



# ■ BRACKET TYPE LED

## SDB-505C Series



Ø 7mm

### ■ 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	If	50	50	50	mA
Peak Forward Current	Ifm	300	100	100	mA
Reverse Voltage	Vr	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 *	ΔIf	0.67	0.67	0.67	mA/°C

\* The current derating for operation applies when temperature is above 25°C.

• Ifm Condition : tw ≤ 1msec, Duty ≤ 1/20

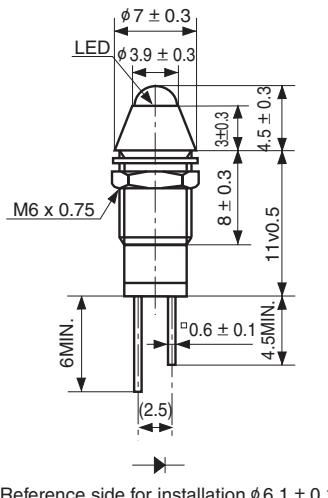
### ■ Electro-Optical Characteristics

Ta = 25°C

Part No.	Emitted Color	Resin Color	Bracket Material	Chip Element	Luminous Intensity Iv			Wavelength			Forward Voltage Vf			Reverse Current Ir		Capacitance Co
					MIN	TYP	If	λp TYP	Δλ TYP	If	TYP	MAX	If	MAX	Vr	
					BR	AY	BG									
SDC-505C-RD	Red	Red Diffused	Metal	BR	10	20	20	660	30	20	1.7	2.0	20	100	4	50
SDC-505C-YD	Yellow	Yellow Diffused		AY	5	10	20	580	30	20	2.2	2.5	20	100	4	40
SDC-505C-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

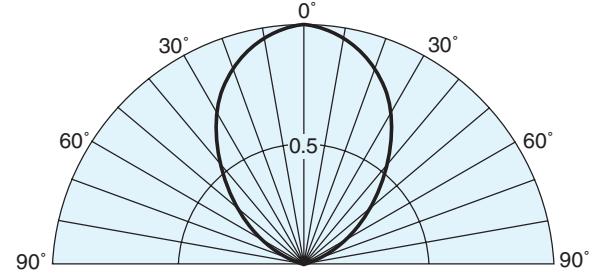
### ■ Package Dimensions

Unit : mm



Reference side for installation Ø 6.1 ± 0.1

### ■ Spatial Distribution

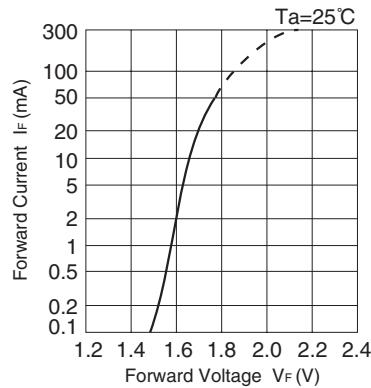




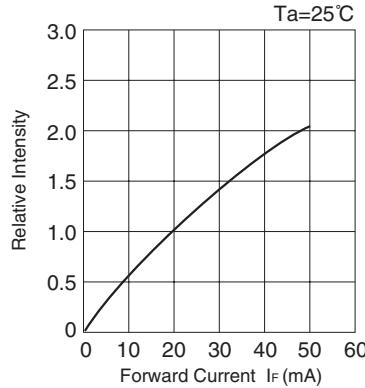
# ■ BRACKET TYPE LED

## SDB-505C-RD

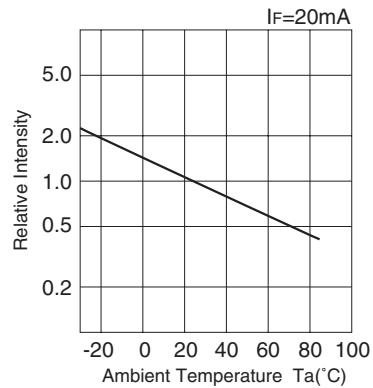
■ Forward Voltage vs. Forward Current



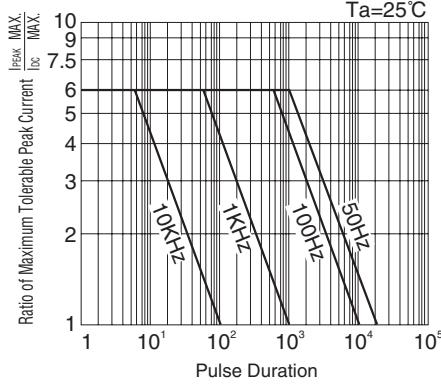
■ Forward Current vs. Relative Intensity



