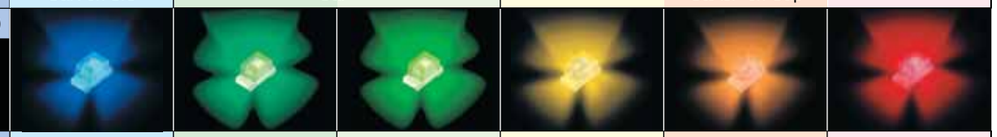
0603<1.6×0.8 t=0.8mm
Standard Type

SML-310 Series

Emitting Color	Blue	Pure Green	Pure Green	Yellow	Orange	Red
Material	GaN on SiC	GaP			GaAsP on Gap	
Package Size(mm)	 1608(0603) 1.6×0.8(t=0.8)					
Part No.	**SML310BAT**	**SML-310PT**	**SML-310MT**	**SML-310YT**	**SML-310DT**	**SML-310VT**

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

■ Absolute Maximum Ratings (Ta=25°C)

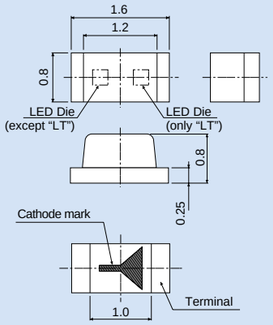
Part No.	Emitting color	Power dissipation P_D (mW)	Forward current I_F (mA)	Peak forward current ✻I_{FP} (mA)	Reverse voltage V_R (V)	Operating temperature T_{opr} (C)	Storage temperature T_{stg} (C)
SML310BAT	Blue	94		70	5		-40 to +100
SML-310PT	Pure Green						
SML-310MT	Green (Yellowish Green)		20				
SML-310YT	Yellow	55		60	4	-30 to +85	-40 to +85
SML-310DT	Orange						
SML-310VT	Red						

✻:Duty ≦1/5, pulse width ≦ 1ms.

■ Electrical Optical Characteristics (Ta=25°C)

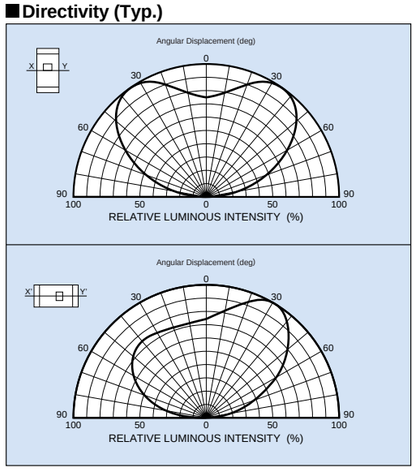
Part No.	Resin Color	Forward voltage V_F Typ. (V)	Forward voltage V_F I_F (mA)	Reverse current I_R Max. (μA)	Reverse current I_R V_R (V)	Light wavelength Peak λp Typ. (nm)	Light wavelength Half-wave Δλ Typ. (nm)	Light wavelength I_F (mA)	Brightness Iv Min. (mcd)	Brightness Iv Typ. (mcd)	Brightness Iv I_F (mA)
SML310BAT	Transparent Colorless	3.8	20	100	5	428	65	20	1.4	3.6	20
SML-310PT		2.2				555				4	
SML-310MT						570			3.6	16	
SML-310YT		2.1			4	585	40		2.2	6.3	
SML-310DT		2.0				610					
SML-310VT						650			1.4	4	

■Dimensions (Unit:mm)

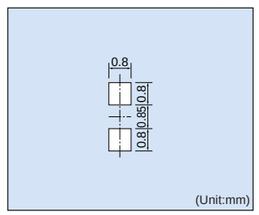


Tolerance:±0.1

■Directivity (Typ.)



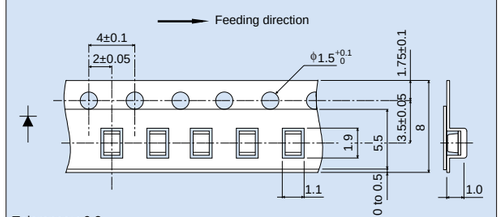
■Recommended Pad Layout



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.

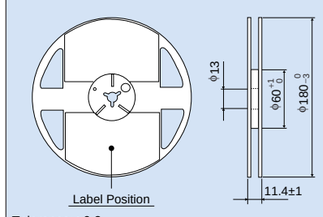
■Packaging Specifications (Unit : mm)

