■ BRACKET TYPE LED

SDB-505B Series

φ7mm

■ Absolute Maximum Ratings

Ta = 25°C

		Red	Yellow	Pure Green	Unit
		RD(BR)	YD(AY)	GD(BG)	
Power Dissipation	Pb	100	125	125	mW
Forward Current	I_F	50	50	50	mA
Peak Forward Current	I_{FM}	300	100	100	mA
Reverse Voltage	V_R	4	4	4	V
Operating Temp.	Topr	-30~+85	-30~+85	-30~+85	°C
Storage Temp.	Tstg	-30~+100	-30~+100	-30~+100	°C
Derating *	ΔI_F	0.67	0.67	0.67	mA/°C

* The current derating for operation applies when temperature is above 25°C.
• I_{FM} Condition : tw ≦ 1msec, Duty ≦ 1/20

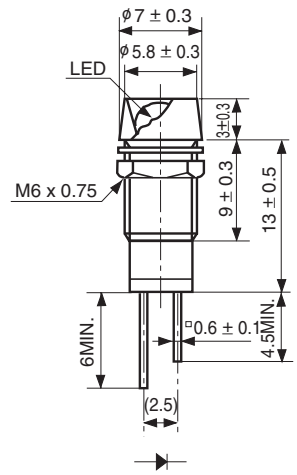
■ Electro-Optical Characteristics

Ta = 25°C

Part No.	Emitted Color	Resin Color	Bracket Material	Chip Element	Luminous Intensity I_V			Wavelength λp / $\Delta\lambda$			Forward Voltage V_F			Reverse Current I_R		Capacitance
					MIN	TYP	I_F	TYP	TYP	I_F	TYP	MAX	I_F	MAX	V_R	Co
SDC-505A-RD	Red	Red Diffused	Resin	BR	10	20	20	660	30	20	1.7	2.0	20	100	4	50
SDC-505A-YD	Yellow	Yellow Diffused		AY	5	10	20	580	30	20	2.2	2.5	20	100	4	40
SDC-505A-GD	Pure Green	Green Diffused		BG	4	8	20	555	30	20	2.1	2.5	20	100	4	50
Units					mcd	mcd	mA	nm	nm	mA	V	V	mA	μA	V	pF

