



■ Absolute Maximum Ratings

Ta = 25°C

		Red	Yellow	Red	Green	Red	Pure Green	Unit
		VRPY		VRPG		VRBG		
Power Dissipation	Pb	75		75		75		mW
Forward Current	IF	30		30		30		mA
Peak Forward Current	IFM	100		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	0.33		0.33		0.33		mA/°C

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

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

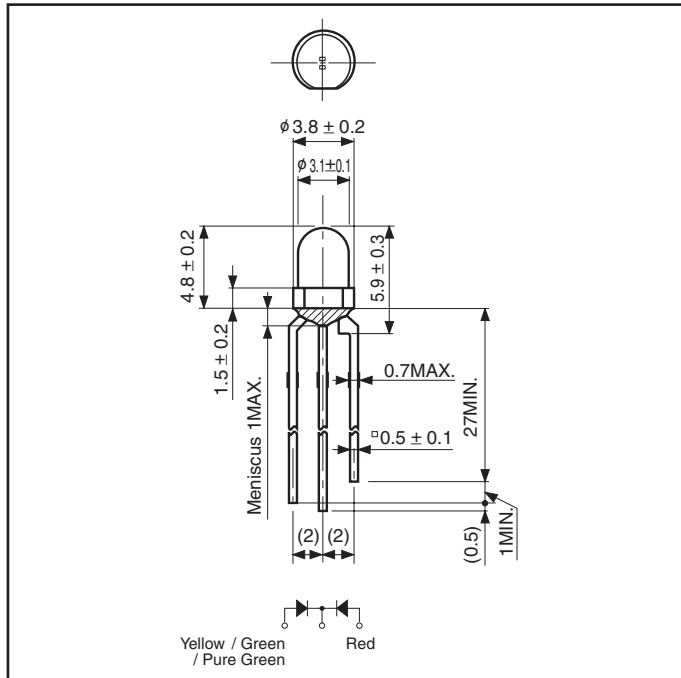
■ Electro-Optical Characteristics

Ta = 25°C

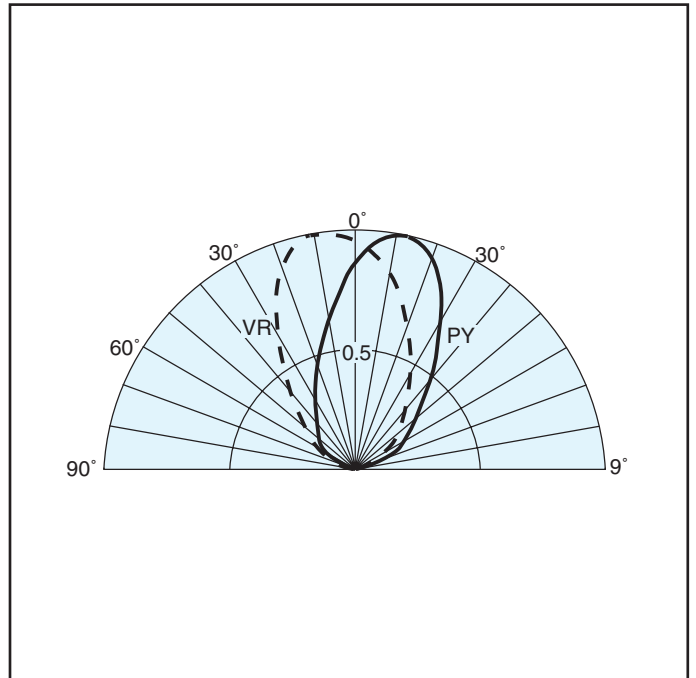
Part No.	Chip		Lens		Luminous Intensity			Wavelength			Forward Voltage			Reverse Current		Capacitance
	Material	Emitted Color			Iv		λp	Δλ		VF			IR			
					MIN	TYP	IF	TYP	TYP	IF	TYP	MAX	IF	MAX	VR	
VRPY3312X	GaAsP	Red	4	8	20	630	30	20	2.0	2.5	20	20	4	35		
	GaP	Yellow	8	16	20	570	30	20	2.1	2.5	20	20	4	40		
VRPG3312X	GaAsP	Red	4	8	20	630	30	20	2.0	2.5	20	20	4	35		
	GaP	Green	6	12	20	560	30	20	2.1	2.5	20	20	4	40		
VRBG3312X	GaAsP	Red	4	8	20	630	30	20	2.0	2.5	20	20	4	35		
	GaP	Pure Green	3	6	20	555	30	20	2.1	2.5	20	20	4	50		
Units			mcd	mcd	mA	nm	nm	mA	V	V	mA	μA	V	pF		

