



■ BRACKET TYPE LED

SDB-205A Series



Ø 9.3mm

■ Absolute Maximum Ratings

T_a = 25°C

		Red	Yellow	Pure Green	Unit
		RD(BR)	YD(AY)	GD(BG)	
Power Dissipation	P _b	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.	T _{opr}	-30~+85	-30~+85	-30~+85	°C
Storage Temp.	T _{stg}	-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 : t_w ≤ 1msec, Duty ≤ 1/20

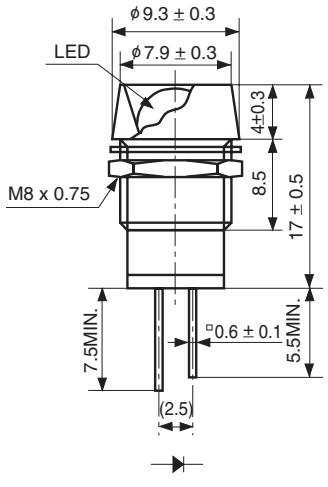
■ Electro-Optical Characteristics

T_a = 25°C

Part No.	Emitted Color	Resin Color	Bracket Material	Chip Element	Luminous Intensity Iv			Wavelength			Forward Voltage V _F			Reverse Current I _R		Capacitance C _o
					MIN	TYP	I _F	λ _p TYP	Δλ TYP	I _F	TYP	MAX	I _F	MAX	V _R	
					BR	AY	BG									
SDC-205A-RD	Red	Red Diffused	Resin	BR	6	12	20	660	30	20	1.7	2.0	20	100	4	50
SDC-205A-YD	Yellow	Yellow Diffused		AY	8	20	20	580	30	20	2.2	2.5	20	100	4	40
SDC-205A-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

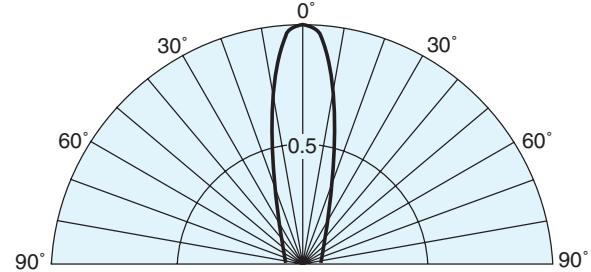
■ Package Dimensions

Unit : mm



Reference side for installation Ø 7.9 ± 0.1

■ Spatial Distribution

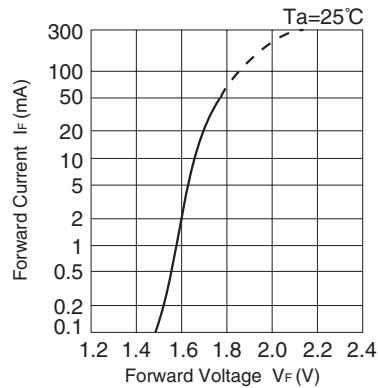




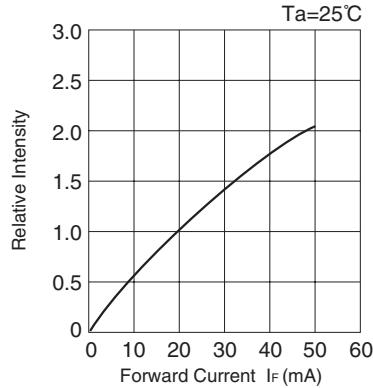
■ BRACKET TYPE LED

SDB-205A-RD

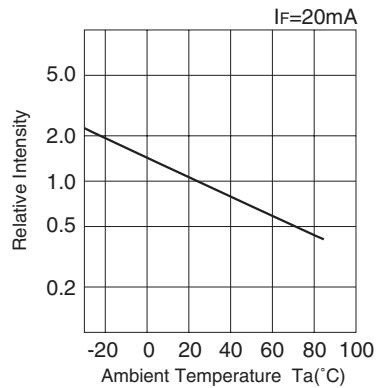
■ Forward Voltage vs. Forward Current



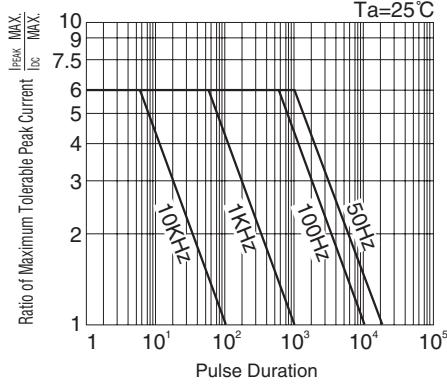
■ Forward Current vs. Relative Intensity