Tape Specifications : T86 <3,000pcs / reel>



Tolerance:±0.2

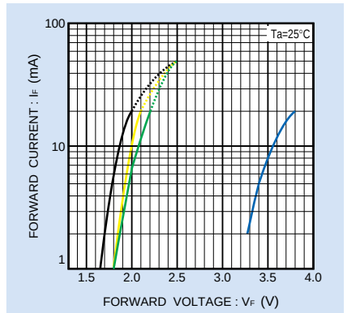
Reel Specifications



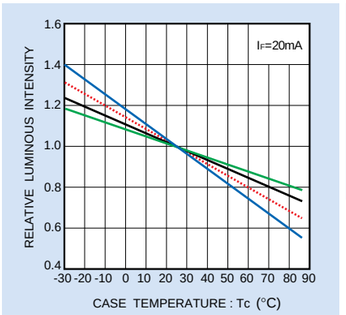
Tolerance:±0.2

■Electrical Characteristic Curves

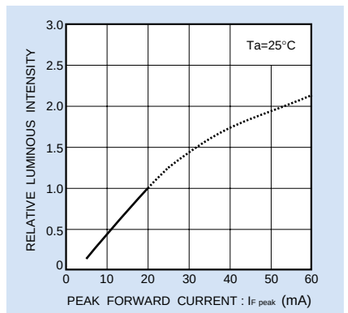
Forward Current - Forward Voltage



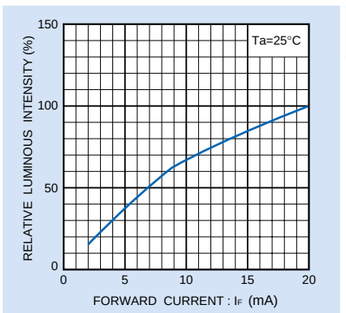
Relative Luminous Intensity - Case Temperature



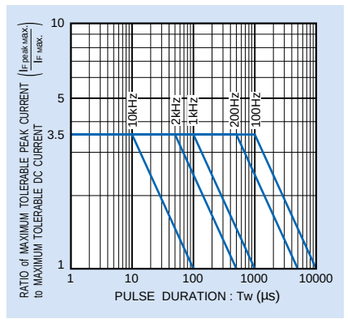
Relative Luminous Intensity - Forward Current



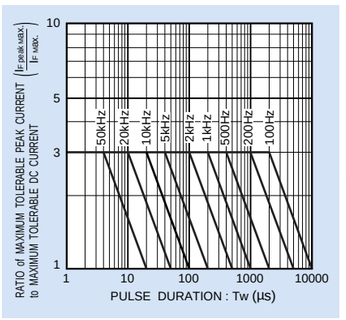
Relative Luminous Intensity - Forward Current



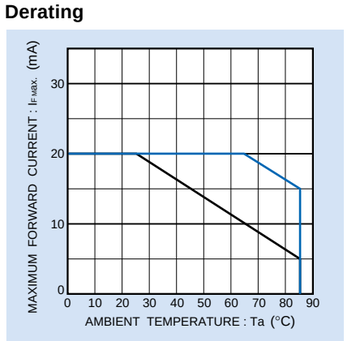
Ratio of Maximum Tolerable Peak Current - Pulse Duration



Ratio of Maximum Tolerable Peak Current - Pulse Duration

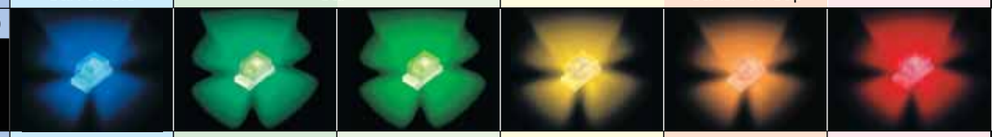


Derating



0603<1.6×0.8 t=0.8mm
Standard Type

SML-310 Series

Emitting Color	Blue	Pure Green	Pure Green	Yellow	Orange	Red
Material	GaN on SiC	GaP			GaAsP on Gap	
Package Size(mm)	 1608(0603) 1.6×0.8(t=0.8)					
Part No.	**SML310BAT**	**SML-310PT**	**SML-310MT**	**SML-310YT**	**SML-310DT**	**SML-310VT**

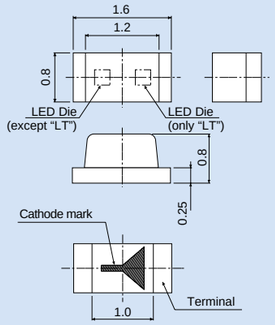
note) "-" will be taken out for emitting color B/E series.

■ Absolute Maximum Ratings (Ta=25°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} (C)	Storage temperature T_{stg} (C)
SML310BAT	Blue	94		70	5		-40 to +100
SML-310PT	Pure Green						
SML-310MT	Green (Yellowish Green)		20				
SML-310YT	Yellow	55		60	4	-30 to +85	-40 to +85
SML-310DT	Orange						
SML-310VT	Red						

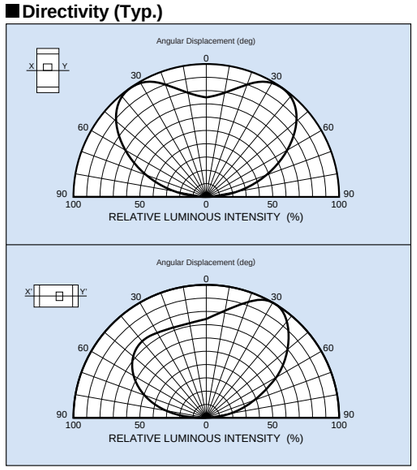
✻:Duty ≦1/5, pulse width ≦ 1ms.

