

Ultra-thin chip LEDs

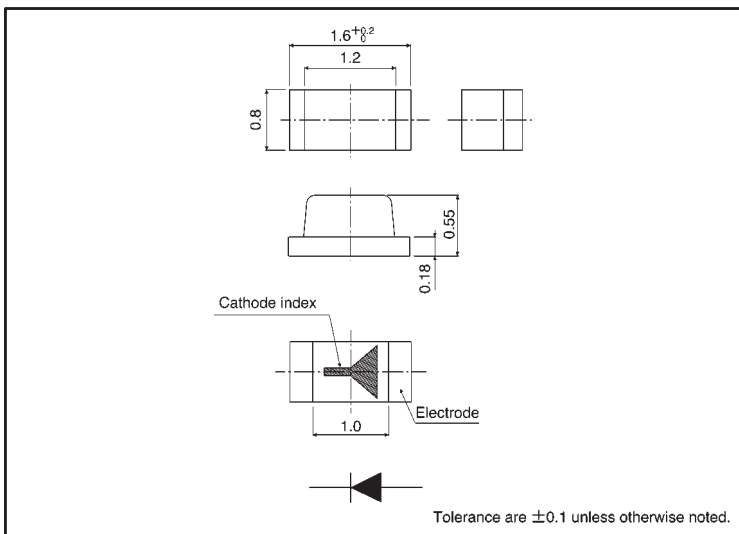
SML-510MW

The SML-510 is an ultra-thin chip LED. The compact and leadless design of these LEDs allows for high mounting density.

●Features

- 1) Thin shaped and leadless (1.6×0.8 mm, 0.55 mm thick).
- 2) Green colored light emission.
- 3) Can be mounted by automatic mounting.

●External dimensions (Units: mm)



●Selection guide

Emitting color	
Lens	Green
	SML-510MW

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Green	Unit
		SML-510MW	
Power dissipation	P _D	55	mW
Forward current	I _F	20	mA
Peak forward current	I _{FP}	60	mA*
Reverse voltage	V _R	4	V
Operating temperature	T _{opr}	-30~+85	°C
Storage temperature	T _{stg}	-40~+85	°C

* Pulse width 1ms Duty 1/5

●Electrical and optical characteristics (Ta = 25°C)

Parameter Type		Color	Forward voltage			Reverse current		Luminous intensity			Peak wavelength		Spectral line half width	
			VF(V)		Cond.	IR(μA)	Cond.	IV(mcd)		Cond.	λP(nm)	Cond.	Δλ(nm)	Cond.
			Typ.	Max.	IF(mA)	Max.	VR(V)	Min.	Typ.	IF(mA)	Typ.	IF(mA)	Typ.	IF(mA)
SML-510	MW	Green	2.2	2.8	20	100	4	3.6	16.0	20	570	20	40	20

●Directional pattern

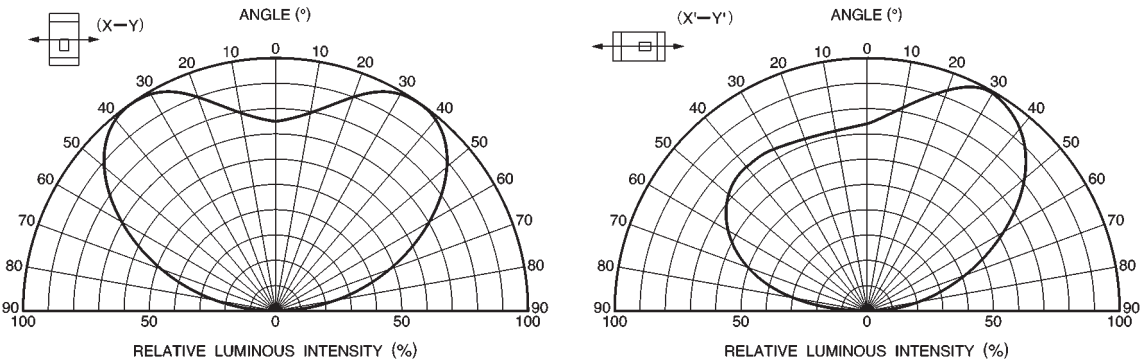


Fig.1 Directional pattern

●Electrical characteristic curves (SML-510MW) (green)

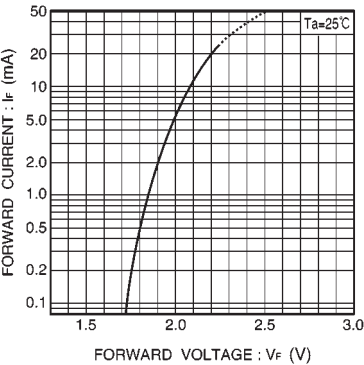


Fig.2 Forward current vs. forward voltage

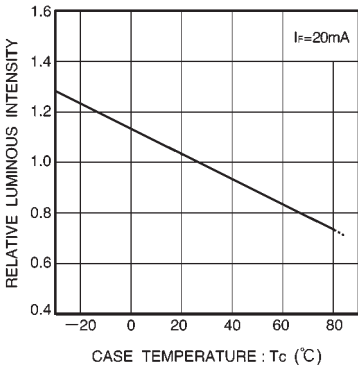


Fig.3 Luminous intensity vs. case temperature

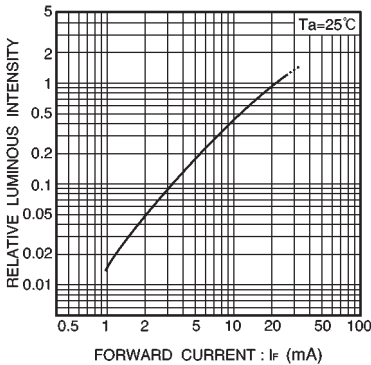


Fig.4 Luminous intensity vs. forward current

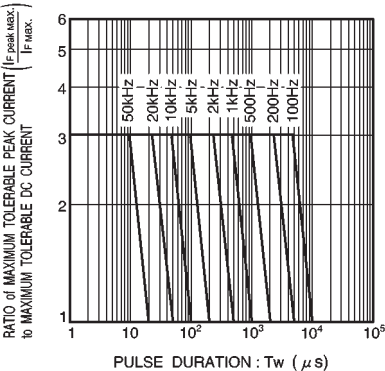


Fig. 5 Maximum tolerable peak current vs. pulse duration

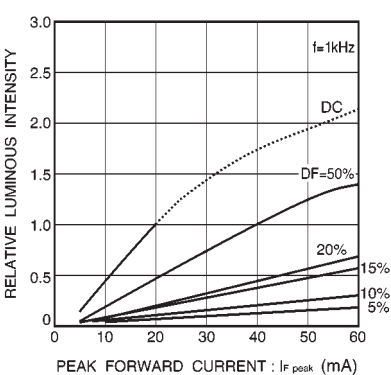


Fig.6 Luminous intensity vs. peak forward current

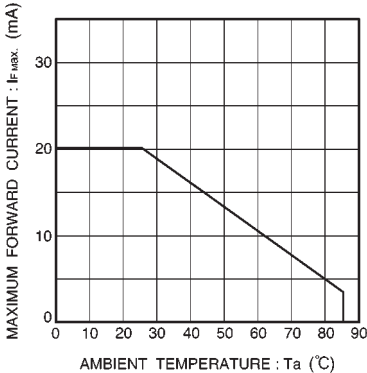


Fig. 7 Maximum forward current vs. ambient temperature