



■ Absolute Maximum Ratings

Ta = 25°C

		Red			Orange	Yellow		Green	Pure Green	Unit
		BR	PR	VR	AA	AY	PY	PG	BG	
Power Dissipation	Pb	100	75	75	125	125	125	125	125	mW
Forward Current	IF	50	30	30	50	50	50	50	50	mA
Peak Forward Current	IFM	300	100	100	100	100	100	100	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	0.33	0.33	0.67	0.67	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

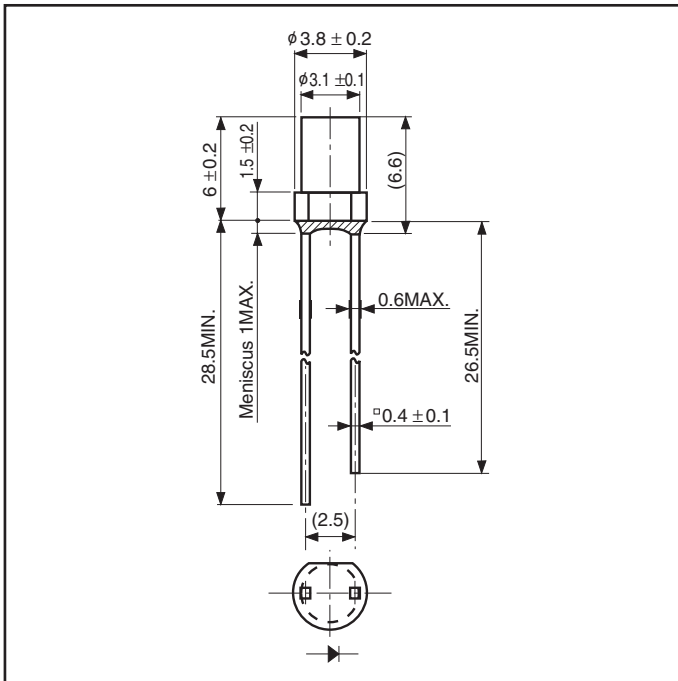
■ Electro-Optical Characteristics

Ta = 25°C

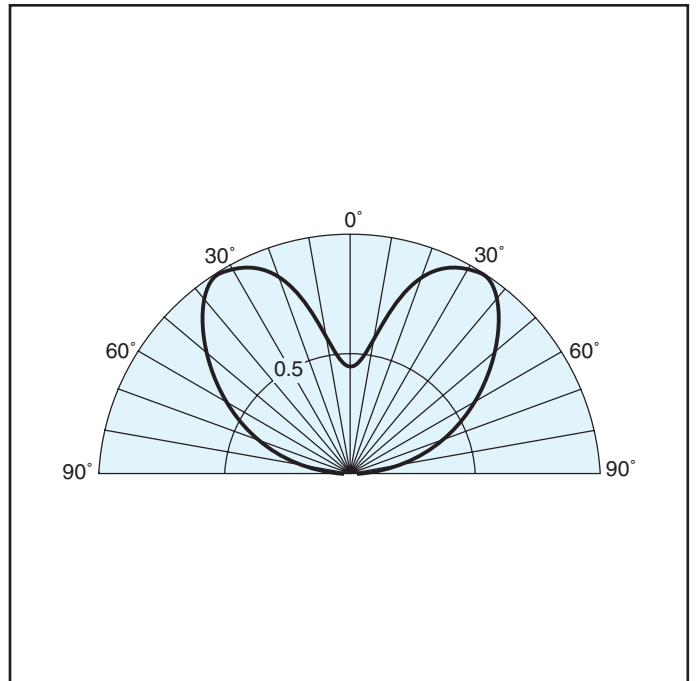
Part No.	Chip		Lens	Luminous Intensity			Wavelength			Forward Voltage			Reverse Current		Capacitance	
	Material	Emitted Color		MIN	TYP	IF	λ p	Δλ	IF	TYP	MAX	IF	MAX	VR	Co	
																MAX
BR3889S	GaAlAs	Red	Pastel Red	Surface Diffused	4	8	20	660	30	20	1.7	2.0	20	100	4	50
PR3889S	GaP				0.6	0.9	10	700	100	10	2.1	2.5	10	20	4	70
VR3889S	GaAsP				3	6	20	630	30	20	2.0	2.5	20	20	4	35
AA3889S	GaAsP	Orange	Pastel Orange		2.5	5	20	605	30	20	2.2	2.5	20	20	4	50
AY3889S	GaAsP				2	4	20	580	30	20	2.2	2.5	20	20	4	40
PY3889S	GaP	Yellow	Pastel Yellow		2.5	5	20	570	30	20	2.1	2.5	20	20	4	40
PG3889S	GaP				Green	Pastel Green	2	4	20	560	30	20	2.1	2.5	20	20
BG3889S	GaP	Pure Green	0.8				1.6	20	555	30	20	2.1	2.5	20	20	4
Units					mcd	mcd	mA	nm	nm	mA	V	V	mA	μA	V	pF

■ Package Dimensions

Unit : mm



■ Spatial Distribution

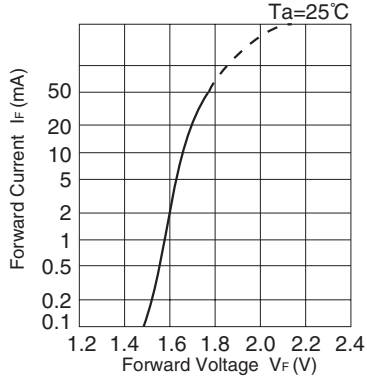




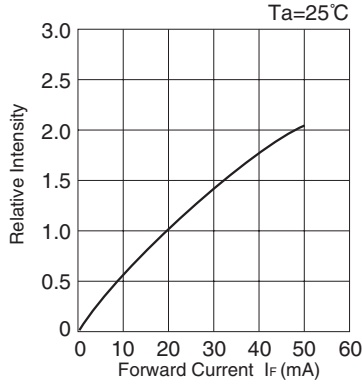
■ SUPER BRIGHT LED

BR3889S

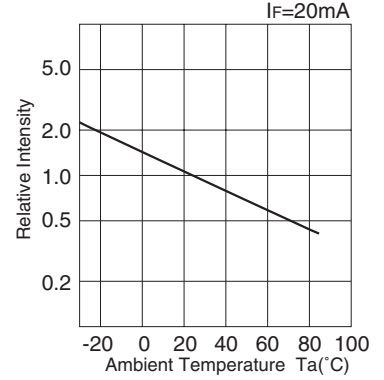
■ Forward Voltage vs. Forward Current



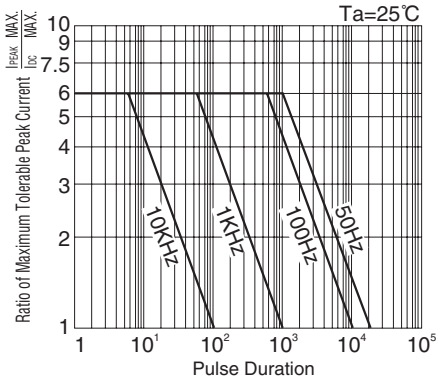
■ Forward Current vs. Relative Intensity



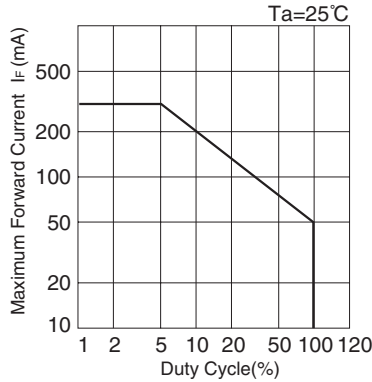
■ Ambient Temperature vs. Relative Intensity



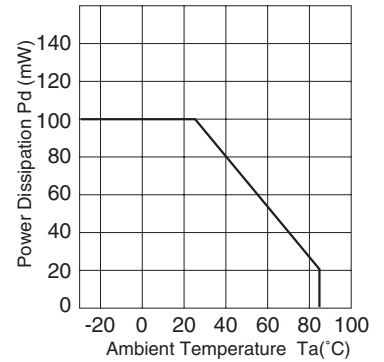
■ Pulse Duration vs. Maximum Tolerable Peak Current



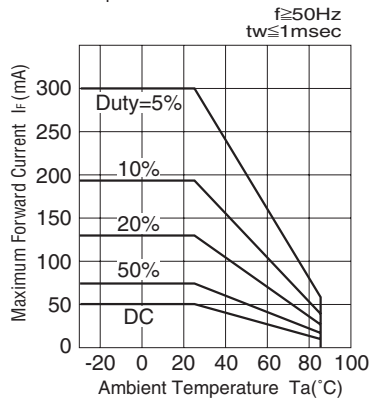
■ Duty Cycle vs. Maximum Forward Current



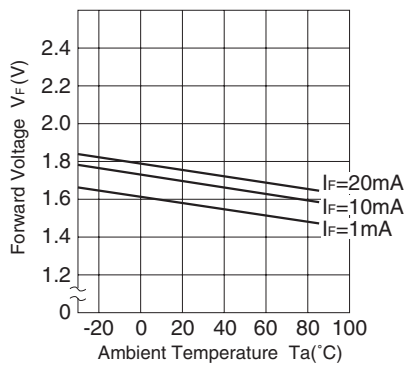
■ Power Dissipation vs. Ambient Temperature



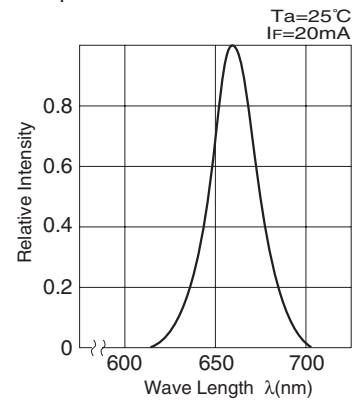
■ Ambient Temperature vs. Maximum Forward Current



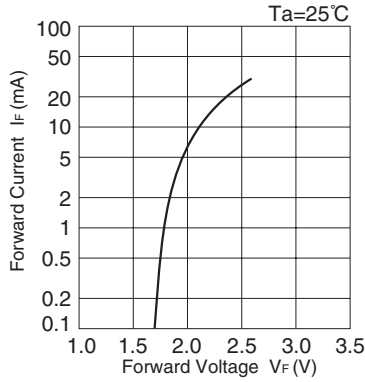
■ Forward Voltage vs. Ambient Temperature