■ Package Dimensions

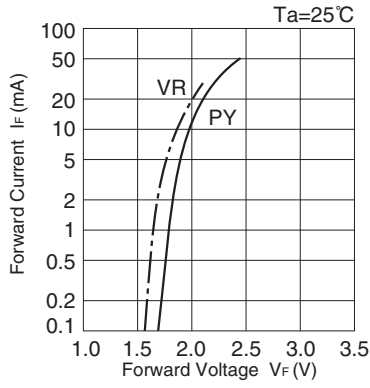
Unit : mm



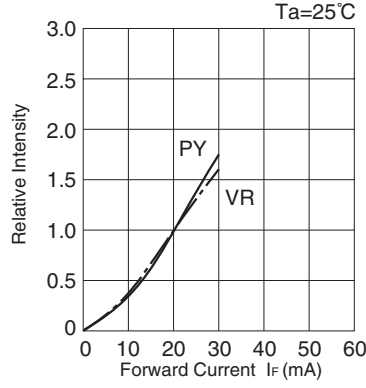
■ Spatial Distribution



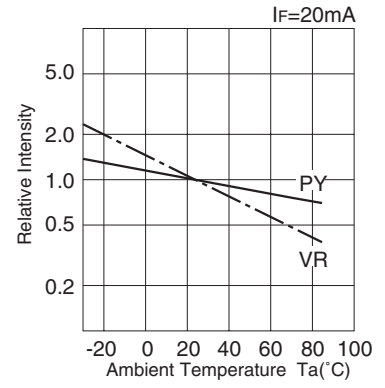
■ Forward Voltage vs. Forward Current



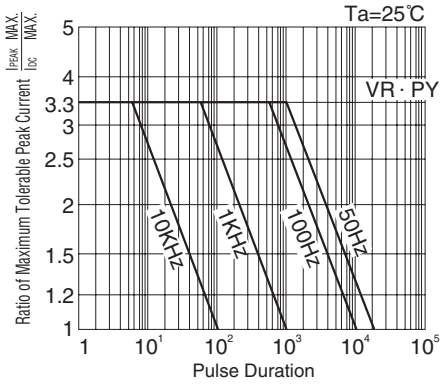
■ Forward Current vs. Relative Intensity



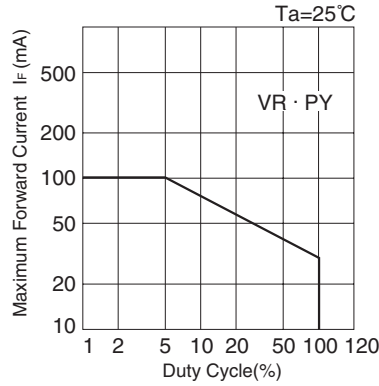
■ Ambient Temperature vs. Intensity



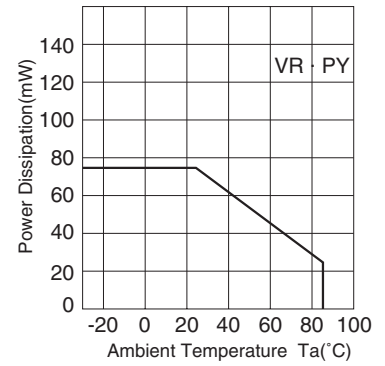
■ Pulse Duration vs. Maximum Tolerable Peak Current