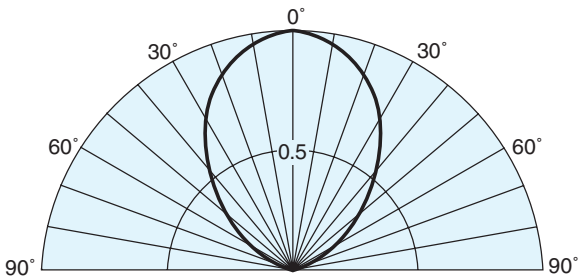
■ Package Dimensions

Unit : mm



Reference side for installation φ6.1 ± 0.1

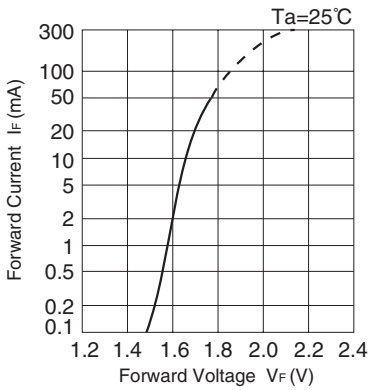
■ Spatial Distribution



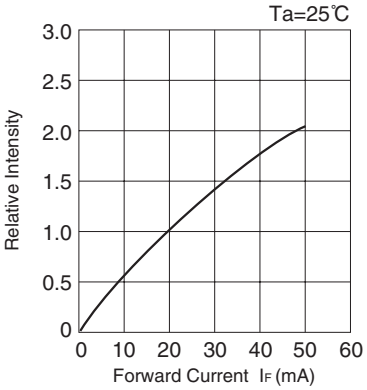
■ BRACKET TYPE LED

SDB-505B-RD

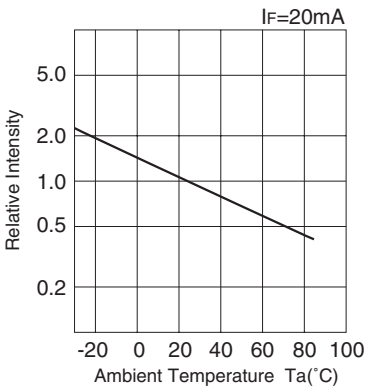
■ Forward Voltage vs. Forward Current



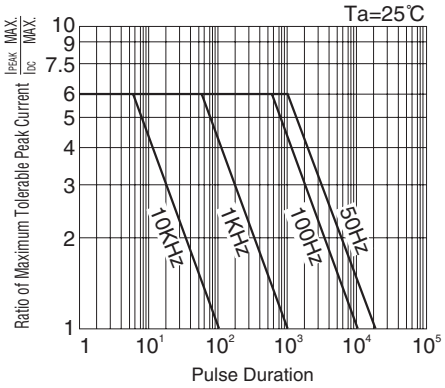
■ Forward Current vs. Relative Intensity



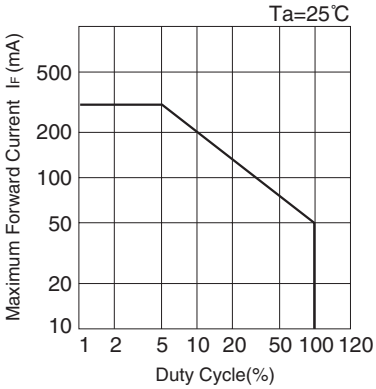
■ Ambient Temperature vs. Intensity



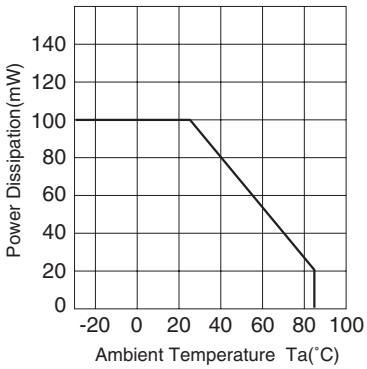
■ Pulse Duration vs.Maximum Tolerable Peak Current



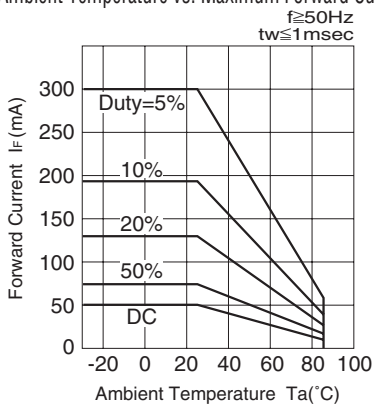
■ Duty Cycle vs. Maximum Forward Current



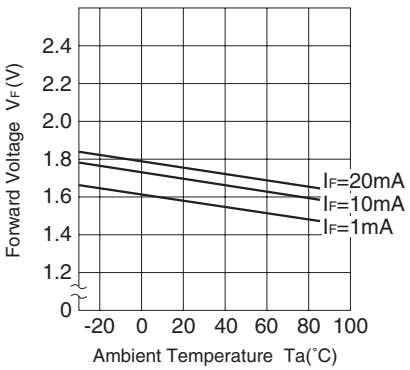
■ Power Dissipation vs. Ambient Temperature



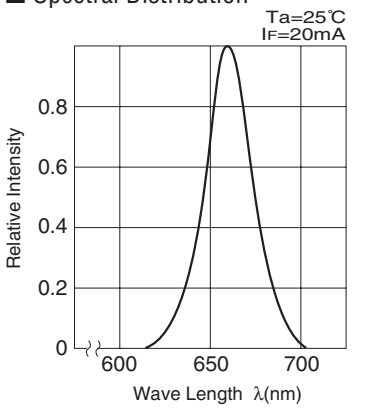
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



