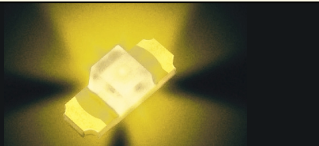
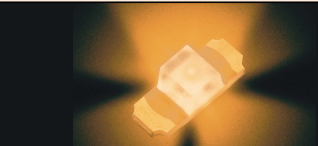



# Low Current Type ( $I_F \leq 10\text{mA}$ ) Back-fire chip LEDs (Reverse package)

## SML-811 Series

Package Size (mm)	Yellow	Orange	Red
	590nm	611nm	630nm
3412 (1305) 3.4×1.24 t=1.1			
	SML-811WT	SML-811DT	SML-811UT

### Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ )

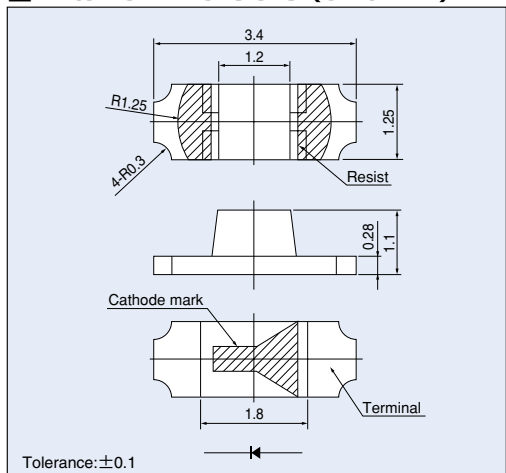
Part No.	Emitting color	Power dissipation $P_D$ (mW)	Forward current $I_F$ (mA)	Peak forward current * $I_{FP}$ (mA)	Reverse voltage $V_R$ (V)	Operating temperature $T_{opr}$ ( $^\circ\text{C}$ )	Storage temperature $T_{stg}$ ( $^\circ\text{C}$ )
SML-811WT	Yellow	62	25	100	5	-40 to +85	-40 to +100
SML-811DT	Orange						
SML-811UT	Red						

\*  $I_{FP}$  measured under duty  $\leq 1/10$ , pulse width  $\leq 0.1\text{ms}$ .

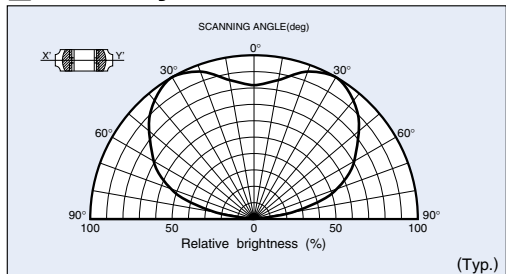
### Electrical Optical Characteristics ( $T_a=25^\circ\text{C}$ )

Part No.	Resin Color	Forward voltage $V_F$		Reverse current $I_R$		Light wavelength			Brightness $I_v$		
		Typ. (V)	$I_F$ (mA)	Max. ( $\mu\text{A}$ )	$V_R$ (V)	Peak $\lambda_p$ Typ. (nm)	Half-wave $\Delta\lambda$ Typ. (nm)	$I_F$ (mA)	Min. (mcd)	Typ. (mcd)	$I_F$ (mA)
SML-811WT	Transparent Clear	1.95	10	100	5	590	15	10	9	18	10
SML-811DT						611	16		11.2	22.4	
SML-811UT						630	18				

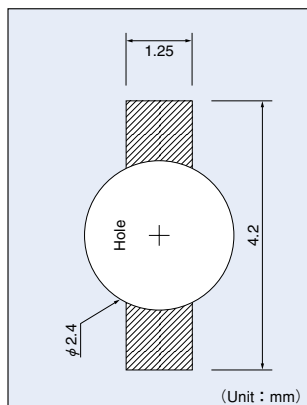
### External Dimensions (Unit : mm)



### Directivity

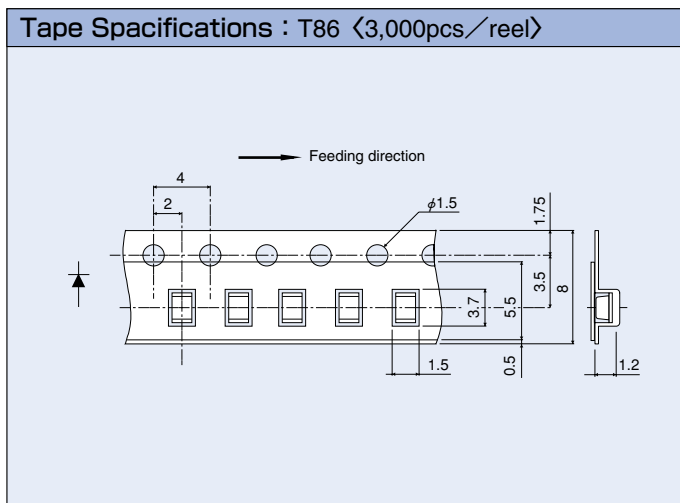


### Recommended Pad Layout



The recommended thickness of the screen mask for soldering is between 100 and 200  $\mu\text{m}$ . The hole size of the screen mask should be same as the recommended land pattern or smaller.