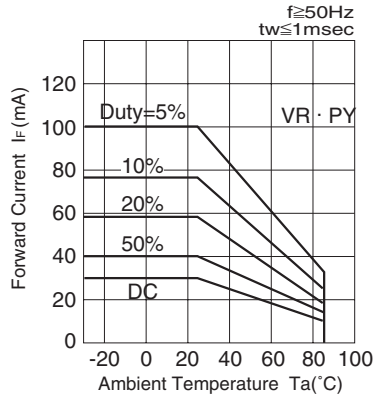
■ Duty Cycle vs. Maximum Forward Current



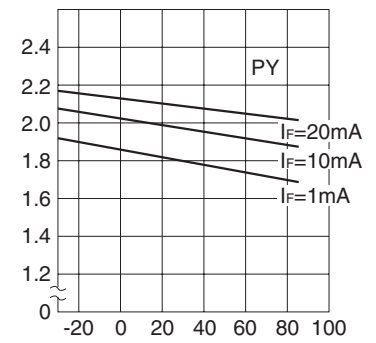
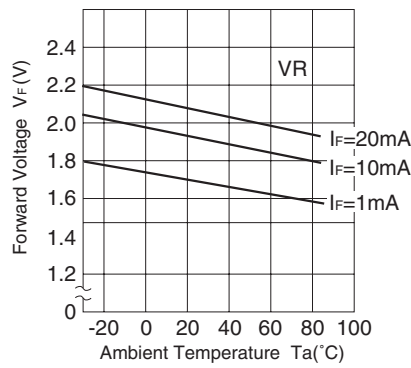
■ Power Dissipation vs. Ambient Temperature



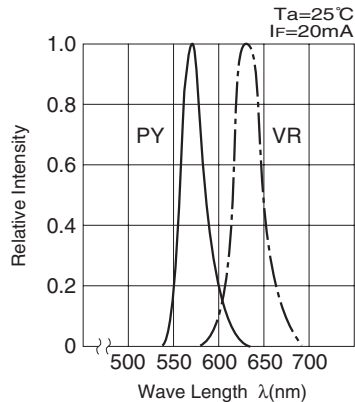
■ Ambient Temperature vs. Maximum Forward Current



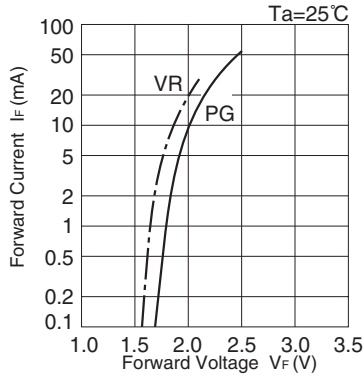
■ Forward Voltage vs. Ambient Temperature



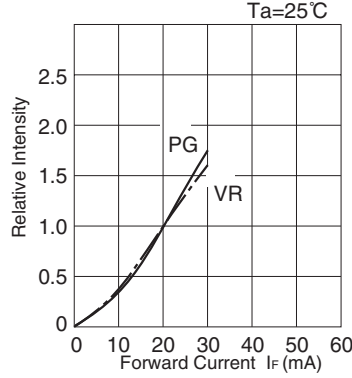
■ Spectral Distribution



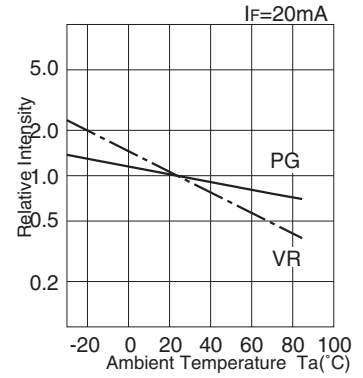
■ Forward Voltage vs. Forward Current



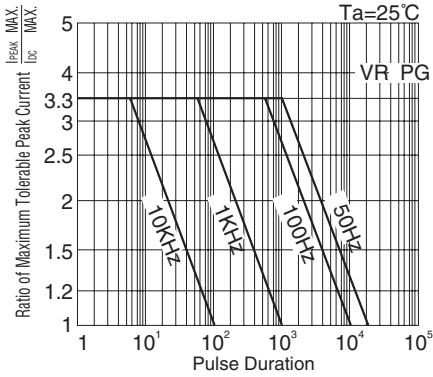
■ Forward Current vs. Relative Intensity