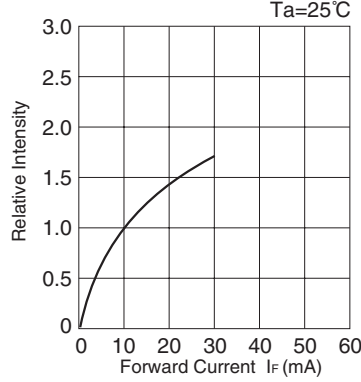
■ Spectral Distribution



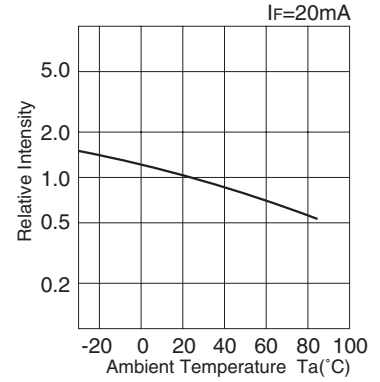
■ Forward Voltage vs. Forward Current



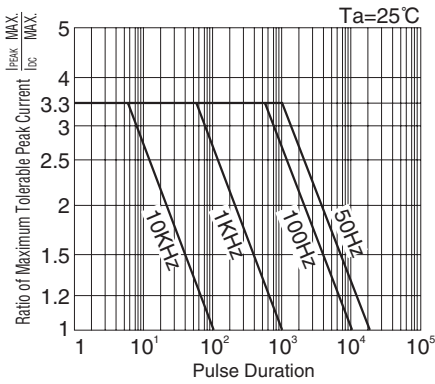
■ Forward Current vs. Relative Intensity



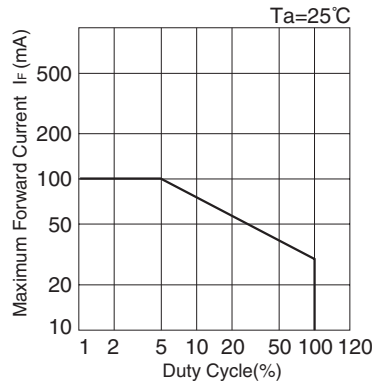
■ Ambient Temperature vs. Relative Intensity



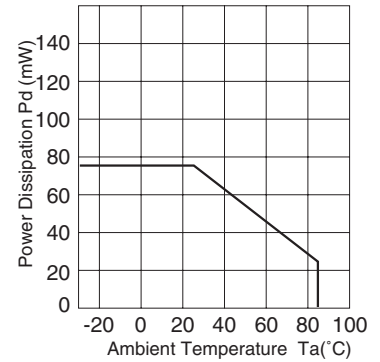
■ Pulse Duration vs. Maximum Tolerable Peak Current



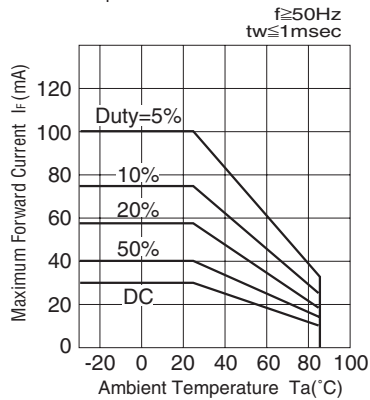
■ Duty Cycle vs. Maximum Forward Current



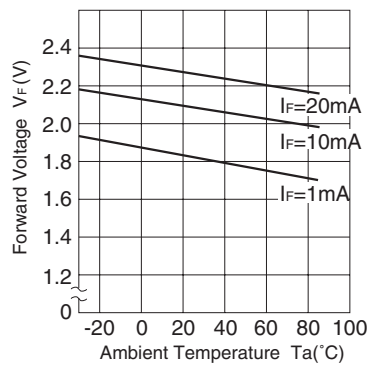
■ Power Dissipation vs. Ambient Temperature



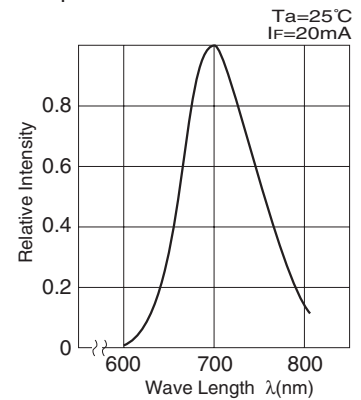
■ Ambient Temperature vs. Maximum Forward Current



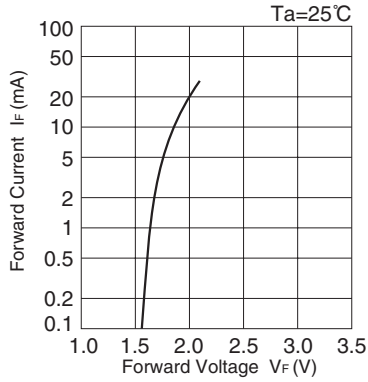
■ Forward Voltage vs. Ambient Temperature



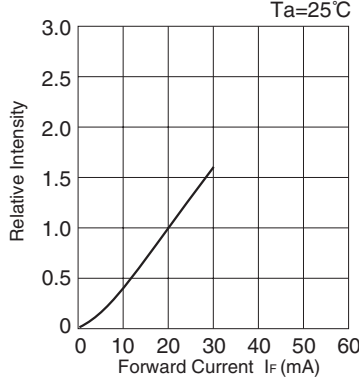
■ Spectral Distribution



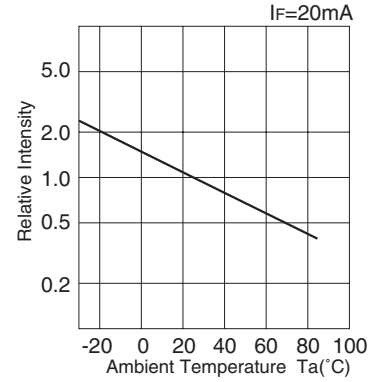
■ Forward Voltage vs. Forward Current



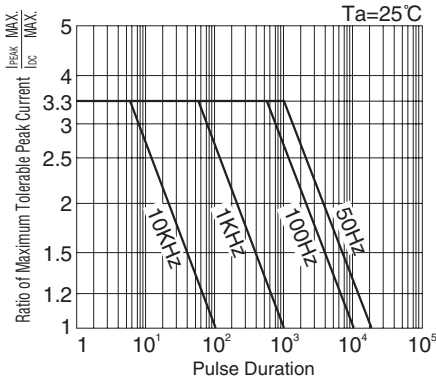
■ Forward Current vs. Relative Intensity



