

LED lamps

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

Parameter Type		Color	Forward voltage			Reverse current		Luminous intensity			Peak wavelength		Spectral line half width	
			V _F (V)		Cond.	I _R (μA)	Cond.	I _V (mcd)		Cond.	λ _P (nm)	Cond.	Δλ (nm)	Cond.
			Typ.	Max.	I _F (mA)	Max.	V _R (V)	Min.	Typ	I _F (mA)	Typ.	I _F (mA)	Typ.	I _F (mA)
SML-010	LT	Red	1.75	2.5	20	100	4	5.6	16.0	20	660	20	25	20
	VT	Red	2.0	2.8	20	100	4	2.2	6.3	20	650	20	40	20
	DT	Orange	2.0	2.8	20	100	4	3.6	10.0	20	610	20	40	20
	YT	Yellow	2.1	2.8	20	100	4	2.2	6.3	20	585	20	40	20
	MT	Green	2.2	2.8	20	100	4	5.6	25.0	20	570	20	40	20
	FT	Green	2.2	2.8	20	100	4	3.6	10.0	20	560	20	40	20
	PT	Green	2.2	2.8	20	100	4	2.2	6.3	20	555	20	40	20

●Directional pattern

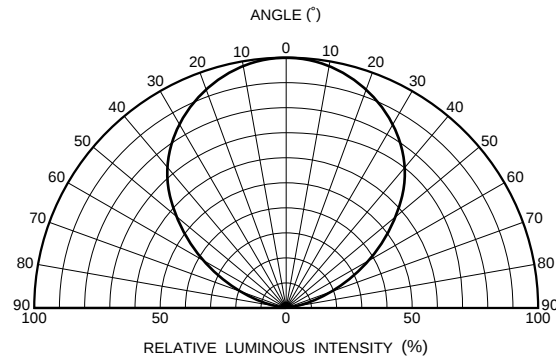


Fig.1 Directional pattern

●Electrical characteristics curves 1 (SML-010LT) (bright red)

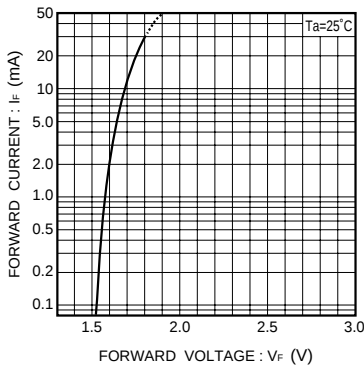


Fig.2 Forward current vs. forward voltage

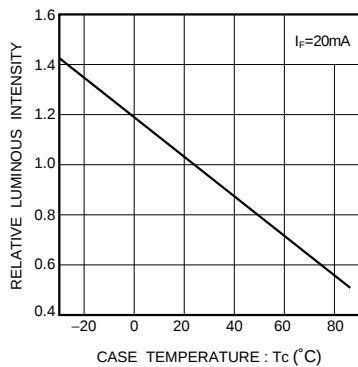


Fig.3 Luminous intensity vs. case temperature

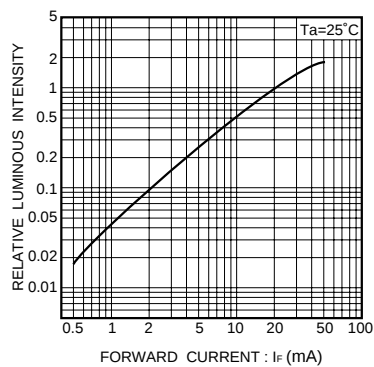


Fig.4 Luminous intensity vs. forward current

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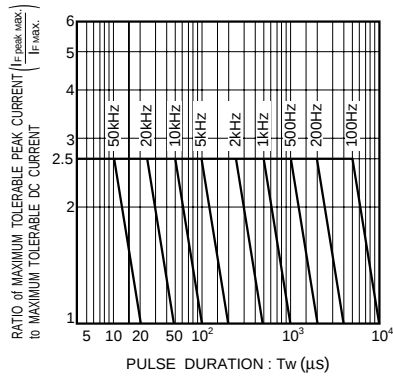