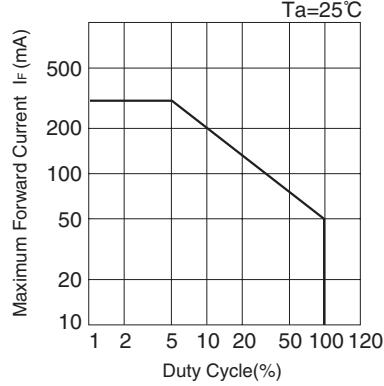
■ Ambient Temperature vs. Intensity



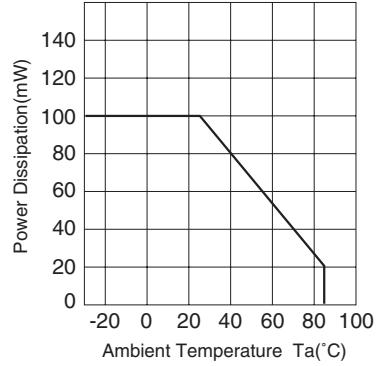
■ Pulse Duration vs. Maximum Tolerable Peak Current



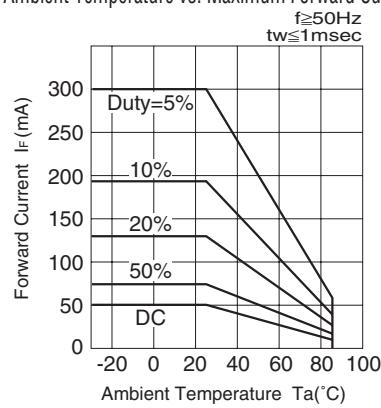
■ DutyCycle vs. Maximum Forward Current



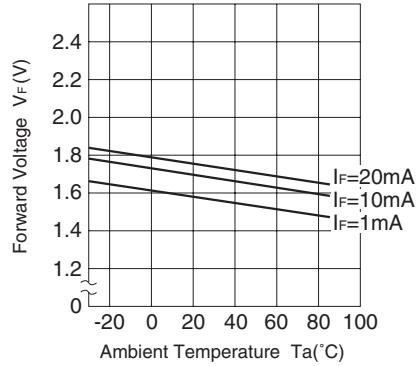
■ Power Dissipation vs. Ambient Temperature



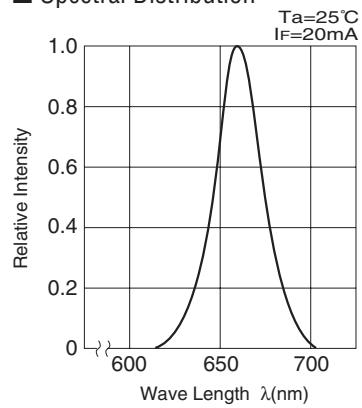
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