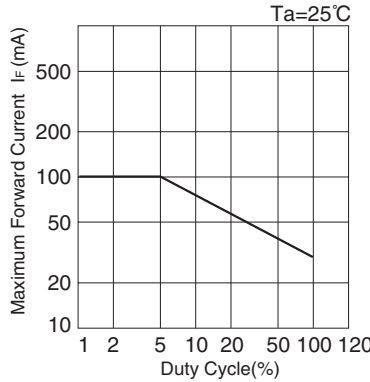
■ Ambient Temperature vs. Relative Intensity



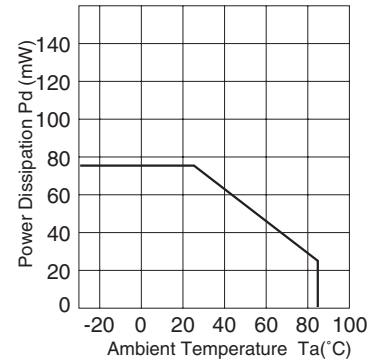
■ Pulse Duration vs. Maximum Tolerable Peak Current



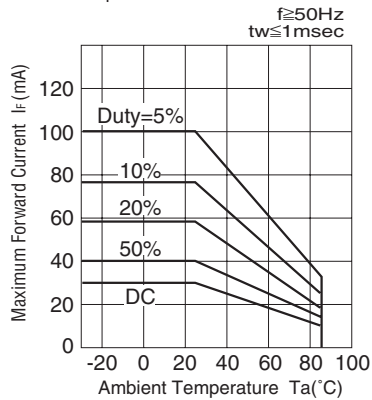
■ Duty Cycle vs. Maximum Forward Current



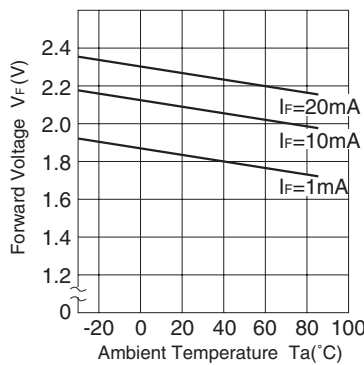
■ Power Dissipation vs. Ambient Temperature



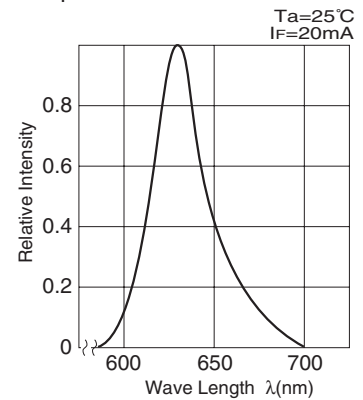
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

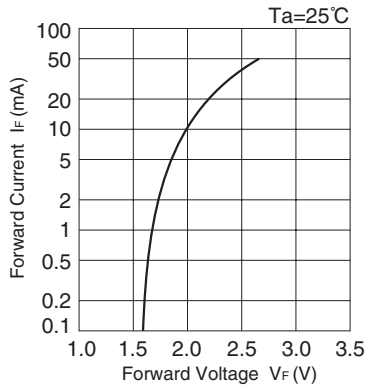




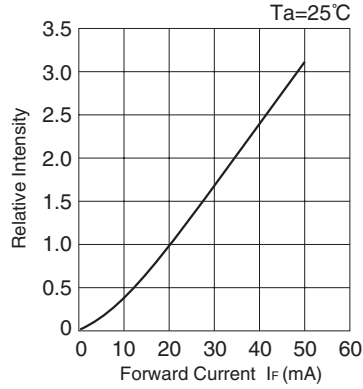
■ SUPER BRIGHT LED

AA3889S

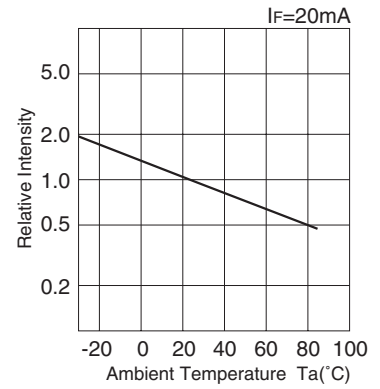
■ Forward Voltage vs. Forward Current



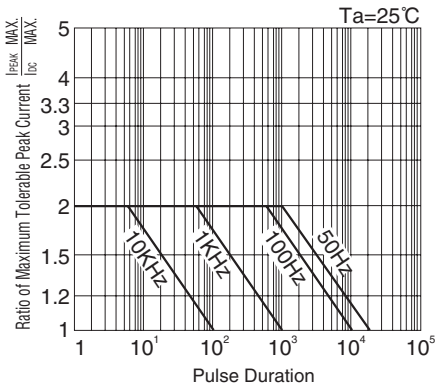
■ Forward Current vs. Relative Intensity



