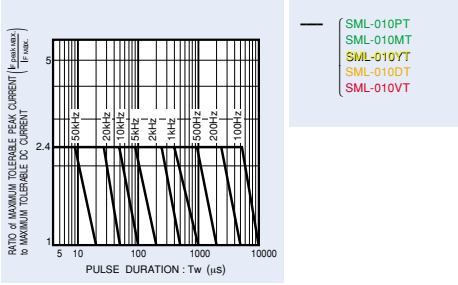
Relative Luminous Intensity - Forward Current



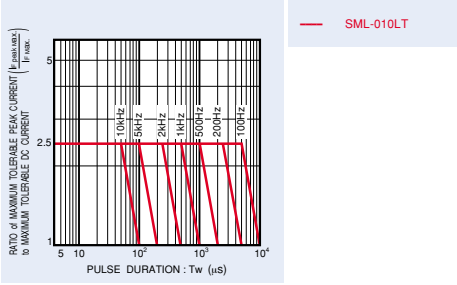
Ratio of Maximum Tolerable Peak Current - Pulse Duration



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating