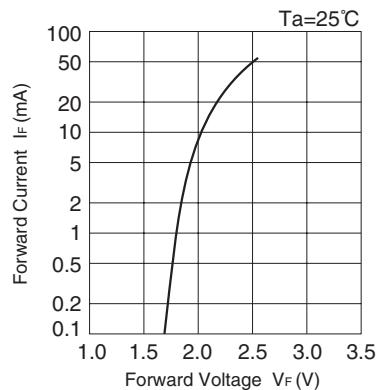




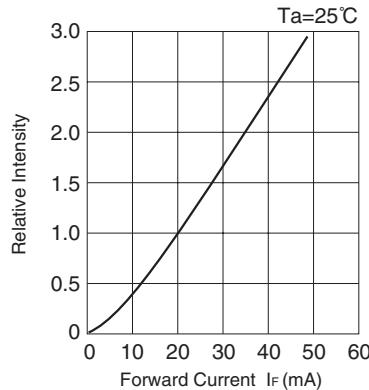
■ BRACKET TYPE LED

SDB-205A-YD

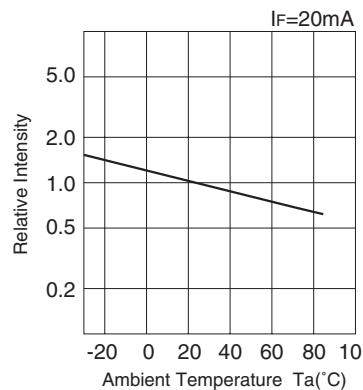
■ Forward Voltage vs. Forward Current



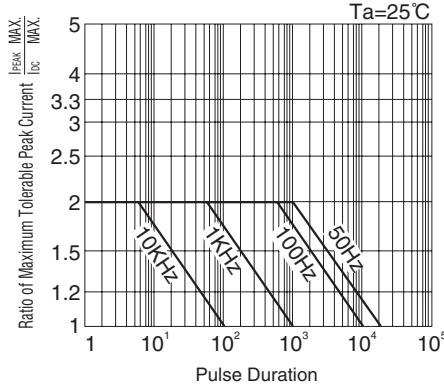
■ Forward Current vs. Relative Intensity



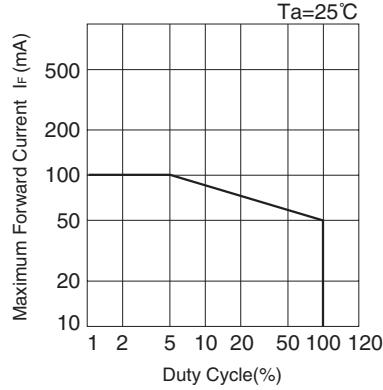
■ Ambient Temperature vs. Intensity



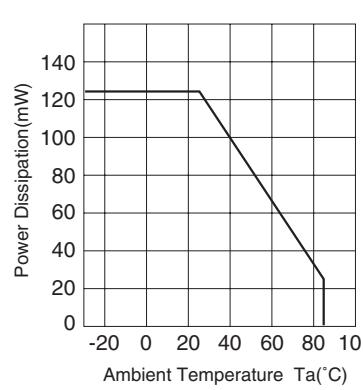
■ Pulse Duration vs. Maximum Tolerable Peak Current



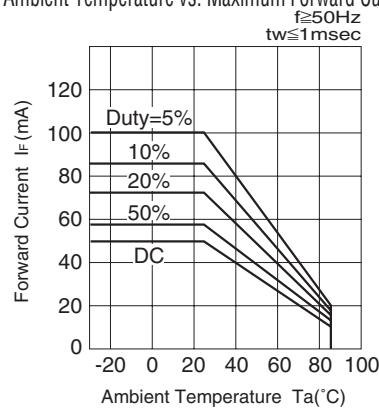
■ Duty Cycle vs. Maximum Forward Current



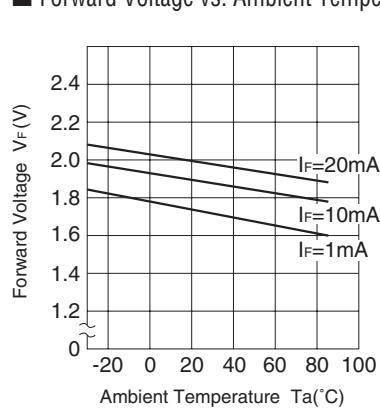
■ Power Dissipation vs. Ambient Temperature



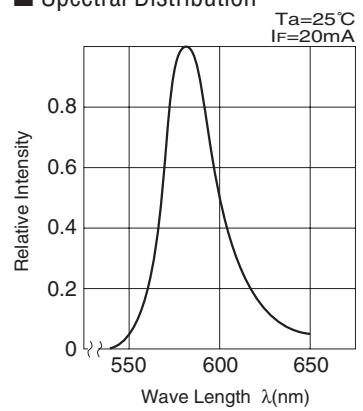
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