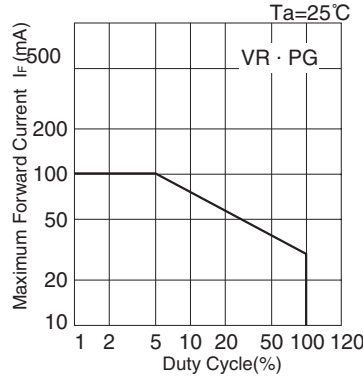
■ Ambient Temperature vs. Intensity



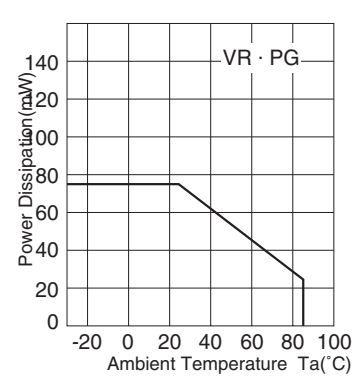
■ Pulse Duration vs. Maximum Tolerable Peak Current



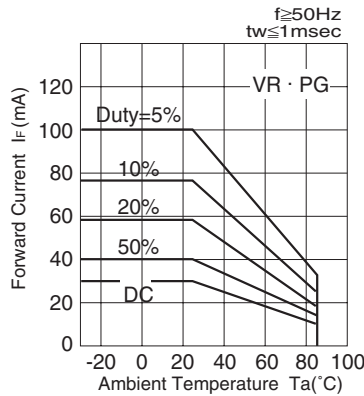
■ Duty Cycle vs. Maximum Forward Current



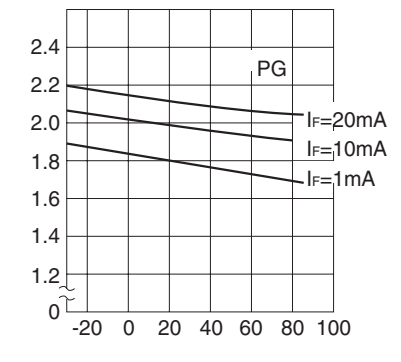
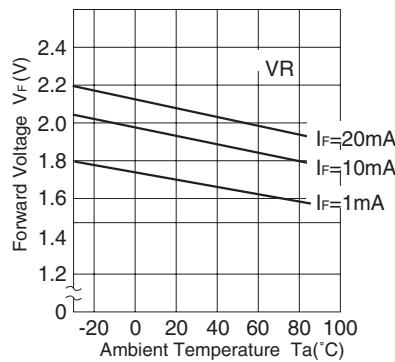
■ Power Dissipation vs. Ambient Temperature



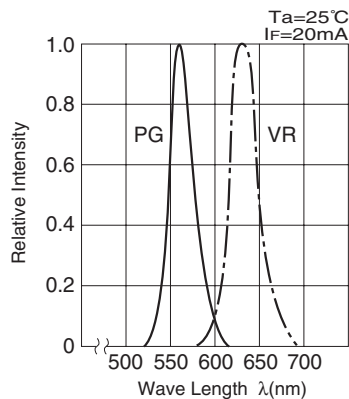
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