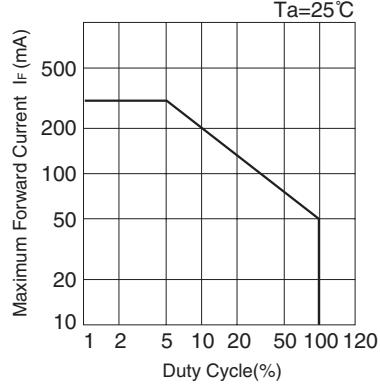
■ Ambient Temperature vs. Intensity



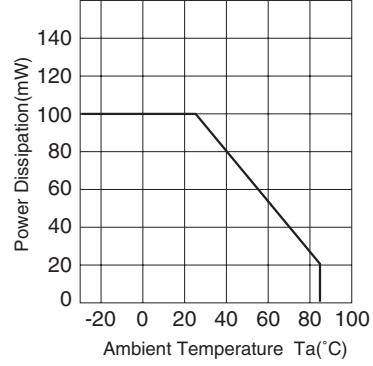
■ Pulse Duration vs. Maximum Tolerable Peak Current



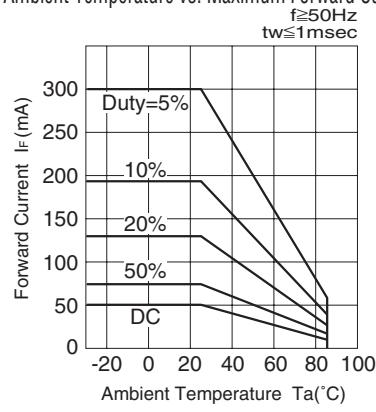
■ Duty Cycle vs. Maximum Forward Current



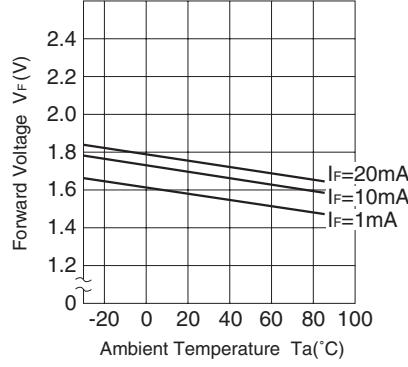
■ Power Dissipation vs. Ambient Temperature



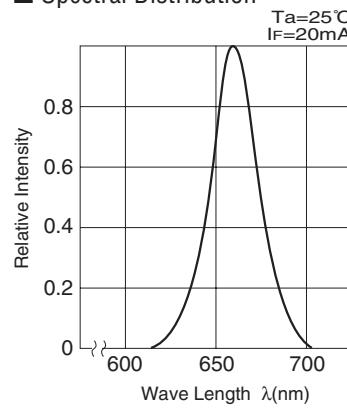
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

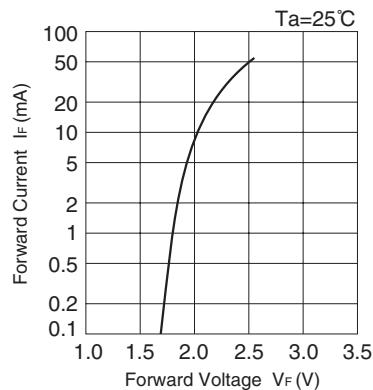




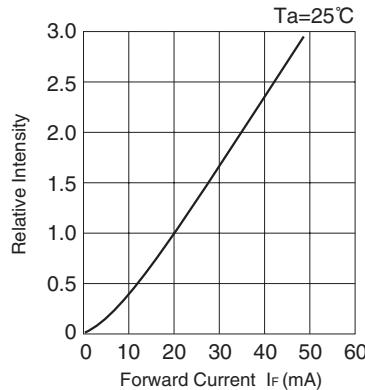
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## SDB-505C-YD