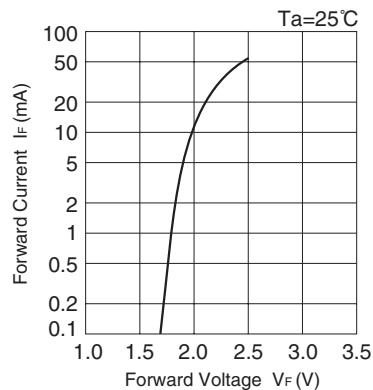




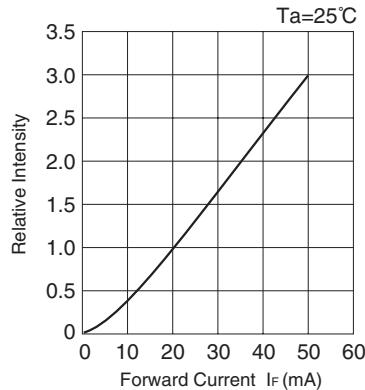
■ BRACKET TYPE LED

SDB-205A-GD

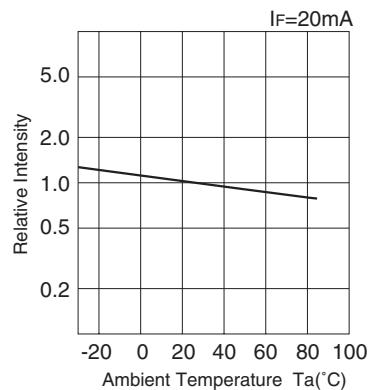
■ Forward Voltage vs. Forward Current



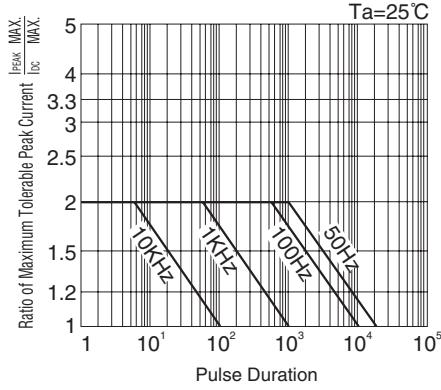
■ Forward Current vs. Relative Intensity



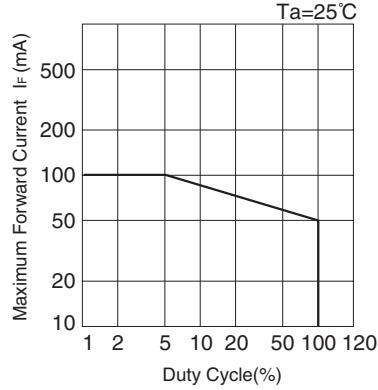
■ Ambient Temperature vs. Intensity



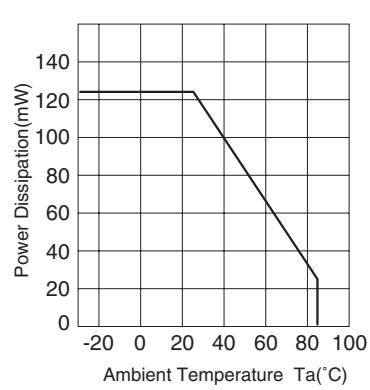
■ Pulse Duration vs. Maximum Tolerable Peak Current



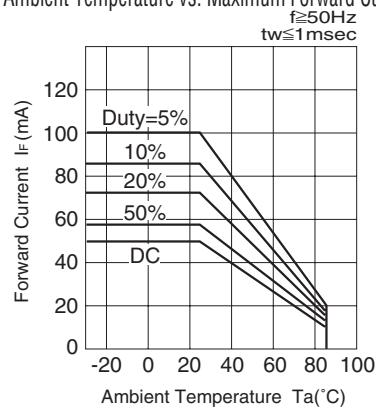
■ Duty Cycle vs. Maximum Forward Current



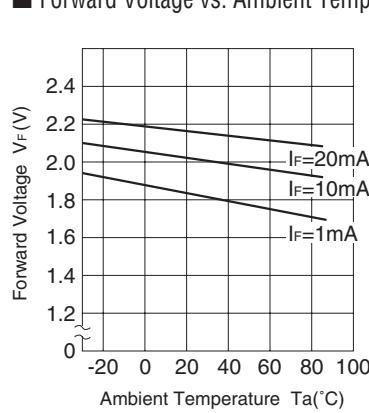
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