Fig.5 Maximum tolerable peak current vs. pulse duration

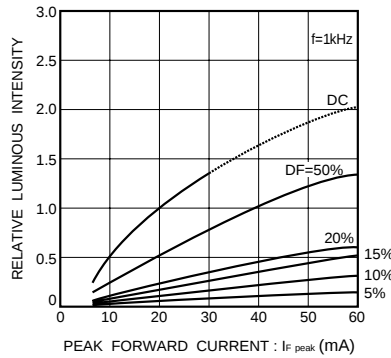


Fig. 6 Luminous intensity vs. peak forward current

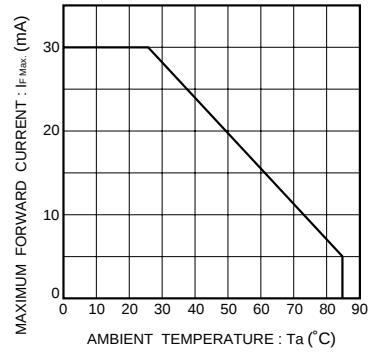


Fig. 7 Maximum forward current vs. ambient temperature (Derating)

●Electrical characteristics curves 2 (SML-010VT) (red)

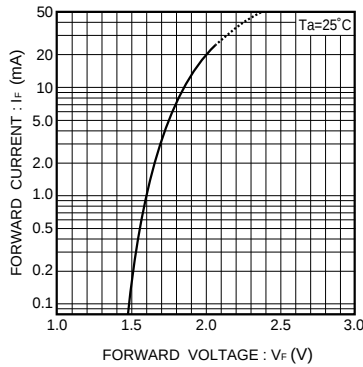


Fig.8 Forward current vs. forward voltage

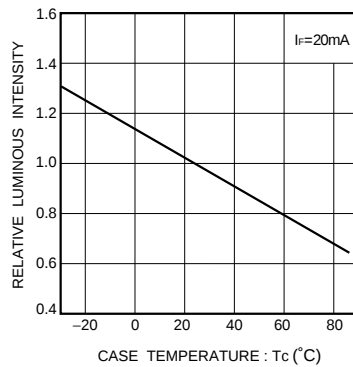


Fig.9 Luminous intensity vs. case temperature

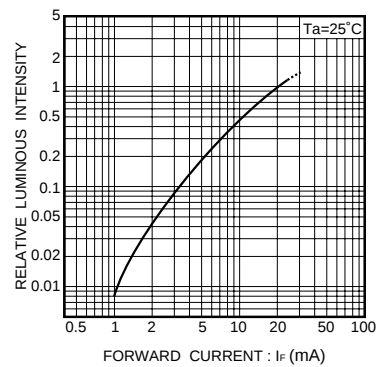


Fig.10 Luminous intensity vs. forward current

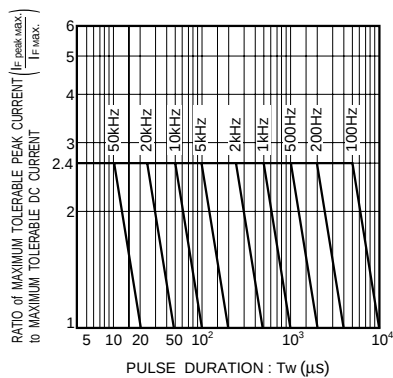


Fig.11 Maximum tolerable peak current vs. pulse duration

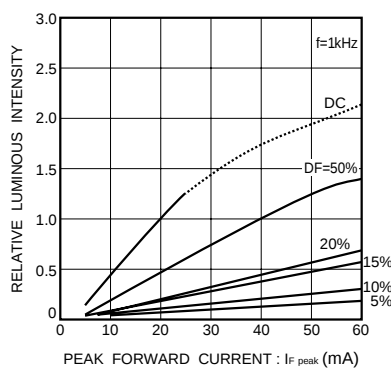


Fig.1 2 Luminous intensity vs. peak forward current

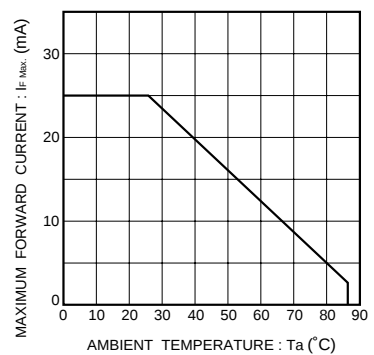


Fig.13 Maximum forward current vs. ambient temperature (Derating)

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●Electrical characteristics curves 3 (SML-010DT) (orange)