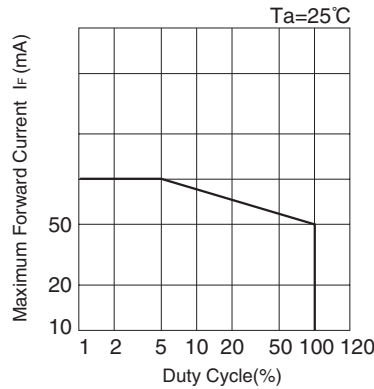
■ Ambient Temperature vs. Relative Intensity



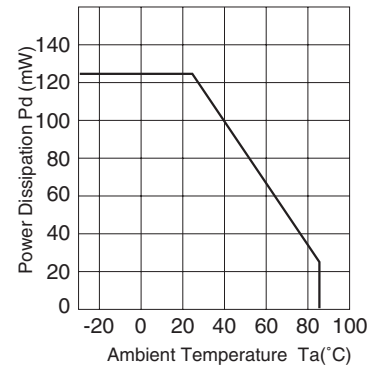
■ Pulse Duration vs. Maximum Tolerable Peak Current



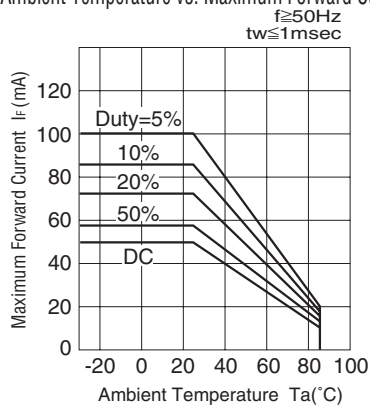
■ Duty Cycle vs. Maximum Forward Current



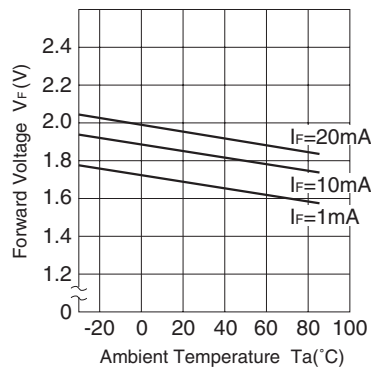
■ Power Dissipation vs. Ambient Temperature



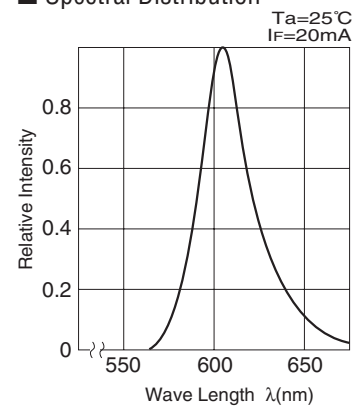
■ Ambient Temperature vs. Maximum Forward Current



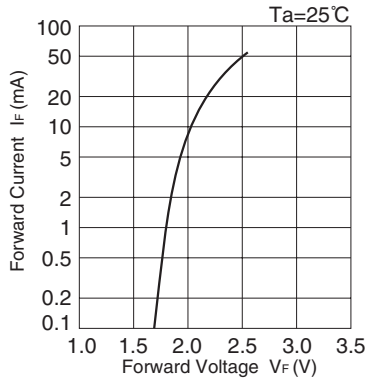
■ Forward Voltage vs. Ambient Temperature



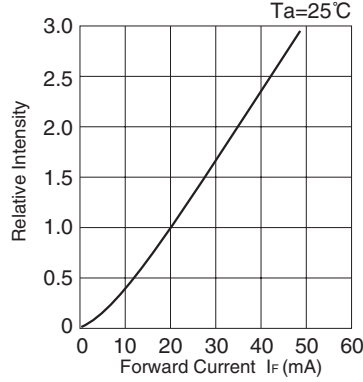
■ Spectral Distribution



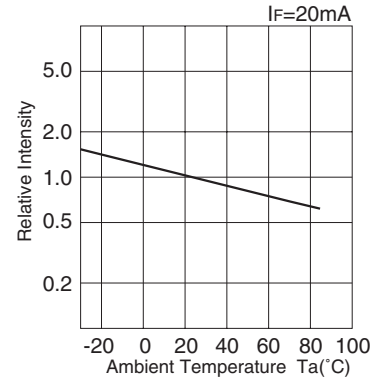
■ Forward Voltage vs. Forward Current



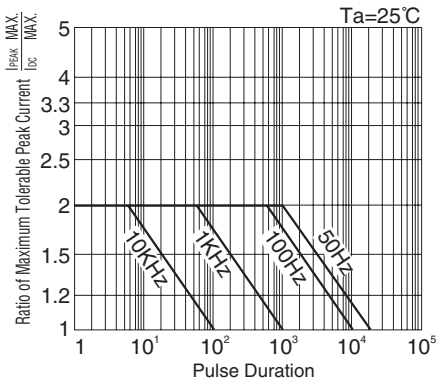
■ Forward Current vs. Relative Intensity



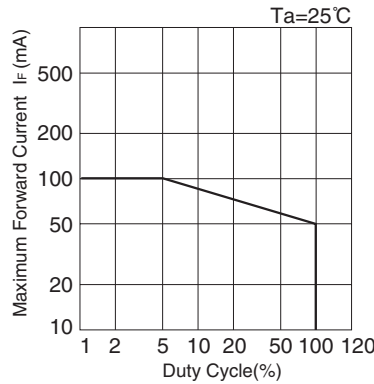
■ Ambient Temperature vs. Relative Intensity