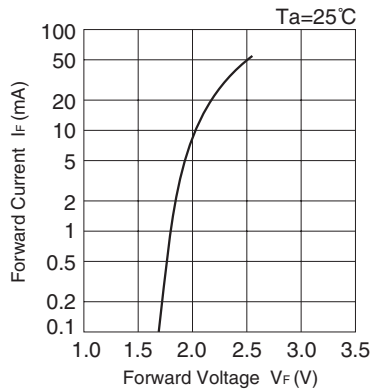
■ Spectral Distribution



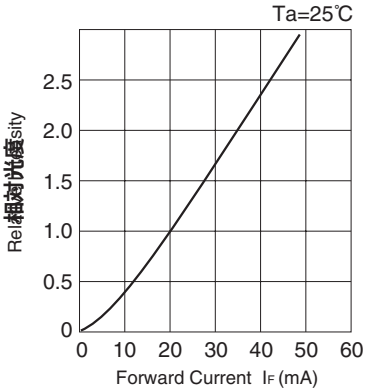
■ BRACKET TYPE LED

SDB-505B-YD

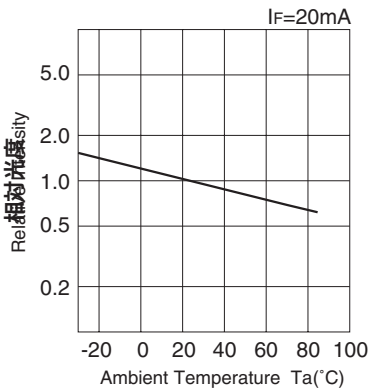
■ Forward Voltage vs. Forward Current



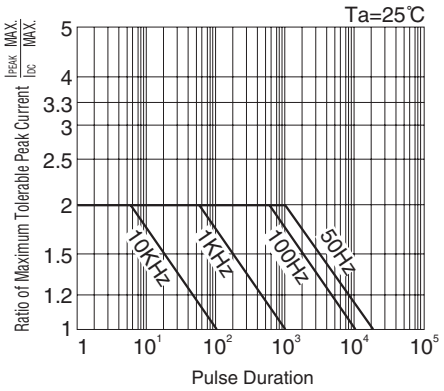
■ Forward Current vs. Relative Intensity



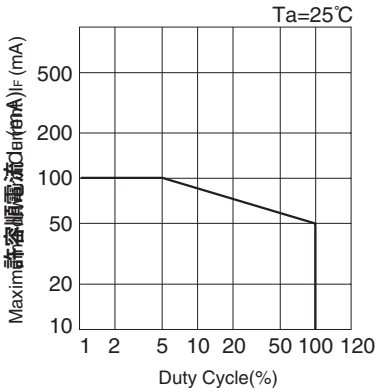
■ Ambient Temperature vs. Intensity



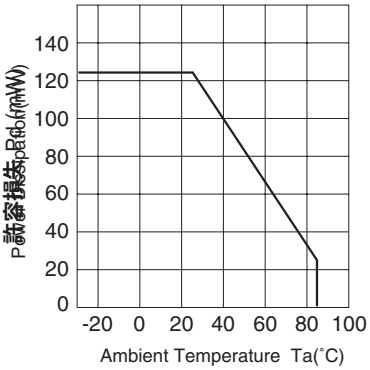
■ Pulse Duration vs.Maximum Tolerable Peak Current



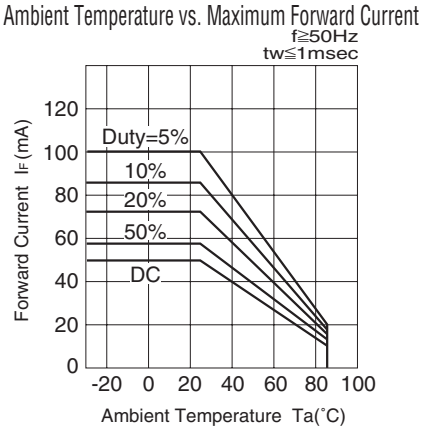
■ Duty Cycle vs. Maximum Forward Current



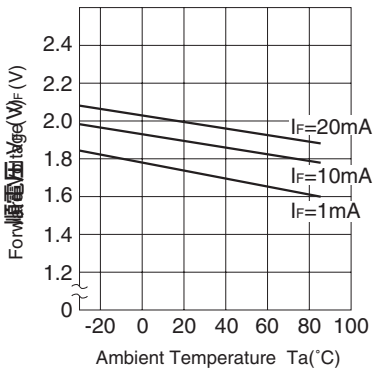
■ Power Dissipation vs. Ambient Temperature



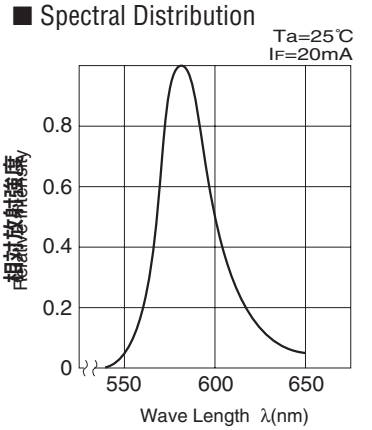
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