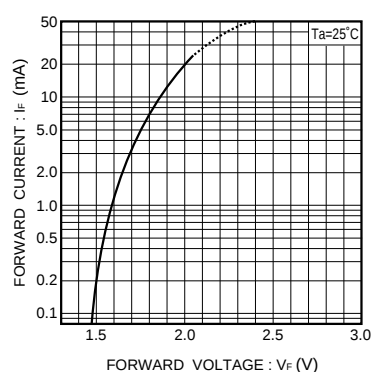


Fig.14 Forward current vs. forward voltage

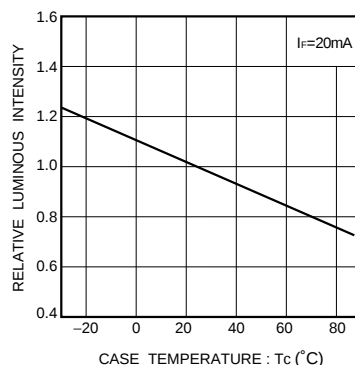


Fig.15 Luminous intensity vs. case temperature

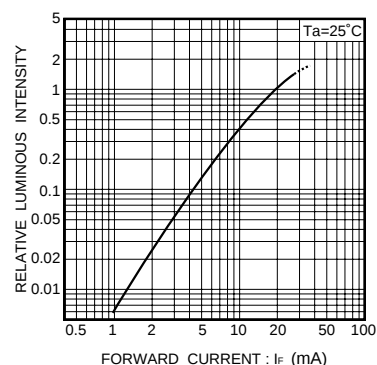


Fig.16 Luminous intensity vs. forward current

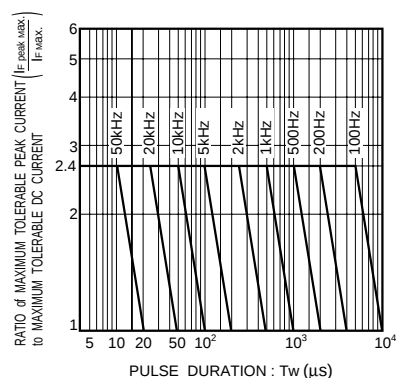


Fig.17 Maximum tolerable peak current vs. pulse duration

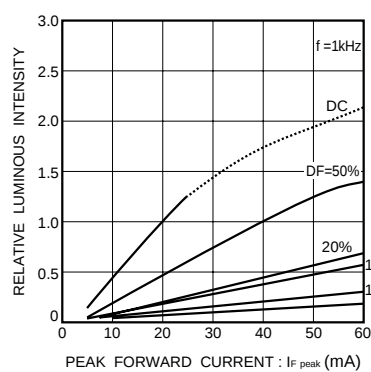


Fig.18 Luminous intensity vs. peak forward current

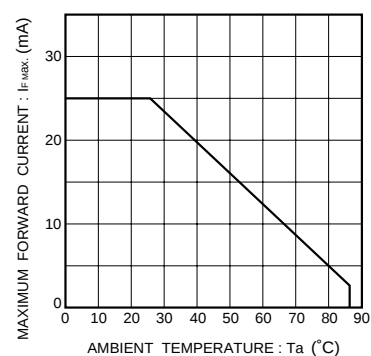


Fig.19 Maximum forward current vs. ambient temperature (Derating)

●Electrical characteristics curves 4 (SML-010YT) (yellow)

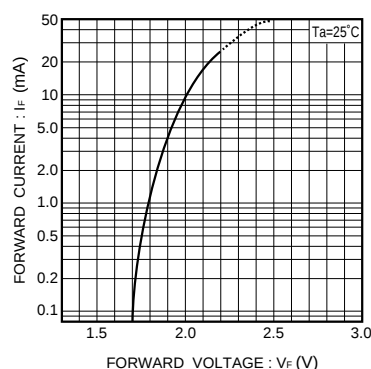


Fig.20 Forward current vs. forward voltage

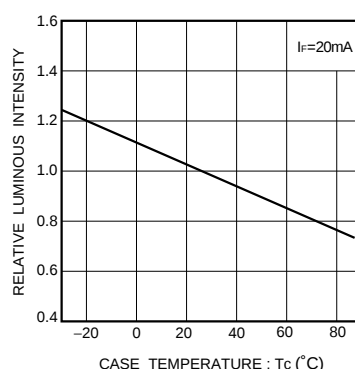


Fig.21 Luminous intensity vs. case temperature

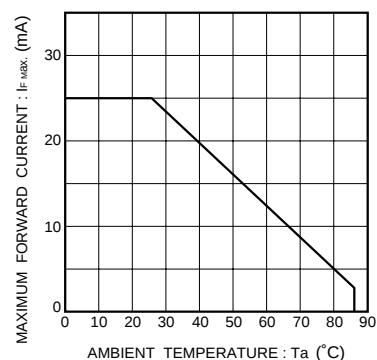


Fig.25 Maximum forward current vs. ambient temperature (Derating)

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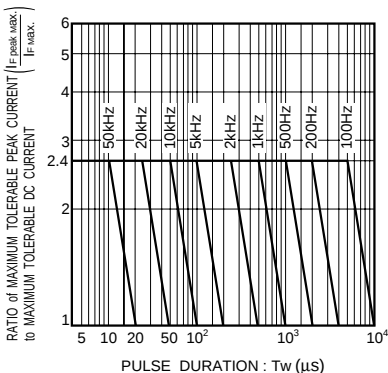