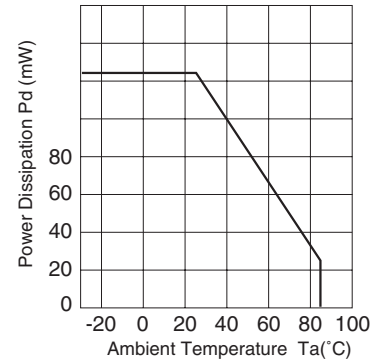
■ Pulse Duration vs. Maximum Tolerable Peak Current



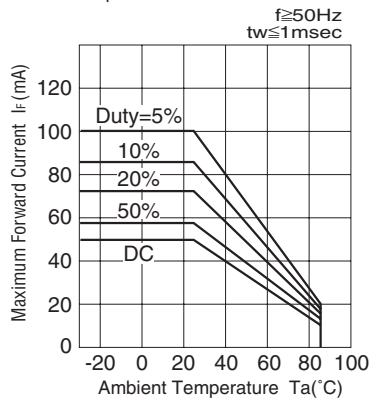
■ Duty Cycle vs. Maximum Forward Current



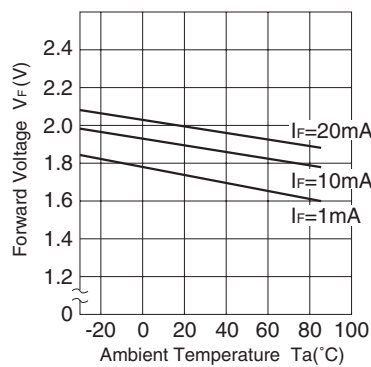
■ Power Dissipation vs. Ambient Temperature



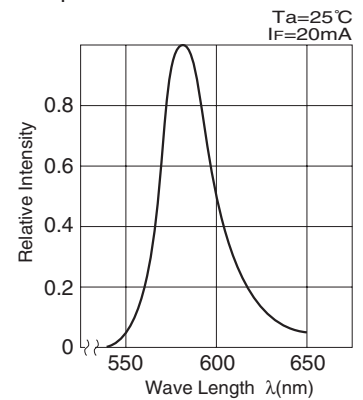
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

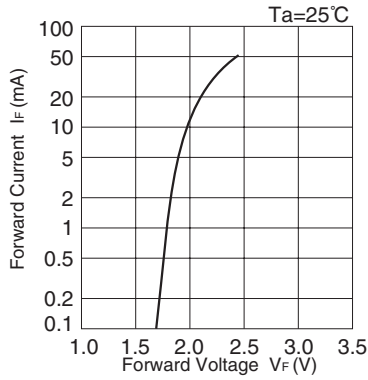




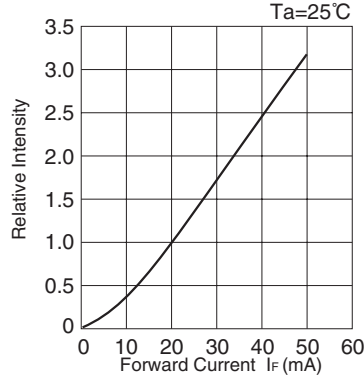
■ SUPER BRIGHT LED

PY3889S

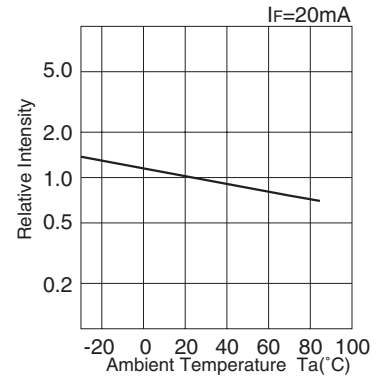
■ Forward Voltage vs. Forward Current



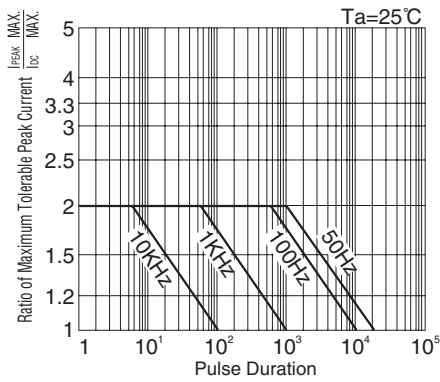
■ Forward Current vs. Relative Intensity



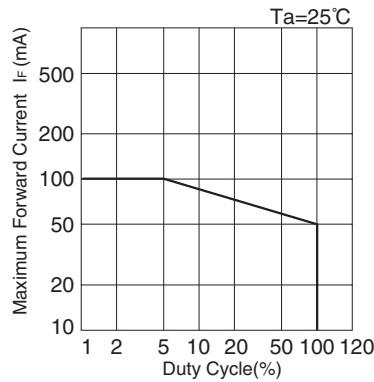
■ Ambient Temperature vs. Relative Intensity



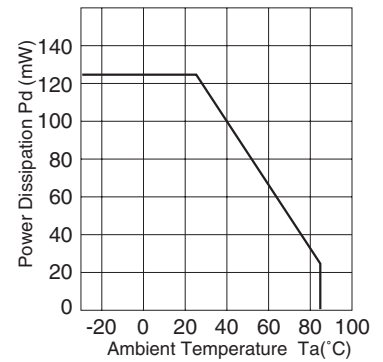
■ Pulse Duration vs. Maximum Tolerable Peak Current



