■ SUPER BRIGHT SURFACE MOUNT LED

1105W Series

Lens Type 3.2X1.6mm

■ Absolute Maximum Ratings

Ta = 25°C

		Blue	Blue Green	Green	Yellow	Orange	Red	Unit
		HDB	HDC	HDG	FY	FA	FR	
Power Dissipation	Pd	76	76	76	81	81	81	mW
Forward Current	IF	20	20	20	30	30	30	mA
Peak Forward Current	IFM	48	48	48	100	100	100	mA
Reverse Voltage	VR	5	5	5	5	5	5	V
Operating Temp.	Topr	-40~+85	-40~+85	-40~+85	-40~+100	-40~+100	-40~+100	°C
Storage Temp.	Tstg	-40~+100	-40~+100	-40~+100	-40~+120	-40~+120	-40~+120	°C
Derating *	ΔIF	0.28	0.28	0.28	1.0	1.0	1.0	mA/°C

* The current derating for operation applies when temperature is above 25°C. (F□ : 75°C)
• IFM Condition : tw ≦ 1ms, Duty ≦ 1/20

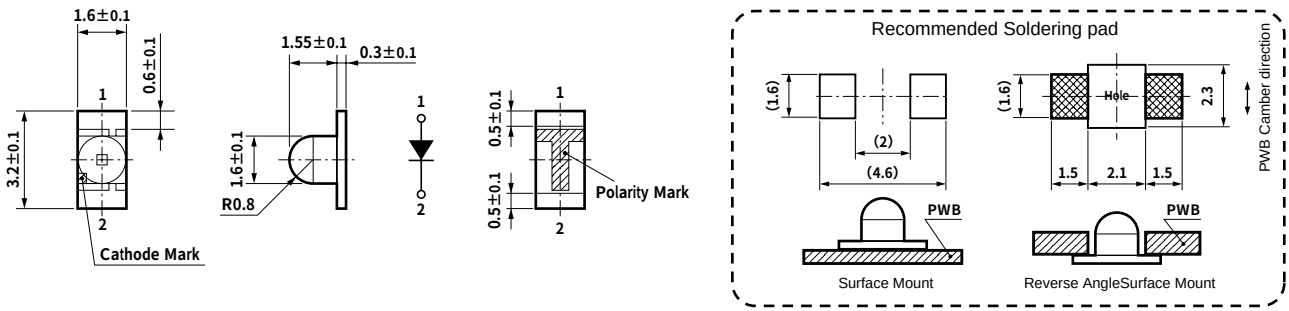
■ Electro-Optical Characteristics

Ta = 25°C

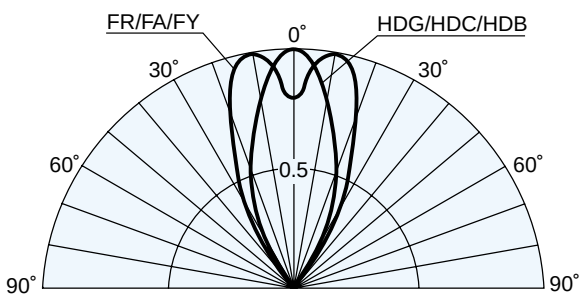
Part No.	Chip		Lens Color	Luminous Intensity Iv			Wavelength				Forward Voltage VF			Reverse Current IR	
							λd	λp	Δλ						
	Material	Emitted Color		MIN	TYP	IF	TYP	TYP	TYP	IF	TYP	MAX	IF	MAX	VR
HDB1105W	InGaN/SiC	Blue	Water Clear	35	70	10	470	467	26	10	3.3	3.8	10	100	5
HDC1105W	InGaN/SiC	Blue Green		70	140	10	508	502	30	10	3.3	3.8	10	100	5
HDG1105W	InGaN/SiC	Green		70	140	10	530	522	30	10	3.3	3.8	10	100	5
FY1105W	AlGaInP	Yellow		70	180	20	590	592	15	20	1.9	2.4	20	100	5
FA1105W	AlGaInP	Orange		70	200	20	605	609	15	20	1.9	2.4	20	100	5
FR1105W	AlGaInP	Red		70	180	20	626	635	15	20	1.9	2.4	20	100	5
Units				mcd	mcd	mA	nm	nm	nm	mA	V	V	mA	μA	V

