0603<1.6×0.8 t=0.8mm> Low Current Type(I⊧≦10mA)



SML-311 Series

Emitting Color	Yell	ow	Orange	Red		
Material			AlGaInP on GaAs			
Package Size(mm)	1					
1608(0603) 1.6×0.8(t=0.8)				- 47 - 5		
Part No.	SML-311YT	SML-311WT	SML-311DT	SML-311UT		

Absolute Maximum Ratings (Ta=25°C)

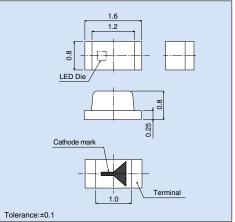
Part No.	Emitting color	Power dissipation Po (mW)	Forward current IF (mA)	Peak forward current *IFP (mA)	Reverse voltage VR (V)	Operating temperature T _{opr} (C)	Storage temperature Tstg (C)	
SML-311YT	Yellow		20	60			-40 to +85	
SML-311WT	reliow	44			4	-30 to +85		
SML-311DT	Orange		20		4	-00 10 +00		
SML-311UT	Red							

*:Duty≦1/ 5,pulse width ≦1ms.

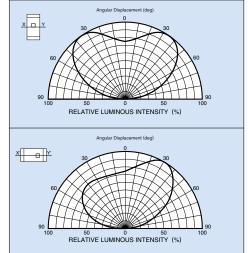
■Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current In		Light wavelength Dominant Half-wave $\lambda D \Delta \lambda$			Brightness Iv		
		Тур. (V)	lF (mA)	Max. (µA)	Vr (V)	Typ. (nm)	Typ. (nm)	lF (mA)	Min. (mcd)	Typ. (mcd)	l⊧ (mA)
SML-311YT						587	15		0.9	2.5	
SML-311WT	Transparent	1.8	2	100	4	590	15	2	0.9	2.5	2
SML-311DT	Colorless	1.0	2	100	4	605	16	2	1.6	3.15	2
SML-311UT						620	18		0.9	2.5	

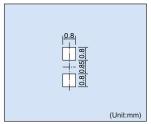
Dimensions (Unit:mm)



Directivity (Typ.)

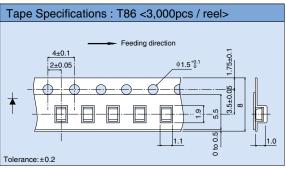


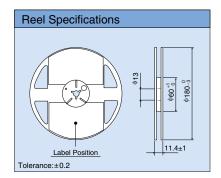
■Recommended Pad Layout



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.

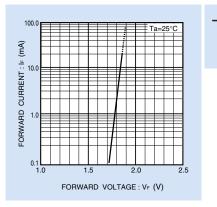
■ Packaging Specifications (Unit : mm)





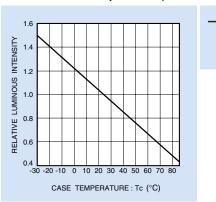
Electrical Characteristic Curves

Forward Current - Forward Voltage



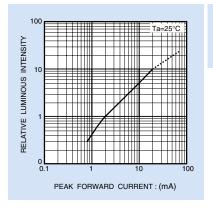
SML-311YT SML-311WT SML-311DT SML-311UT

Relative Luminous Intensity - Case Temperature



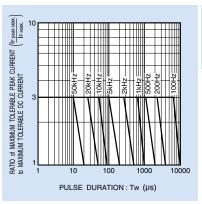
(SML-311YT SML-311WT SML-311DT SML-311UT

Relative Luminous Intensity - Forward Current



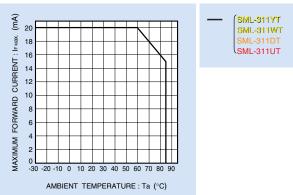
SML-311YT SML-311WT SML-311DT SML-311UT

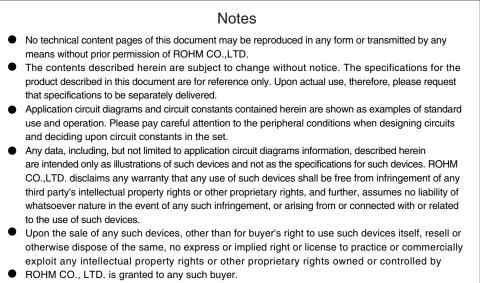
Ratio of Maximum Tolerable Peak Current - Pulse Duration



(SML-311YT SML-311WT SML-311DT SML-311UT

Derating





• Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

It is our top priority to supply products with the utmost quality and reliability. However, there is always a chance of failure due to unexpected factors. Therefore, please take into account the derating characteristics and allow for sufficient safety features, such as extra margin, anti-flammability, and fail-safe measures when designing in order to prevent possible accidents that may result in bodily harm or fire caused by component failure. ROHM cannot be held responsible for any damages arising from the use of the products under conditions out of the range of the specifications or due to non-compliance with the NOTES specified in this catalog.

Thank you for your accessing to ROHM product informations. More detail product informations and catalogs are available, please contact your nearest sales office.

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Appendix1-Rev2.0