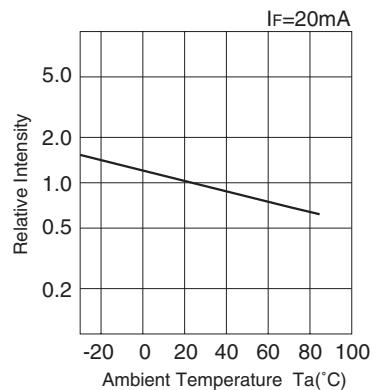
■ Forward Voltage vs. Forward Current



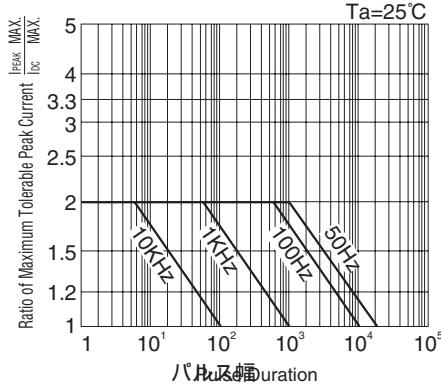
■ Forward Current vs. Relative Intensity



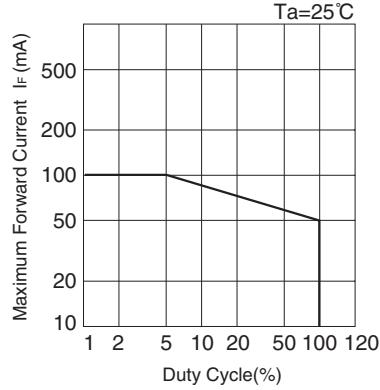
■ Ambient Temperature vs. Intensity



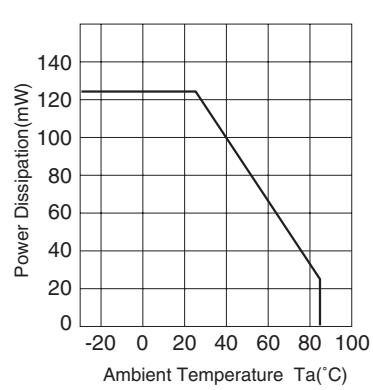
■ Pulse Duration vs. Maximum Tolerable Peak Current



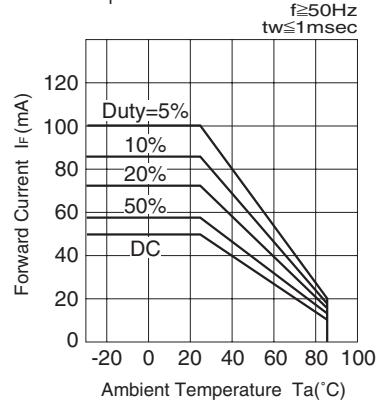
■ Duty Cycle vs. Maximum Forward Current



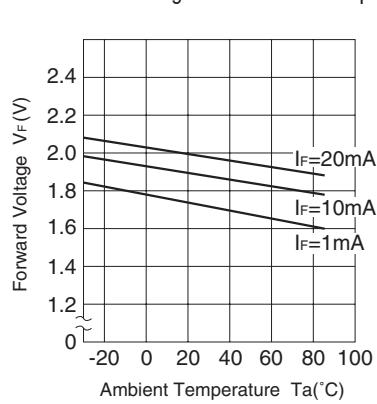
■ Power Dissipation vs. Ambient Temperature



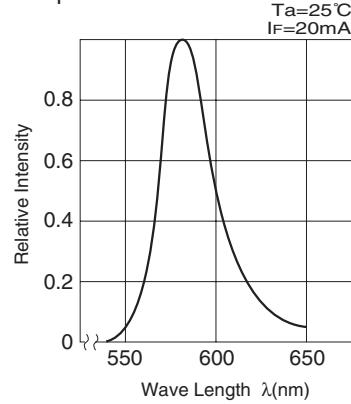
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