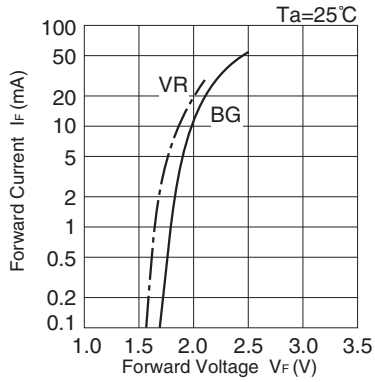




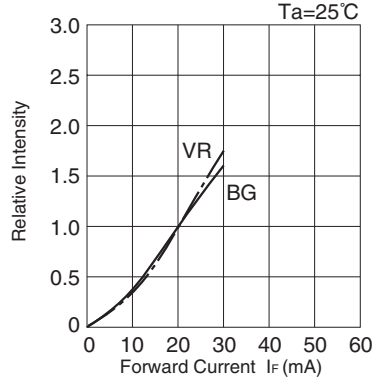
BICOLOR TYPE LED

VRBG3312X

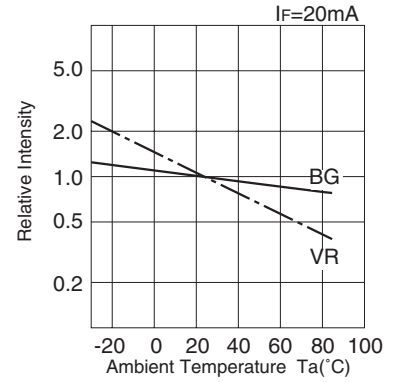
■ Forward Voltage vs. Forward Current



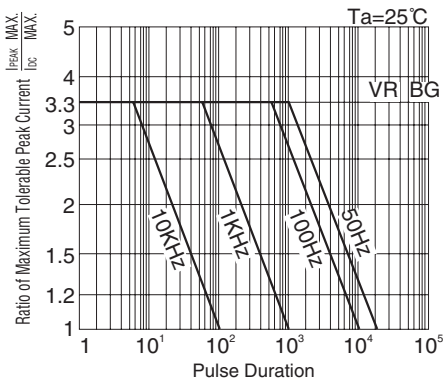
■ Forward Current vs. Relative Intensity



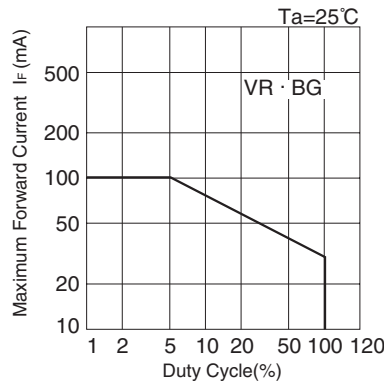
■ Ambient Temperature vs. Intensity



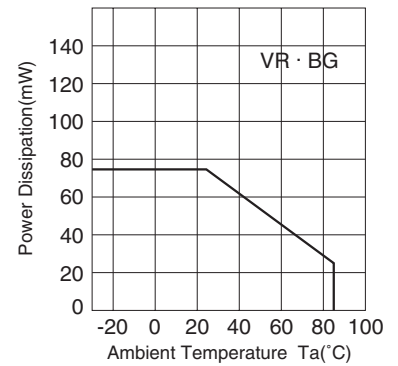
■ Pulse Duration vs. Maximum Tolerable Peak Current



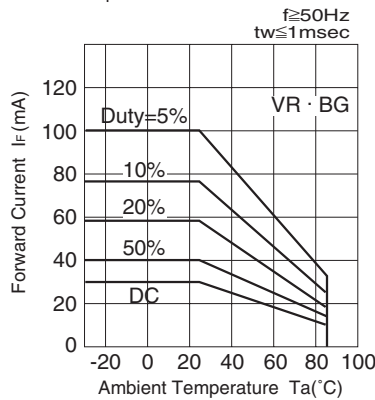
■ Duty Cycle vs. Maximum Forward Current



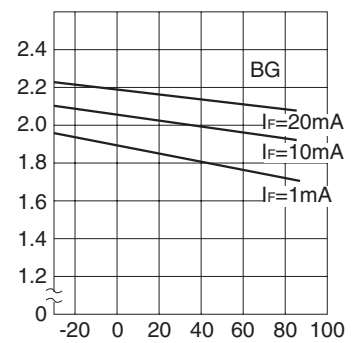
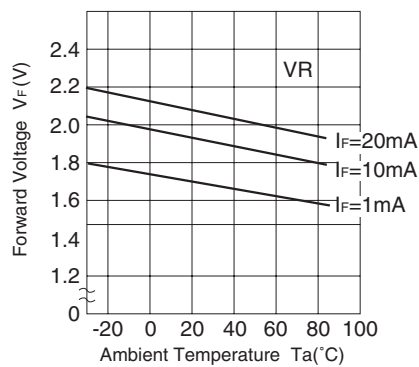
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