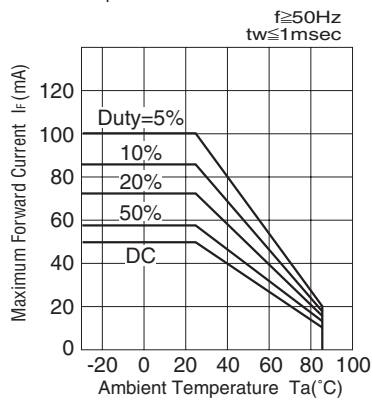
■ Duty Cycle vs. Maximum Forward Current



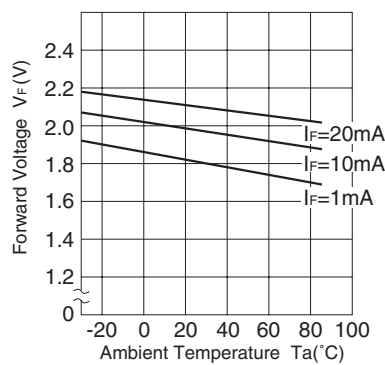
■ Power Dissipation vs. Ambient Temperature



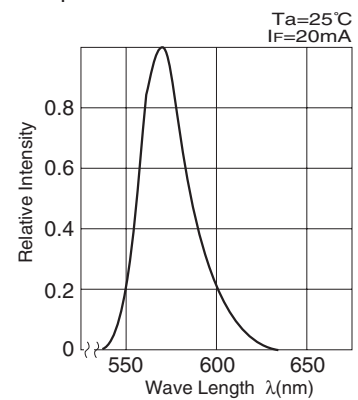
■ Ambient Temperature vs. Maximum Forward Current



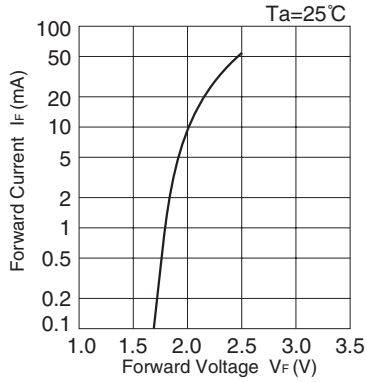
■ Forward Voltage vs. Ambient Temperature



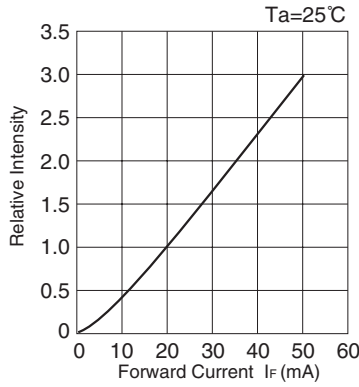
■ Spectral Distribution



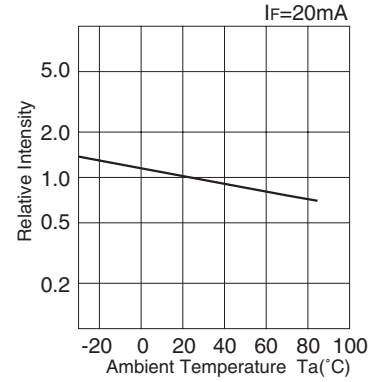
■ Forward Voltage vs. Forward Current



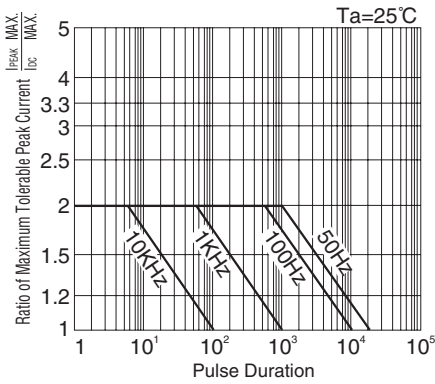
■ Forward Current vs. Relative Intensity



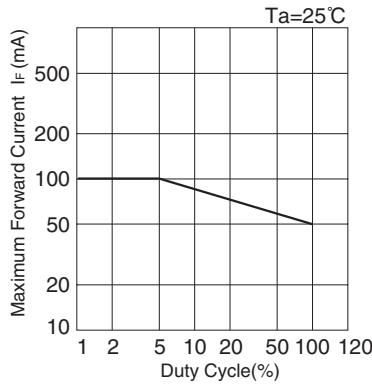
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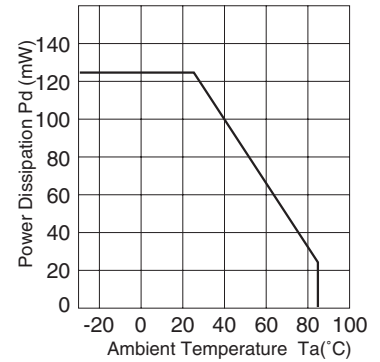
■ Pulse Duration vs. Maximum Tolerable Peak Current



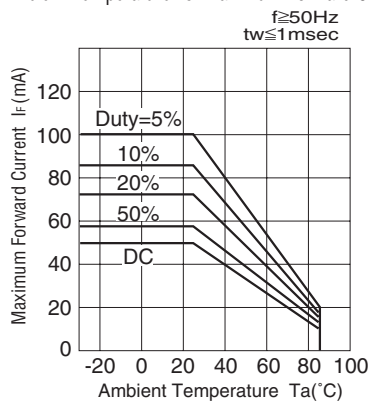
■ Duty Cycle vs. Maximum Forward Current