### Packaging Specifications (Unit : mm)



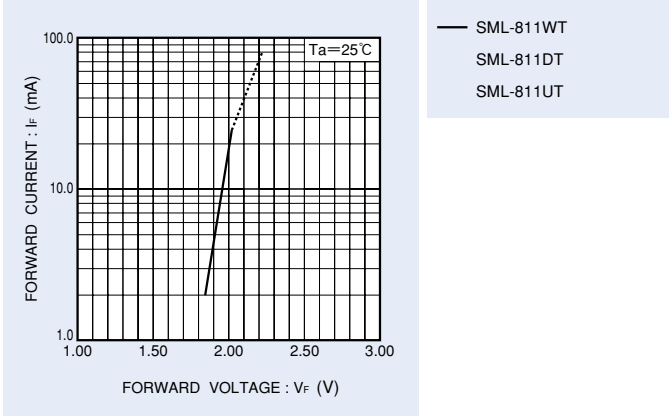
### Reel Specifications



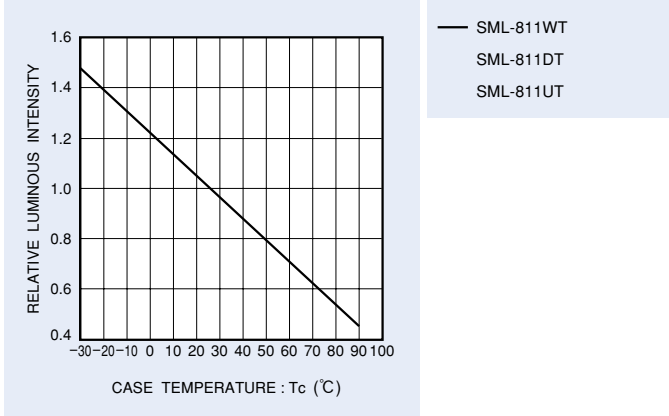


## Electrical Characteristic Curves

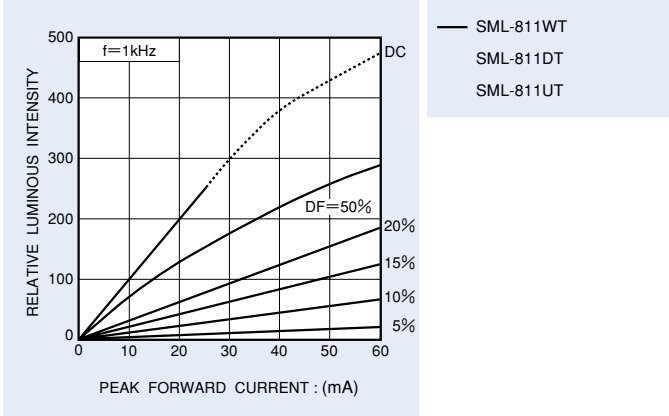
Forward Current - Forward Voltage



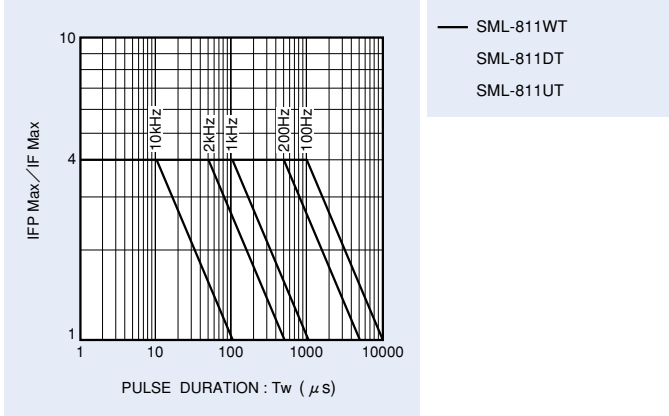
Relative Luminous Intensity - Case Temperature



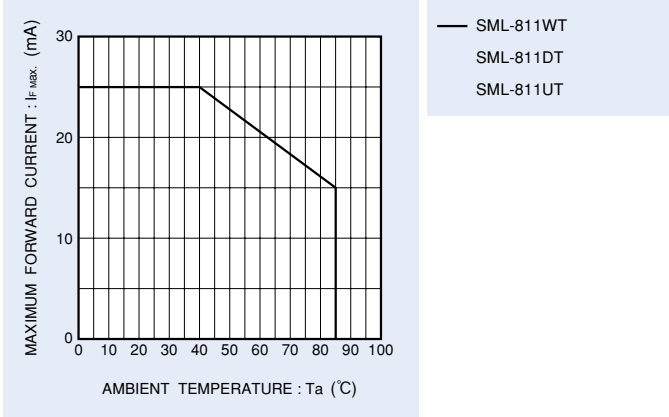
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



## Derating





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