



Absolute Maximum Ratings

Ta = 25°C

		Pure Green	Green	Yellow		Orange	Red			Unit
		BG	PG	PY	AY	AA	VR	BR	PR	
Power Dissipation	Pd	125	125	125	125	125	75	100	75	mW
Forward Current	IF	50	50	50	50	50	30	50	30	mA
Peak Forward Current	IFM	100	100	100	100	100	100	300	100	mA
Reverse Voltage	VR	4	4	4	4	4	4	4	4	V
Operating Temp.	Topr	-30~+85	-30~+85	-30~+85	-30~+85	-30~+85	-30~+85	-30~+85	-30~+85	°C
Storage Temp.	Tstg	-30~+100	-30~+100	-30~+100	-30~+100	-30~+100	-30~+100	-30~+100	-30~+100	°C
Derating *	ΔIF	0.67	0.67	0.67	0.67	0.67	0.40	0.67	0.40	mA/°C

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

• IFM Condition : tw ≤ 1ms, Duty ≤ 1/20

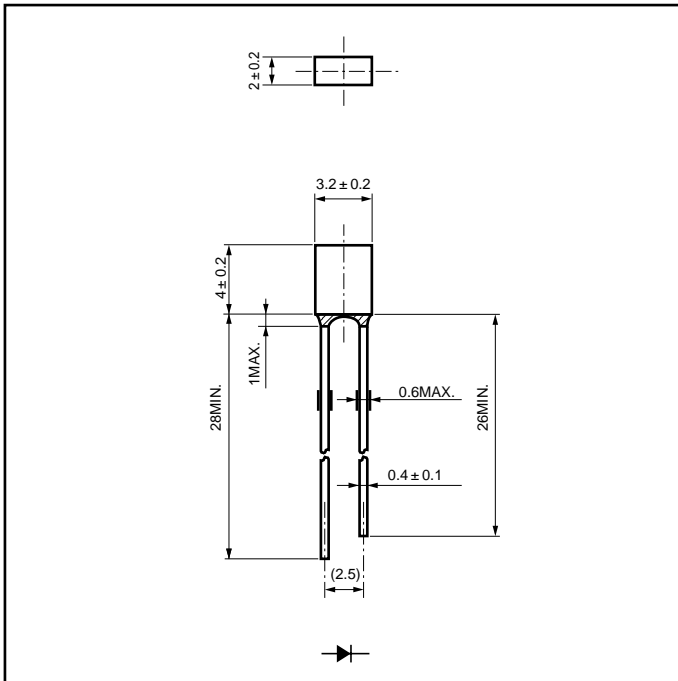
Electro-Optical Characteristics

Ta = 25°C

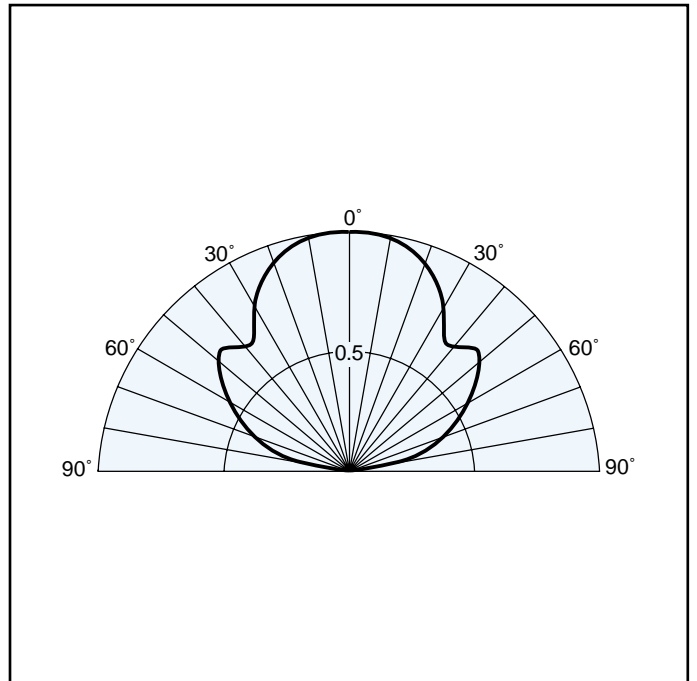
Part No.	Chip		Lens	Luminous Intensity			Wavelength				Forward Voltage			Reverse Current	
	Material	Emitted Color		Iv	λ d	λ p	Δ λ	VF			IR	VR			
								MIN	TYP	IF			TYP	TYP	IF
BG3822K	GaP	Pure Green	Clear	1	2	20	558	555	30	20	2.1	2.5	20	100	4
PG3822K	GaP	Green		2	4	20	567	560	30	20	2.1	2.5	20	100	4
PY3822K	GaP	Yellow		2	4	20	572	570	30	20	2.1	2.5	20	100	4
AY3822K	GaAsP			2	4	20	590	580	30	20	2.2	2.5	20	100	4
AA3822K	GaAsP	Orange		2	4	20	606	605	30	20	2.2	2.5	20	100	4
VR3822K	GaAsP	Red		2	4	20	624	630	30	20	2.0	2.5	20	100	4
BR3822K	GaAlAs			2	4	20	647	660	30	20	1.7	2.0	20	100	4
PR3822K	GaP			0.4	0.8	10	630	700	100	10	2.1	2.5	10	100	4
Units				mcd	mcd	mA	nm	nm	nm	mA	V	V	mA	μA	V