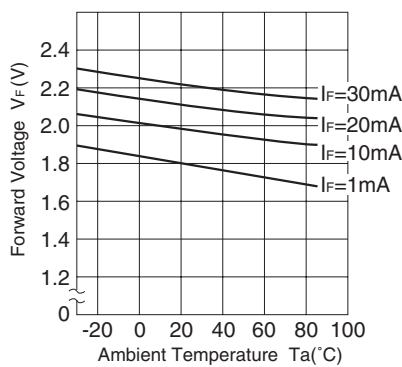
■ Power Dissipation vs. Ambient Temperature



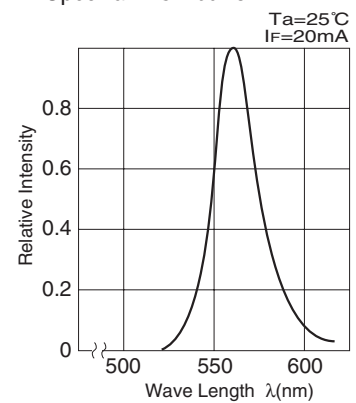
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

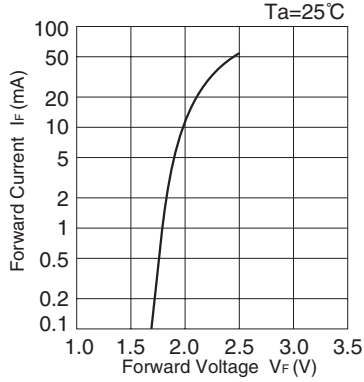




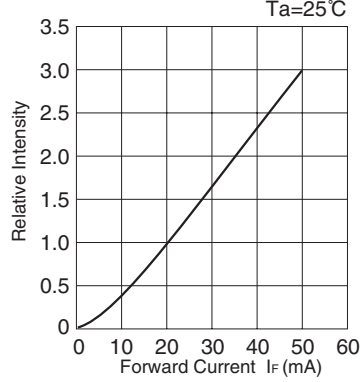
■ SUPER BRIGHT LED

BG3889S

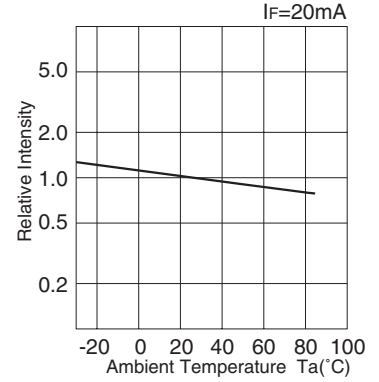
■ Forward Voltage vs. Forward Current



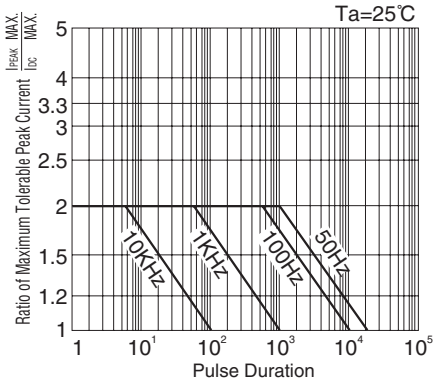
■ Forward Current vs. Relative Intensity



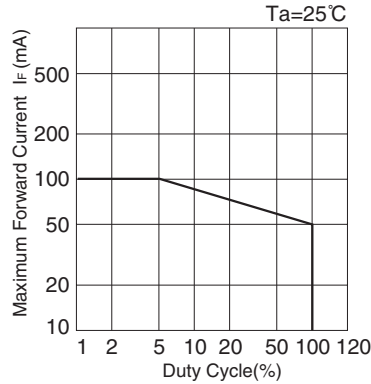
■ Ambient Temperature vs. Relative Intensity



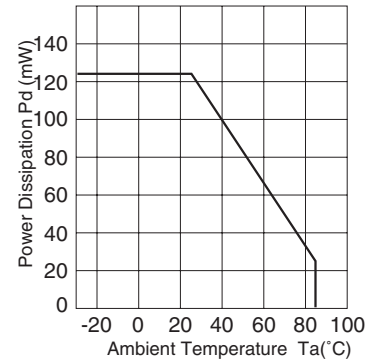
■ Pulse Duration vs. Maximum Tolerable Peak Current



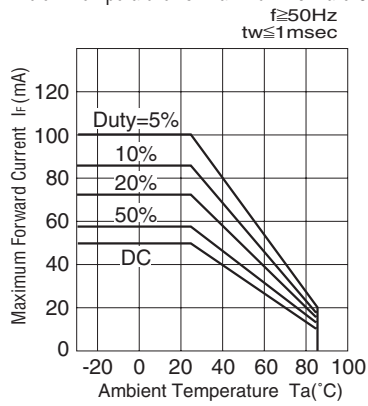
■ Duty Cycle vs. Maximum Forward Current



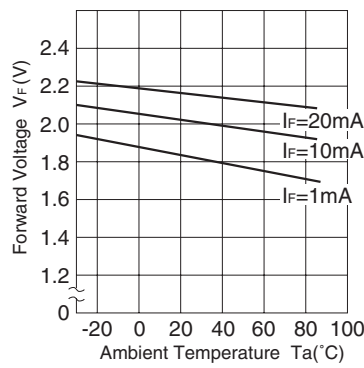
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