■Dimensions (Unit:mm)



Tolerance:±0.1

■Directivity (Typ.)



■Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V_F Typ. (V)	Forward voltage V_F I_F (mA)	Reverse current I_R Max. (μA)	Reverse current I_R V_R (V)	Light wavelength Peak λp Typ. (nm)	Light wavelength Half-wave Δλ Typ. (nm)	Light wavelength I_F (mA)	Brightness Iv Min. (mcd)	Brightness Iv Typ. (mcd)	Brightness Iv I_F (mA)
SML310BAT	Transparent Colorless	3.8	20	100	5	428	65	20	1.4	3.6	20
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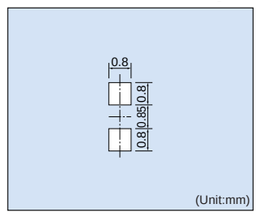
SML-310MT						570			3.6	16	
SML-310YT		2.1			4	585	40		2.2	6.3	
SML-310DT		2.0				610					
SML-310VT						650			1.4	4	

■Recommended Pad Layout



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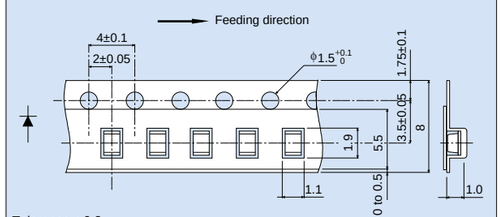
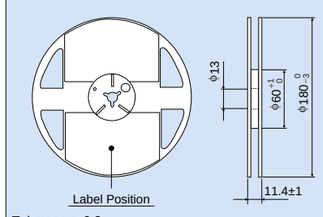
■Packaging Specifications (Unit : mm)

Tape Specifications : T86 <3,000pcs / reel>



Tolerance:±0.2

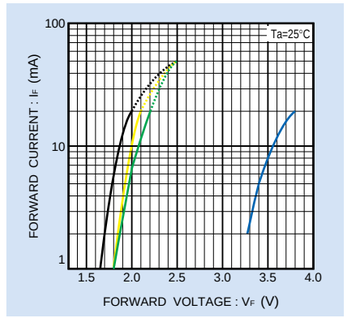
Reel Specifications



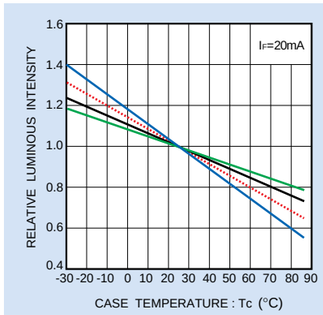
Tolerance:±0.2

■Electrical Characteristic Curves

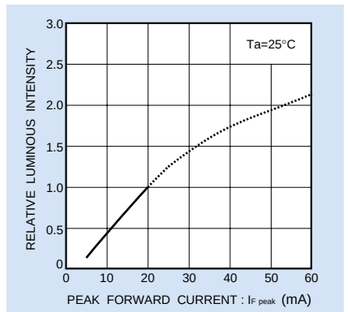
Forward Current - Forward Voltage



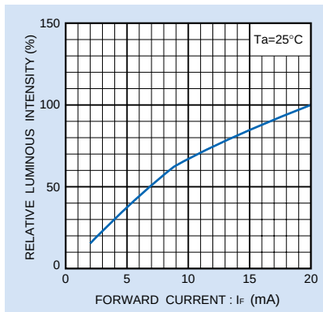
Relative Luminous Intensity - Case Temperature



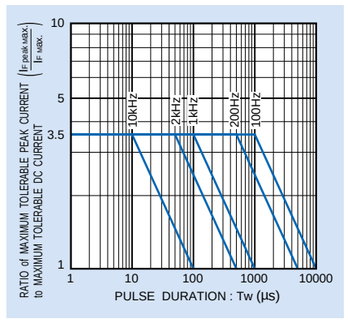
Relative Luminous Intensity - Forward Current



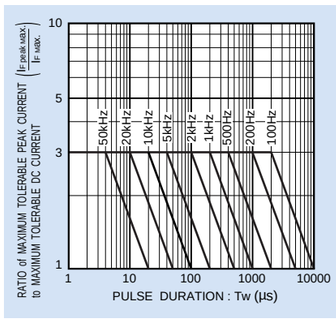
Relative Luminous Intensity - Forward Current



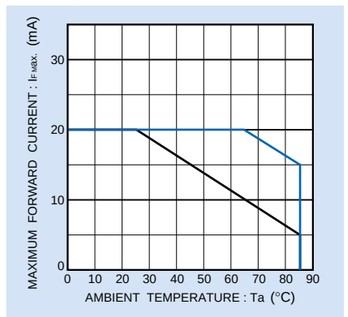
Ratio of Maximum Tolerable Peak Current - Pulse Duration



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



Rev.D

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