Fig.23 Maximum tolerable peak current vs. pulse duration

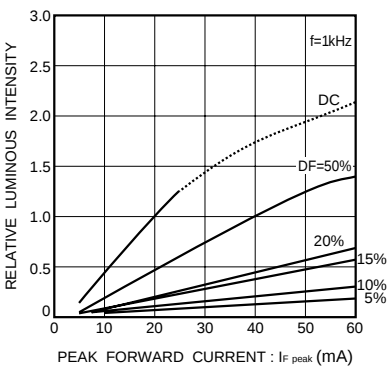


Fig.24 Luminous intensity vs. peak forward current

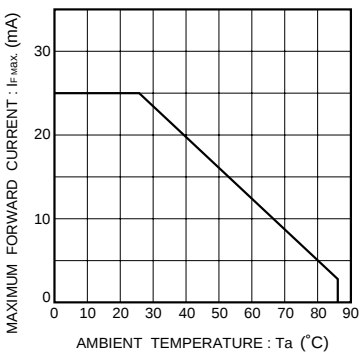


Fig.25 Maximum forward current vs. ambient temperature (Derating)

●Electrical characteristics curves 5 (SML-010MT, SML-010FT, SML-010PT) (green)

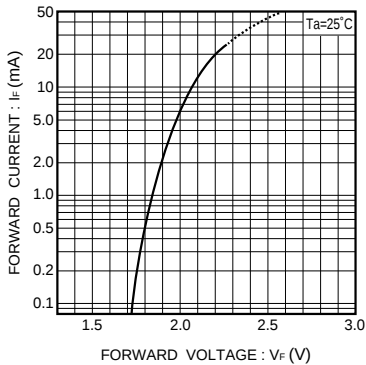


Fig.26 Forward current vs. forward voltage

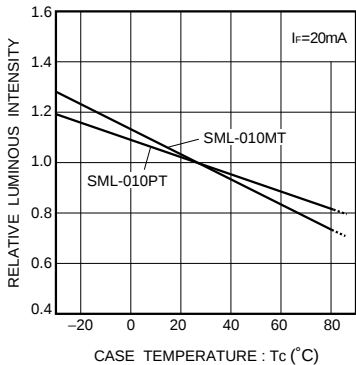


Fig.27 Luminous intensity vs. case temperature

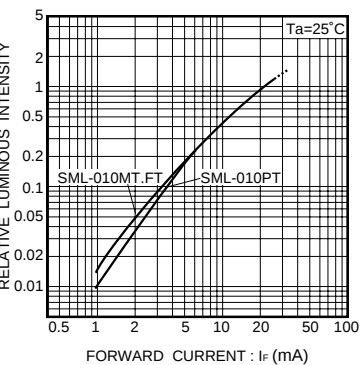


Fig.28 Luminous intensity vs. forward current

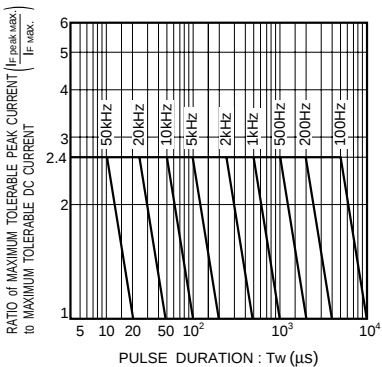


Fig.29 Maximum tolerable peak current vs. pulse duration

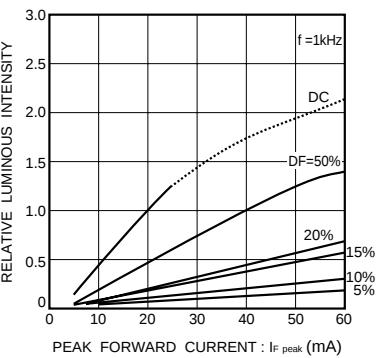


Fig.30 Luminous intensity vs. peak forward current

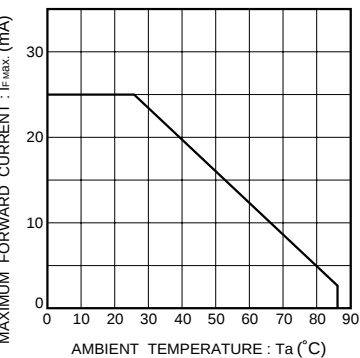


Fig.31 Maximum forward current vs. ambient temperature (Derating)

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