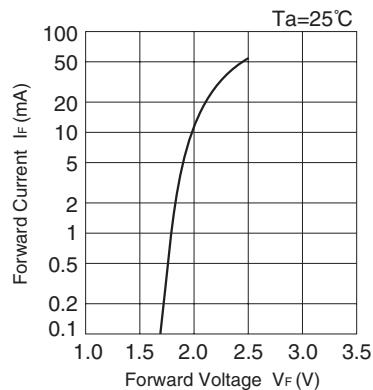




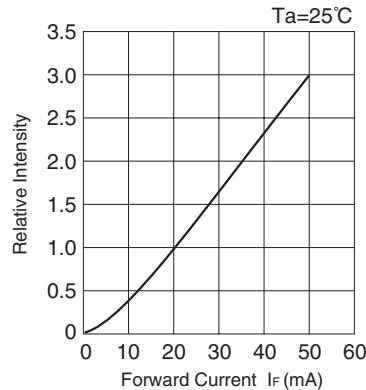
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## SDB-505C-GD

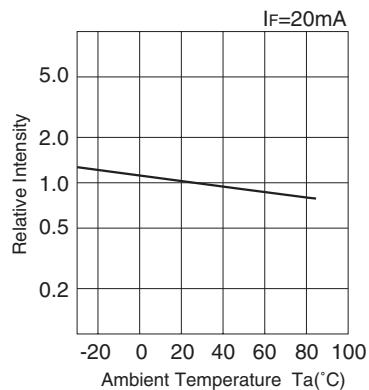
■ Forward Voltage vs. Forward Current



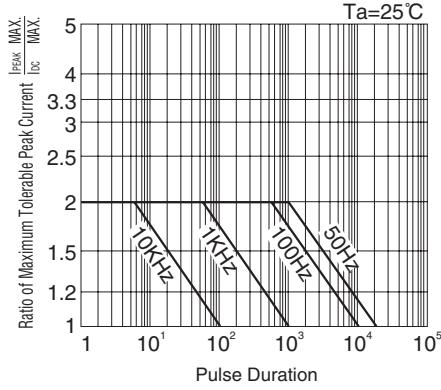
■ Forward Current vs. Relative Intensity



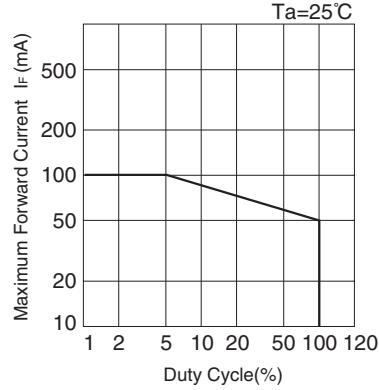
■ Ambient Temperature vs. Intensity



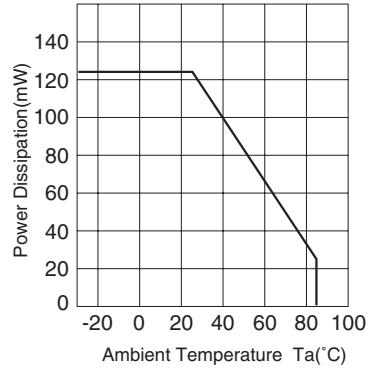
■ Pulse Duration vs. Maximum Tolerable Peak Current



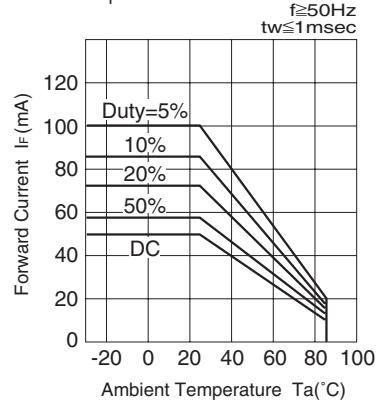
■ Duty Cycle vs. Maximum Forward Current



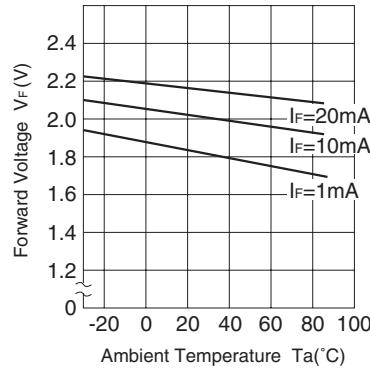
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