Package Dimensions

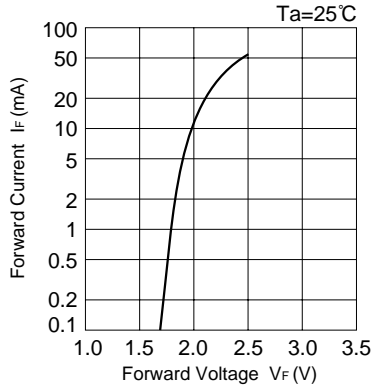
Unit : mm



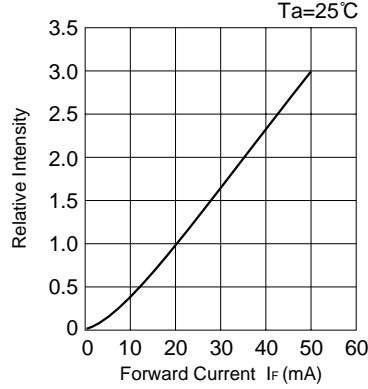
Spatial Distribution



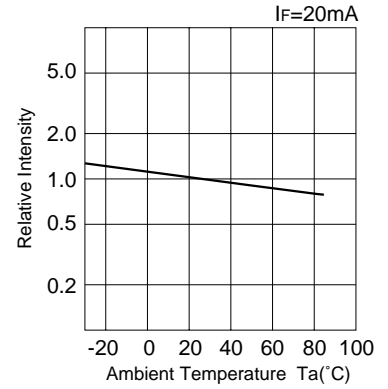
■ Forward Voltage vs. Forward Current



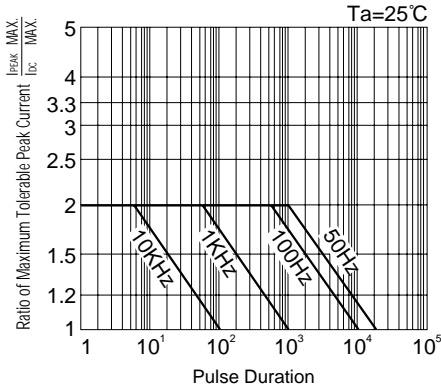
■ Forward Current vs. Relative Intensity



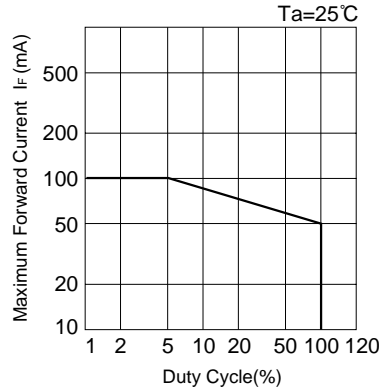
■ Ambient Temperature vs. Relative Intensity



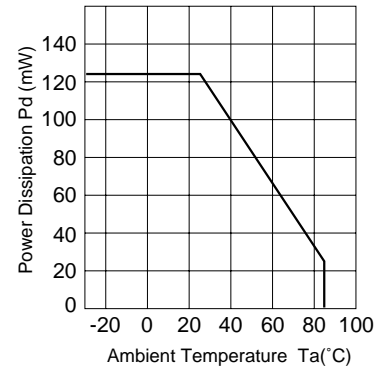
■ Pulse Duration vs. Maximum Tolerable Peak Current



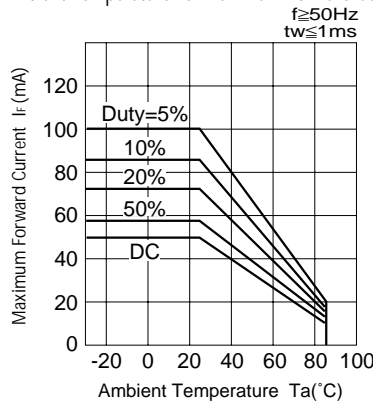
■ Duty Cycle vs. Maximum Forward Current



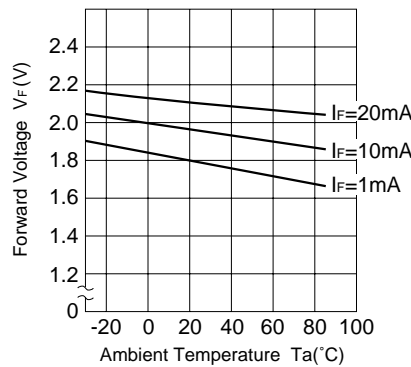
■ Power Dissipation vs. Ambient Temperature



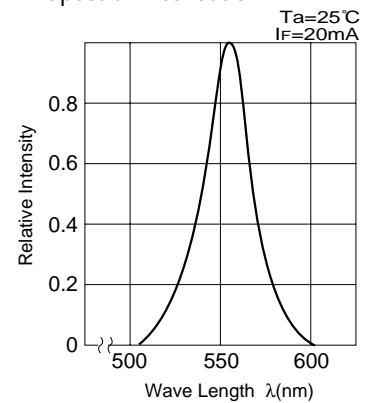
■ Ambient Temperature vs. Maximum Forward Current



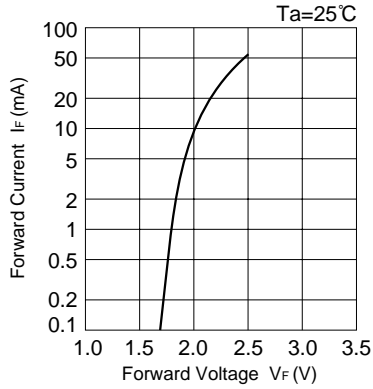
■ Forward Voltage vs. Ambient Temperature