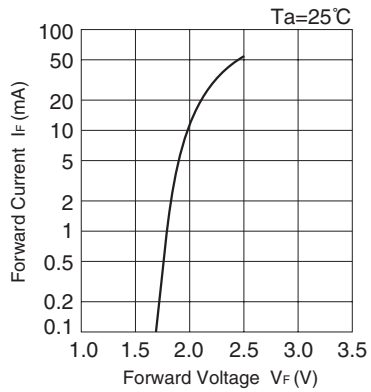
■ Spectral Distribution



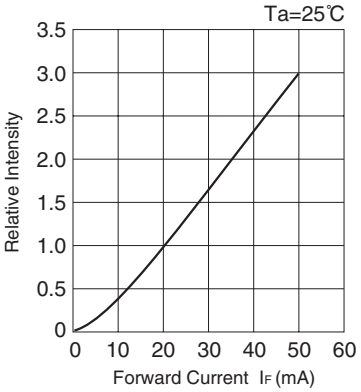
■ BRACKET TYPE LED

SDB-505B-GD

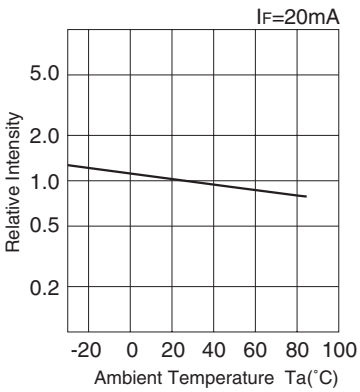
■ Forward Voltage vs. Forward Current



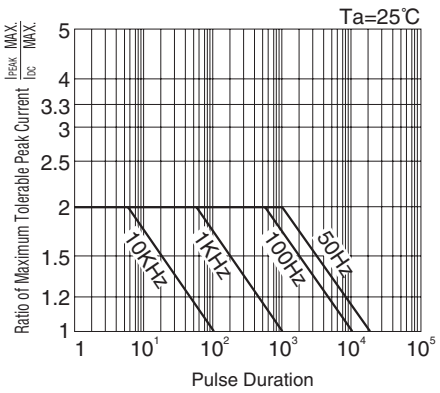
■ Forward Current vs. Relative Intensity



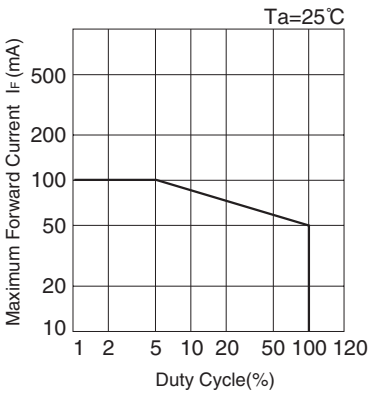
■ Ambient Temperature vs. Intensity



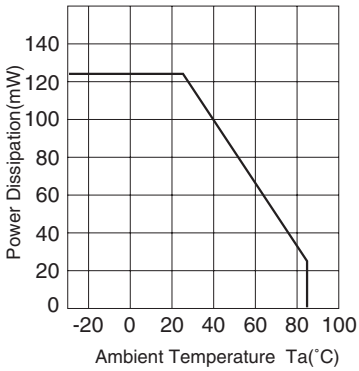
■ Pulse Duration vs.Maximum Tolerable Peak Current



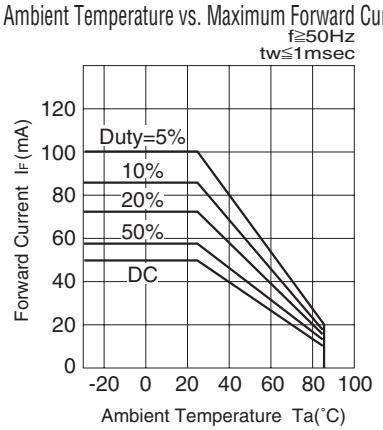
■ Duty Cycle vs. Maximum Forward Current



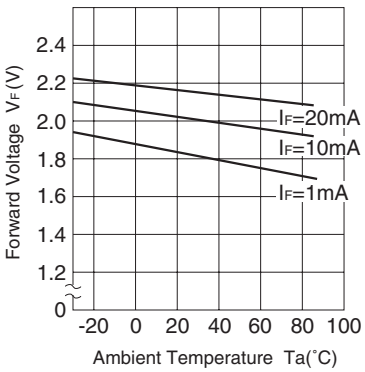
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution