

Standard Type Chip LEDs with reflector

SML-010 Series

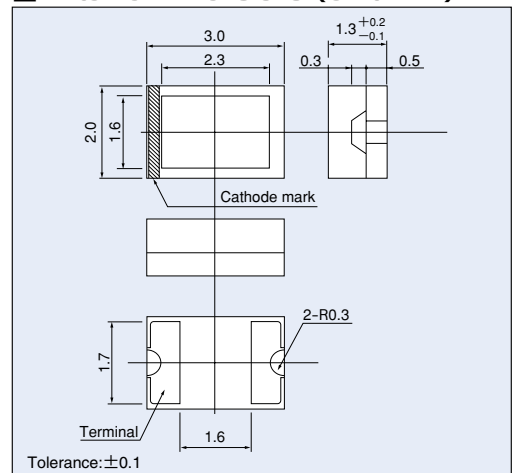
Package Size (mm)	Pure Green	Green	Yellow	Orange	Red	
	GaP			GaAsP on GaP		GaAlAs on GaAs
	555nm	570nm	585nm	610nm	650nm	660nm
3216 (1206) 3.0x2.0 t=1.3						
	SML-010PT	SML-010MT	SML-010YT	SML-010DT	SML-010VT	SML-010LT

Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current * I _{FP} (mA)	Reverse voltage VR (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-010PT	Pure Green	70	25	60	4	-30 to +85	-40 to +85
SML-010MT	Green						
SML-010YT	Yellow						
SML-010DT	Orange						
SML-010VT	Red						
SML-010LT	Red	75	30	75			

* I_{FP} measured under duty ≤ 1/5, pulse width ≤ 1ms.

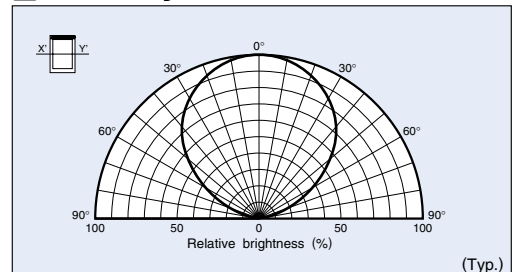
External Dimensions (Unit : mm)



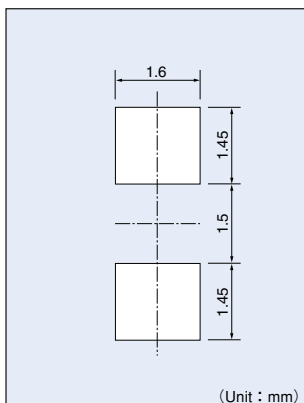
Electrical Optical Characteristics (Ta=25°C)

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

Directivity

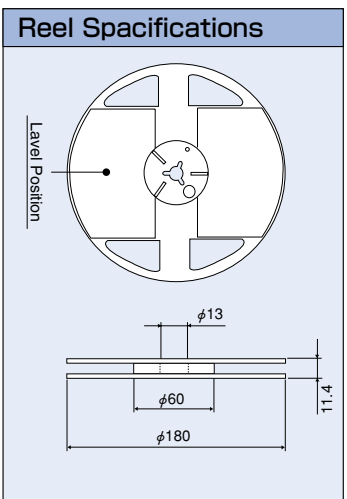
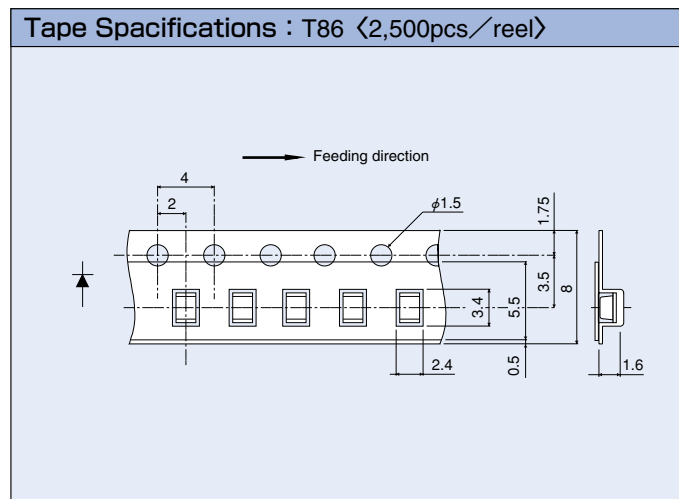


Recommended Pad Layout



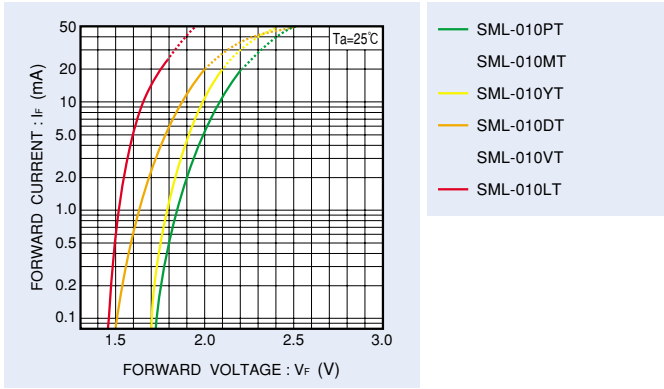
The recommended thickness of the screen mask for soldering is between 100 and 200μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit : mm)

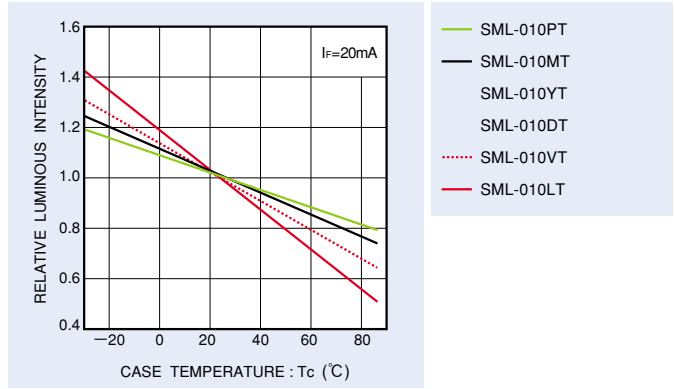


Electrical Characteristic Curves

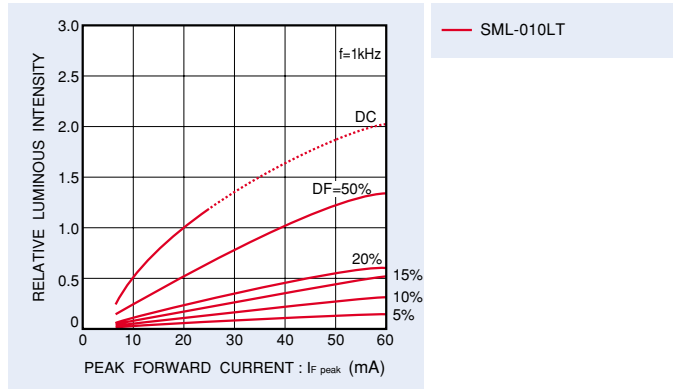
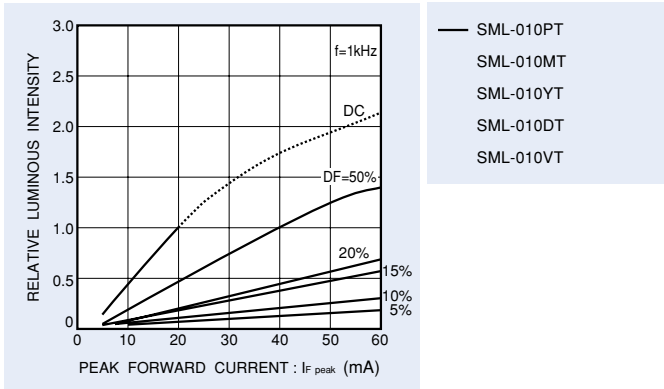
Forward Current - Forward Voltage



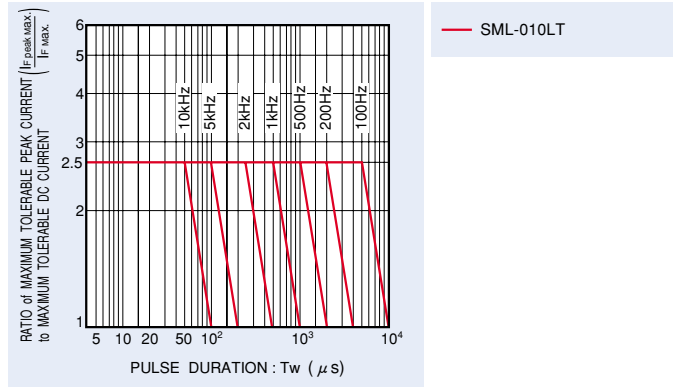
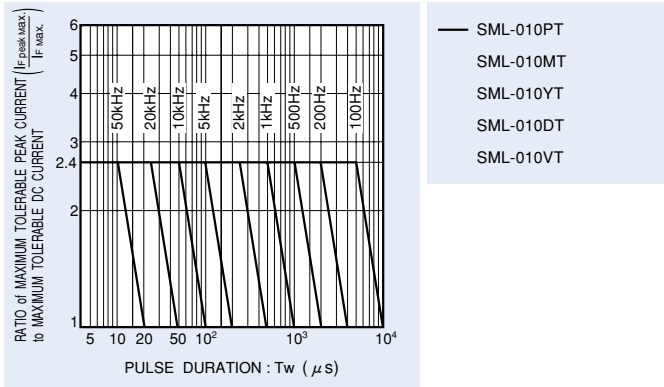
Relative Luminous Intensity - Case Temperature



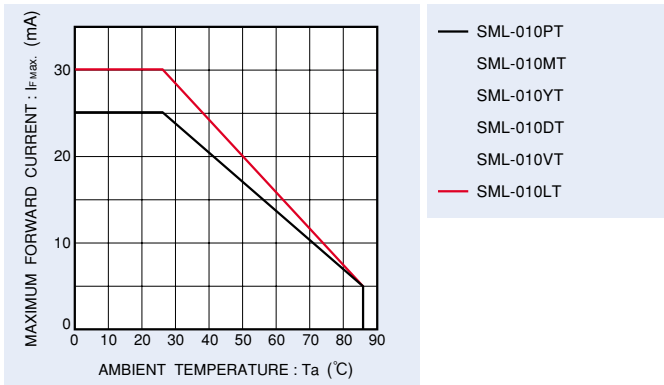
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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