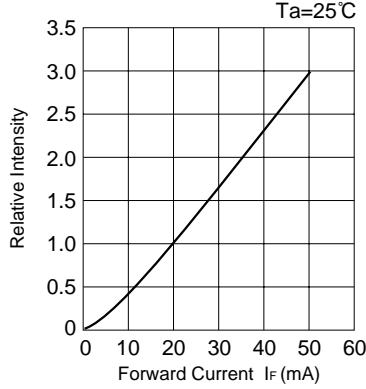
■ Spectral Distribution



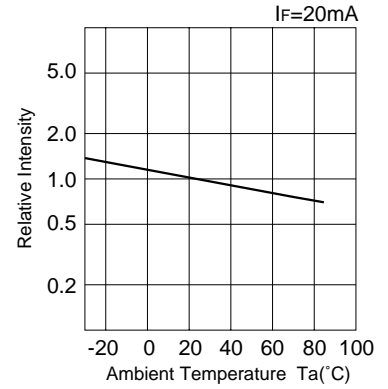
■ Forward Voltage vs. Forward Current



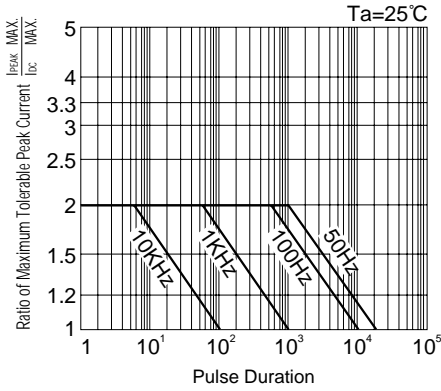
■ Forward Current vs. Relative Intensity



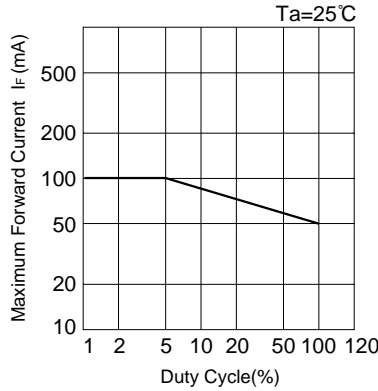
■ Ambient Temperature vs. Relative Intensity



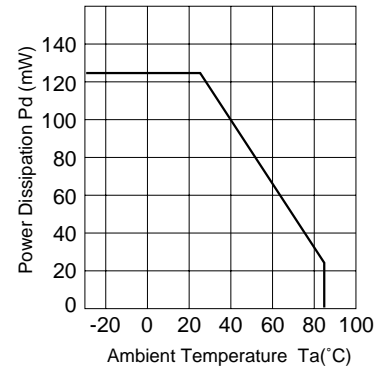
■ Pulse Duration vs. Maximum Tolerable Peak Current



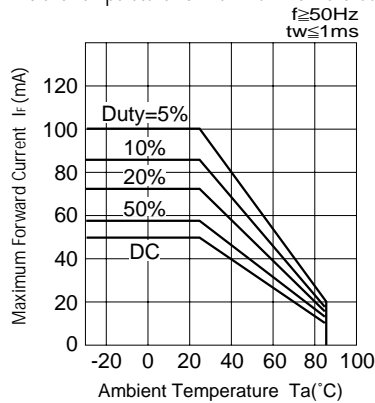
■ Duty Cycle vs. Maximum Forward Current



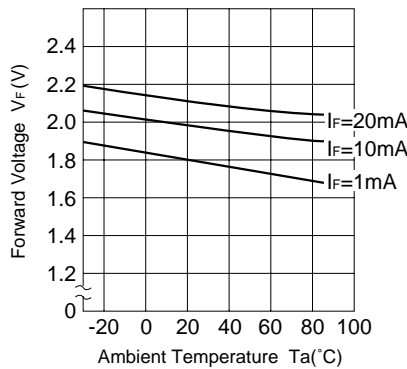
■ Power Dissipation vs. Ambient Temperature



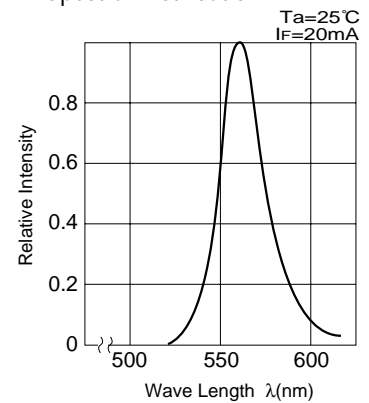
■ Ambient Temperature vs. Maximum Forward Current



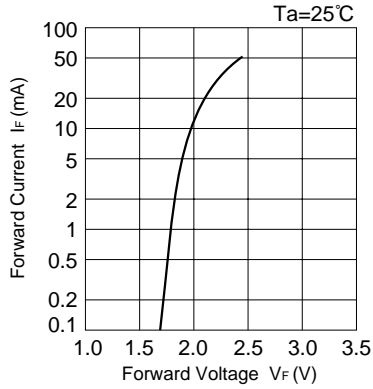
■ Forward Voltage vs. Ambient Temperature



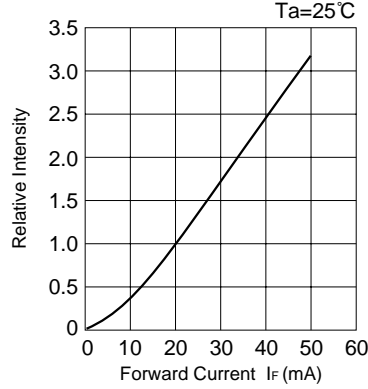
■ Spectral Distribution



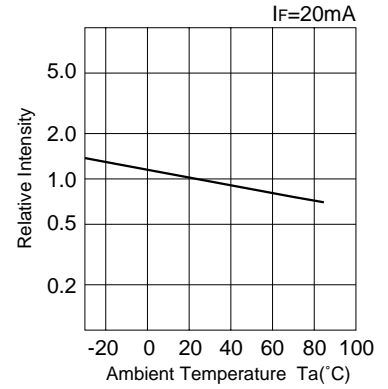
■ Forward Voltage vs. Forward Current



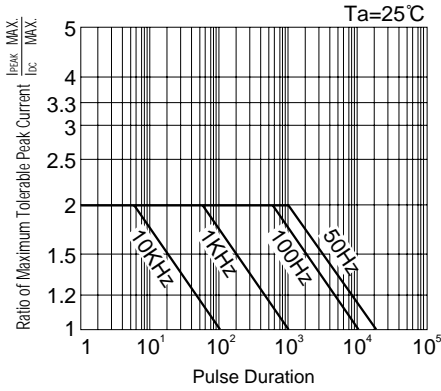
■ Forward Current vs. Relative Intensity



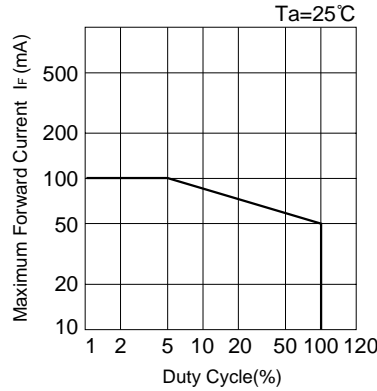
■ Ambient Temperature vs. Relative Intensity



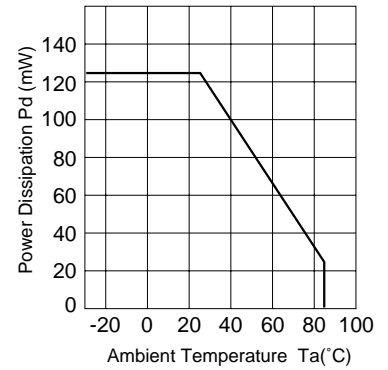
■ Pulse Duration vs. Maximum Tolerable Peak Current



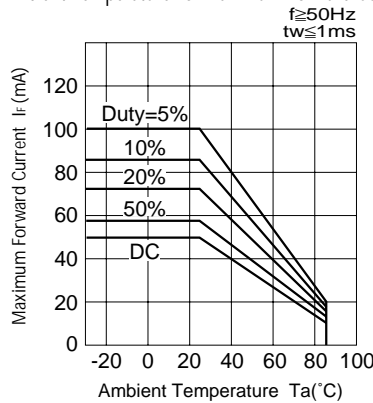
■ Duty Cycle vs. Maximum Forward Current



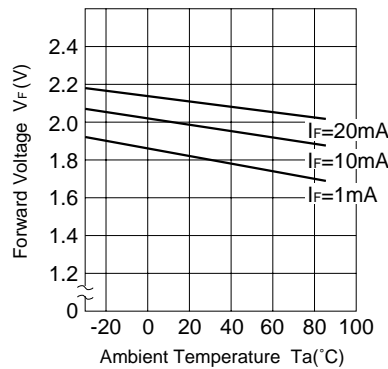
■ Power Dissipation vs. Ambient Temperature



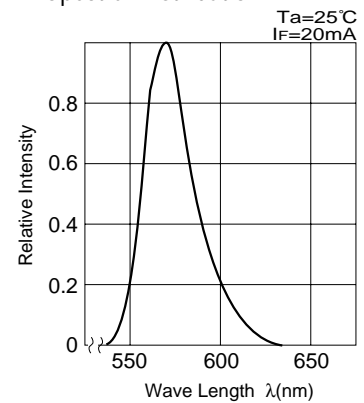
■ Ambient Temperature vs. Maximum Forward Current



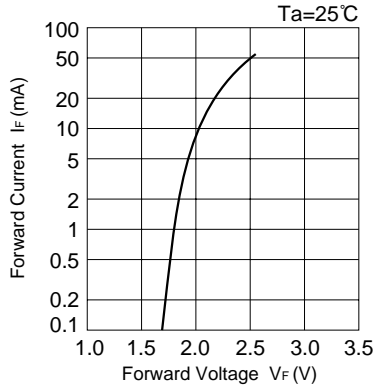
■ Forward Voltage vs. Ambient Temperature



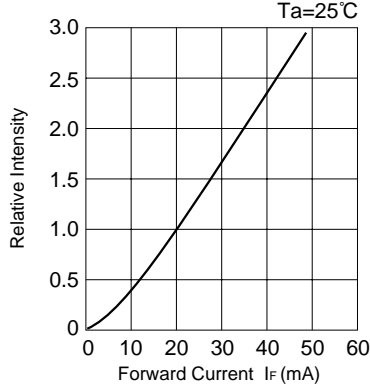
■ Spectral Distribution



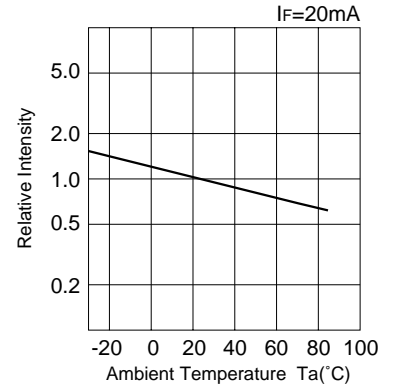
■ Forward Voltage vs. Forward Current



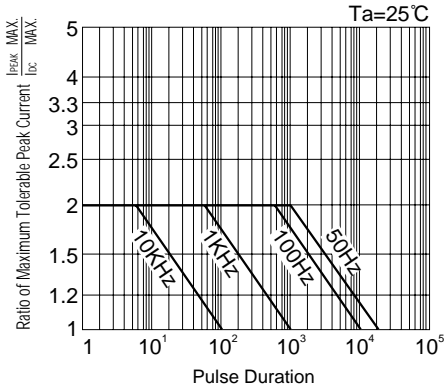
■ Forward Current vs. Relative Intensity



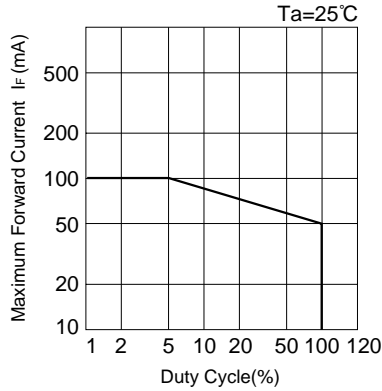
■ Ambient Temperature vs. Relative Intensity



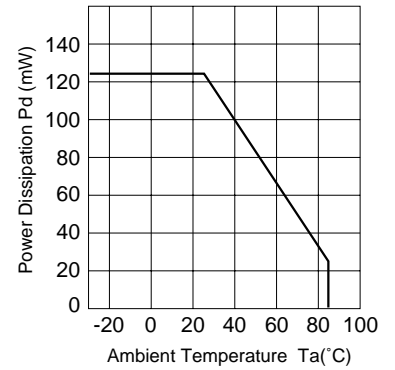
■ Pulse Duration vs. Maximum Tolerable Peak Current



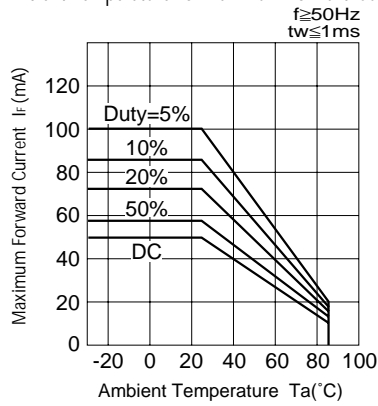
■ Duty Cycle vs. Maximum Forward Current



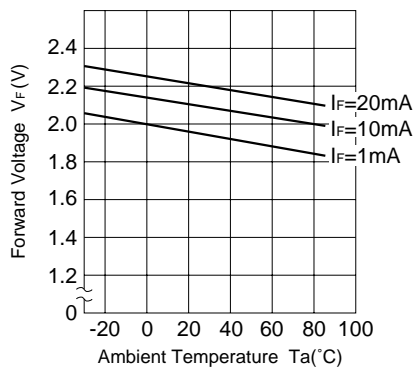
■ Power Dissipation vs. Ambient Temperature



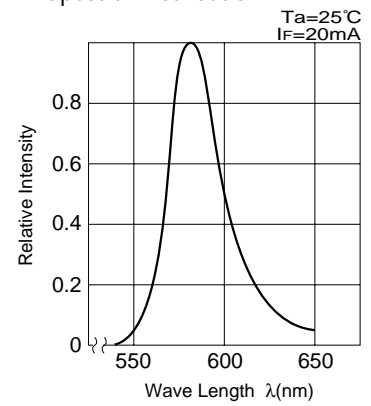
■ Ambient Temperature vs. Maximum Forward Current



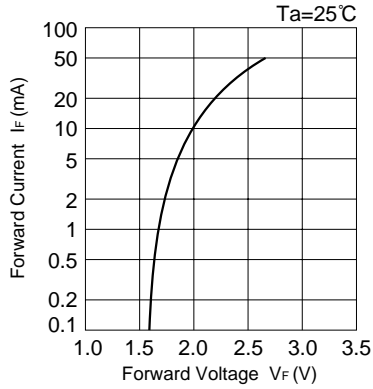
■ Forward Voltage vs. Ambient Temperature



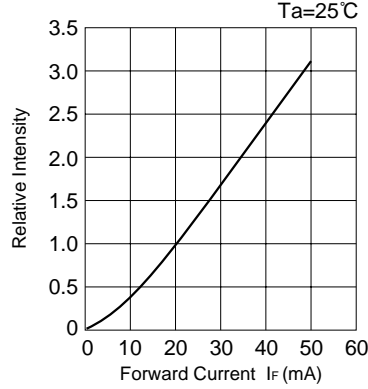
■ Spectral Distribution



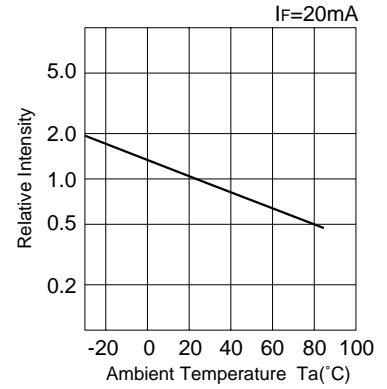
■ Forward Voltage vs. Forward Current



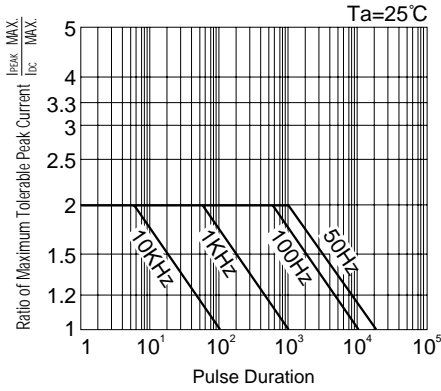
■ Forward Current vs. Relative Intensity



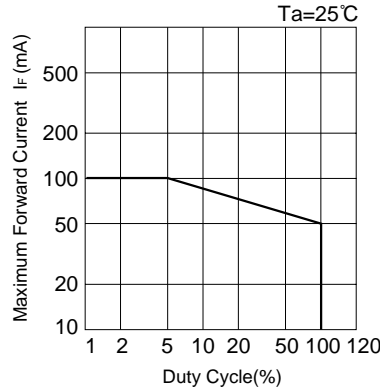
■ Ambient Temperature vs. Relative Intensity



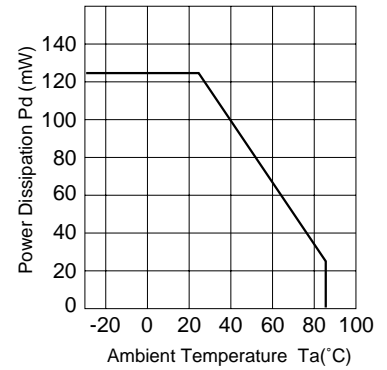
■ Pulse Duration vs. Maximum Tolerable Peak Current



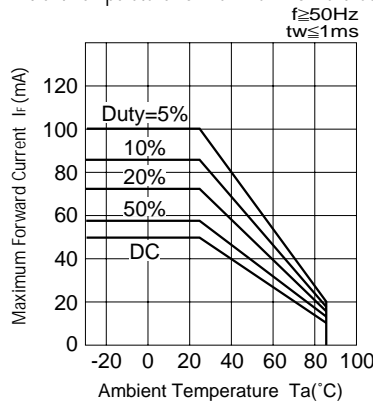
■ Duty Cycle vs. Maximum Forward Current



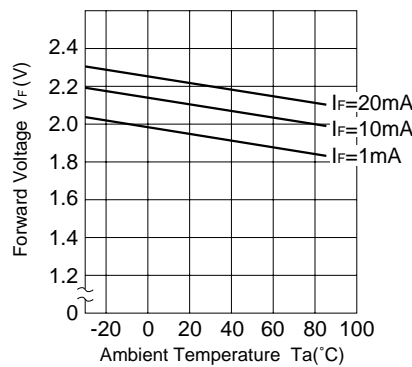
■ Power Dissipation vs. Ambient Temperature



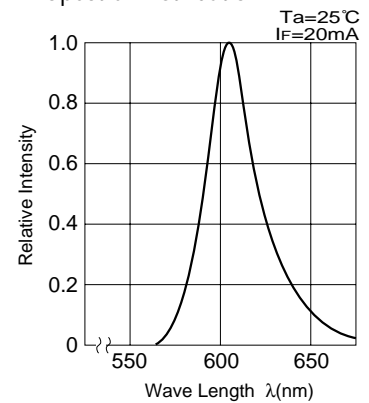
■ Ambient Temperature vs. Maximum Forward Current



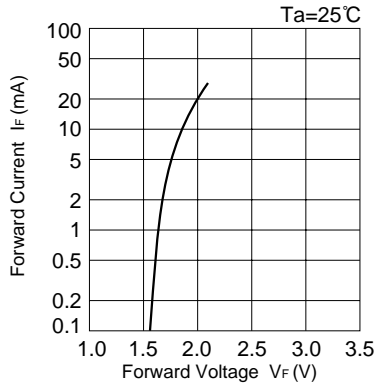
■ Forward Voltage vs. Ambient Temperature



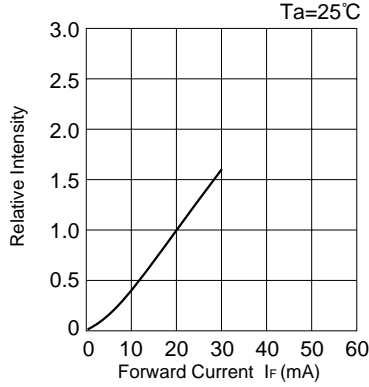
■ Spectral Distribution



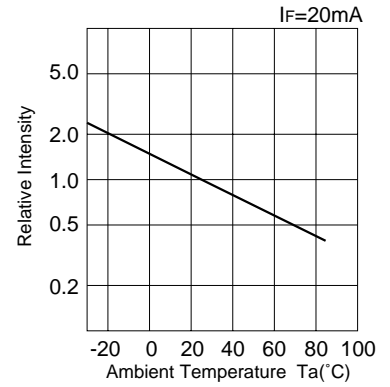
■ Forward Voltage vs. Forward Current



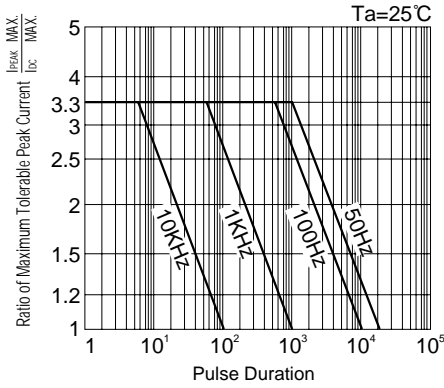
■ Forward Current vs. Relative Intensity



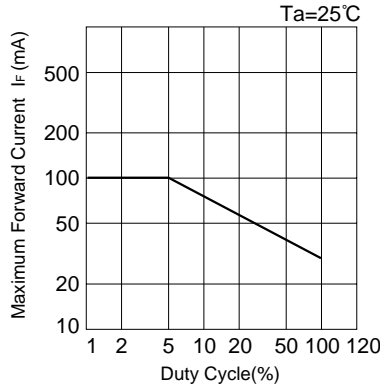
■ Ambient Temperature vs. Relative Intensity



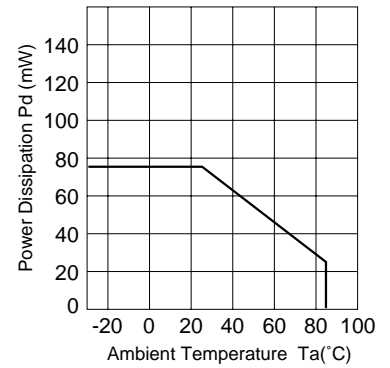
■ Pulse Duration vs. Maximum Tolerable Peak Current



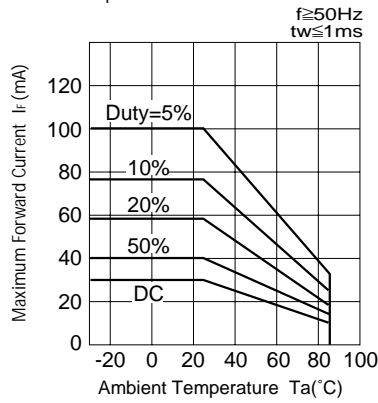
■ Duty Cycle vs. Maximum Forward Current



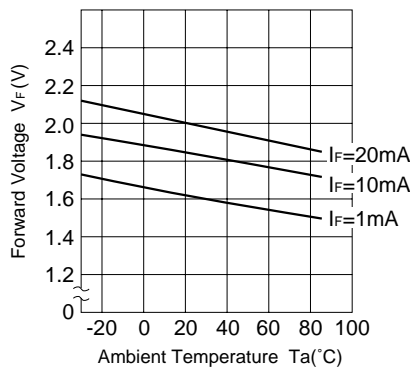
■ Power Dissipation vs. Ambient Temperature



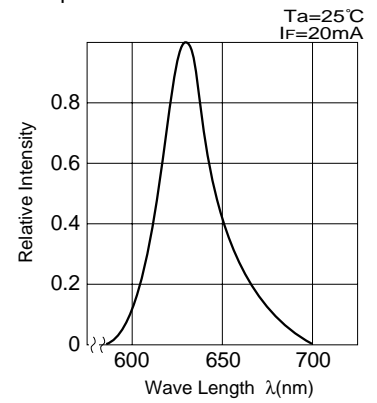
■ Ambient Temperature vs. Maximum Forward Current



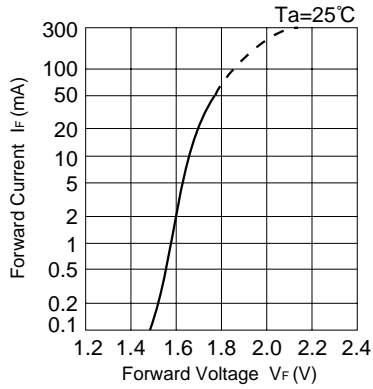
■ Forward Voltage vs. Ambient Temperature



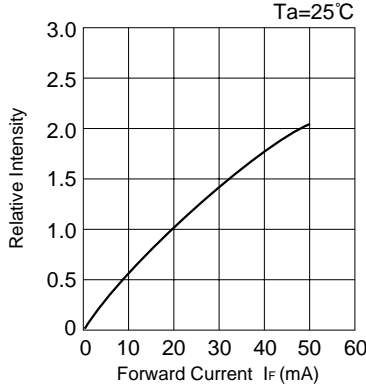
■ Spectral Distribution



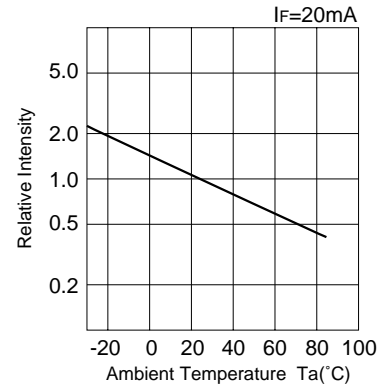
■ Forward Voltage vs. Forward Current



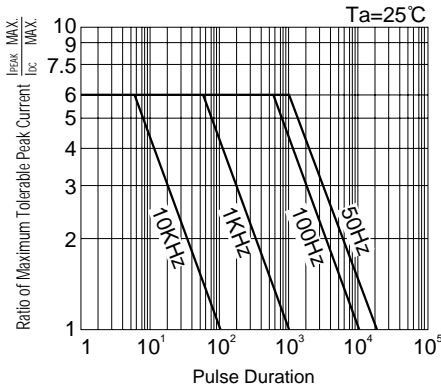
■ Forward Current vs. Relative Intensity



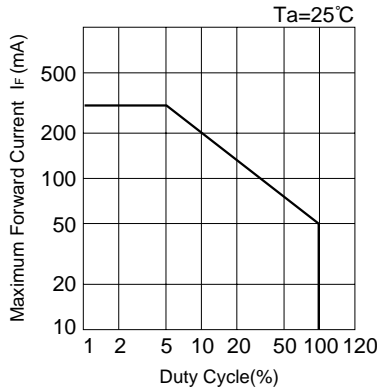
■ Ambient Temperature vs. Relative Intensity



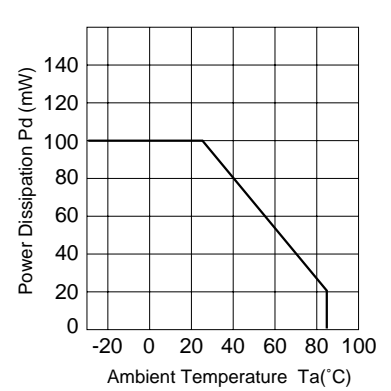
■ Pulse Duration vs. Maximum Tolerable Peak Current



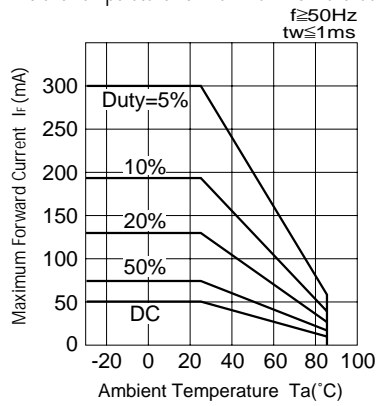
■ Duty Cycle vs. Maximum Forward Current



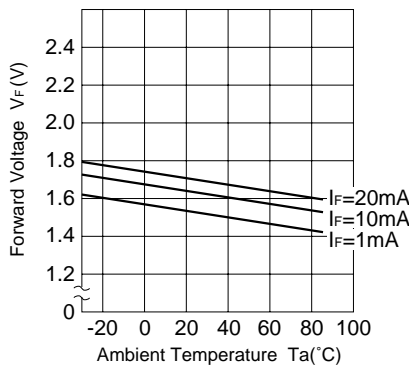
■ Power Dissipation vs. Ambient Temperature



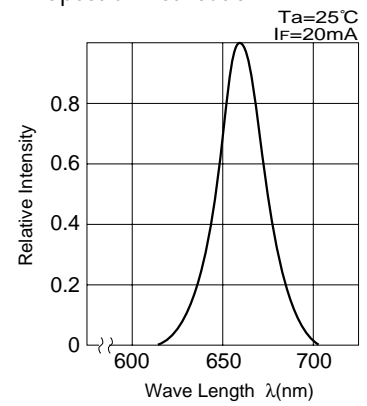
■ Ambient Temperature vs. Maximum Forward Current



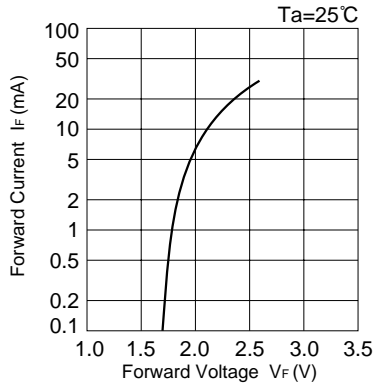
■ Forward Voltage vs. Ambient Temperature



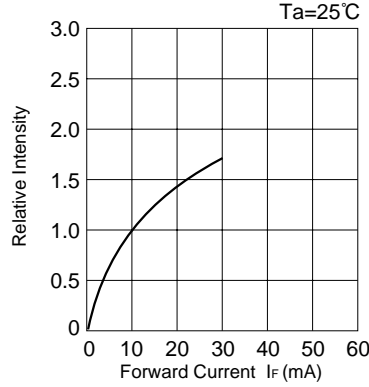
■ Spectral Distribution



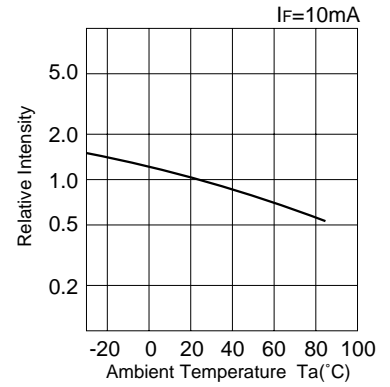
■ Forward Voltage vs. Forward Current



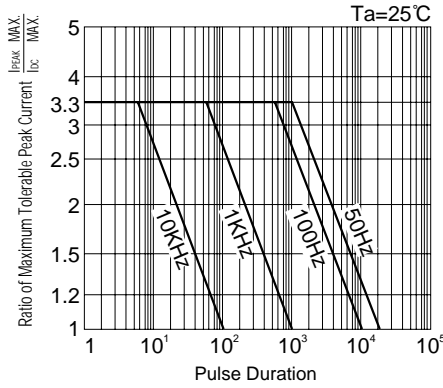
■ Forward Current vs. Relative Intensity



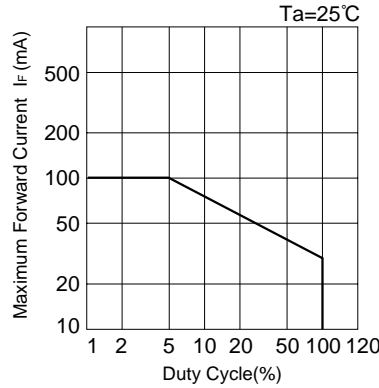
■ Ambient Temperature vs. Relative Intensity



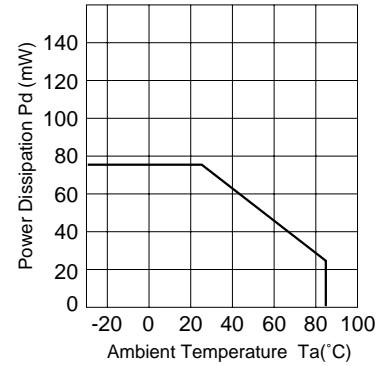
■ Pulse Duration vs. Maximum Tolerable Peak Current



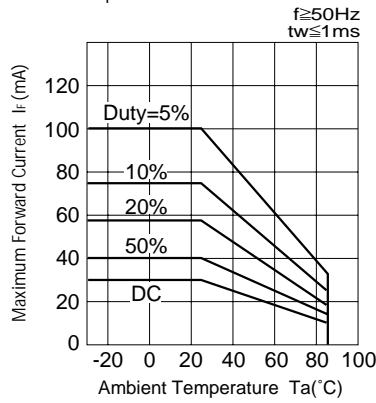
■ Duty Cycle vs. Maximum Forward Current



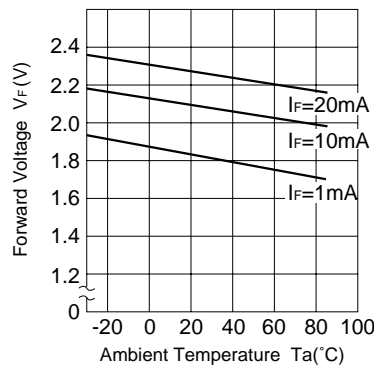
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