■ Package Dimensions

Unit : mm

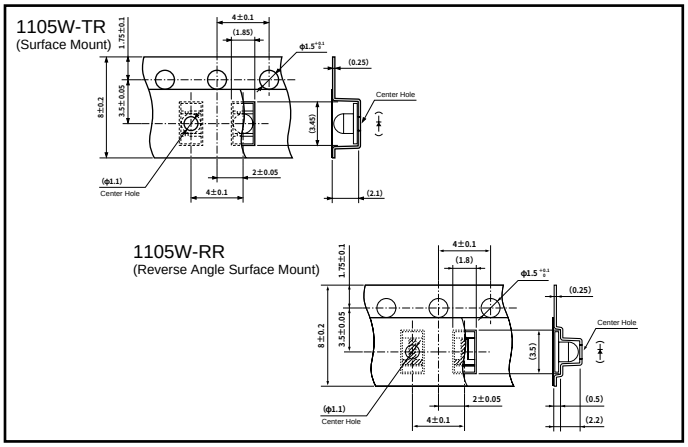


■ Spatial Distribution



■ Taping Specification

Unit : mm

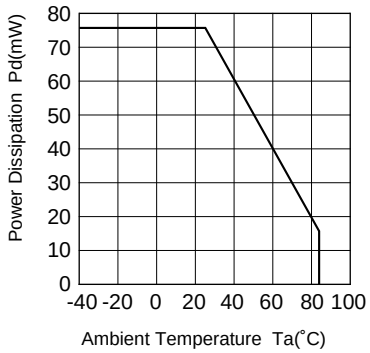


* Quantity 2,000 pcs/Reel

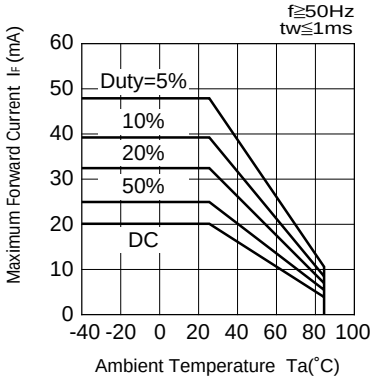
■ SUPER BRIGHT SURFACE MOUNT LED

HDB1105W

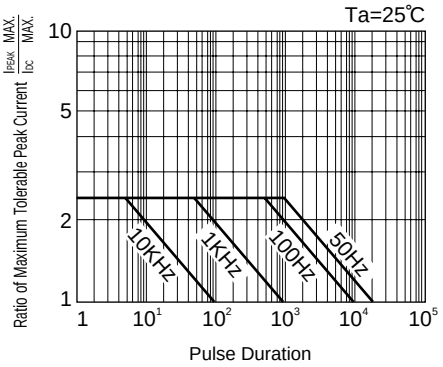
■ Power Dissipation vs. Ambient Temperature



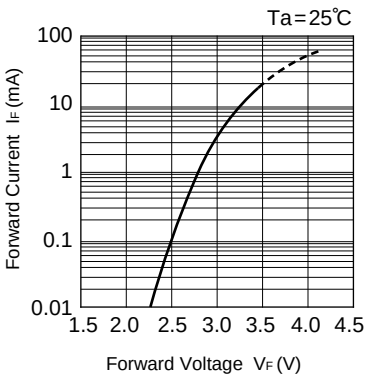
■ Ambient Temperature vs. Maximum Forward Current



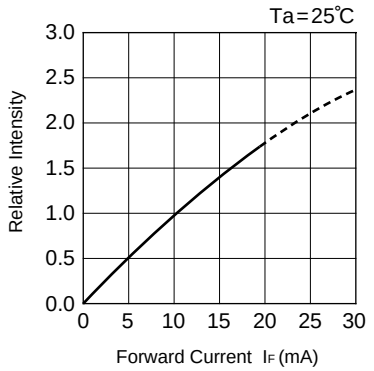
■ Pulse Duration vs.Maximum Tolerable Peak Current



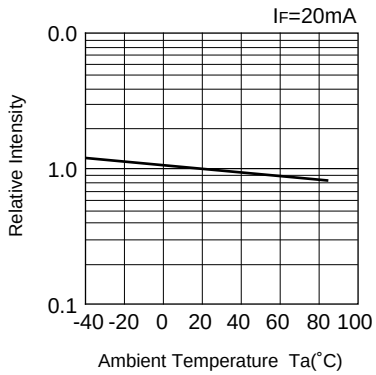
■ Forward Voltage vs. Forward Current



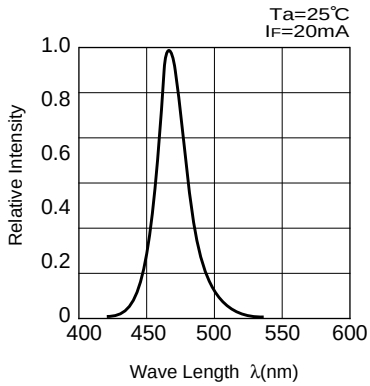
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



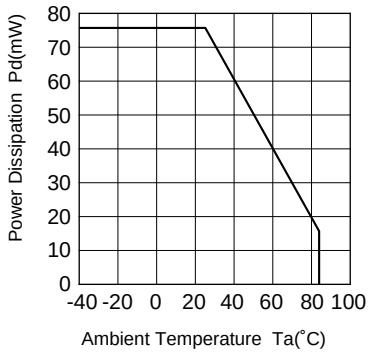
■ Spectral Distribution



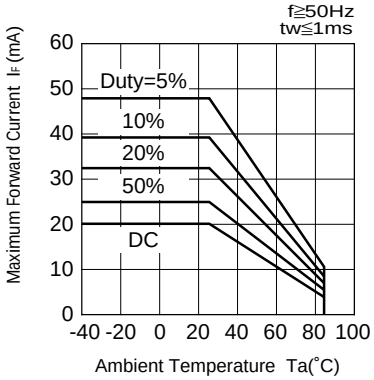
■ SUPER BRIGHT SURFACE MOUNT LED

HDC1105W

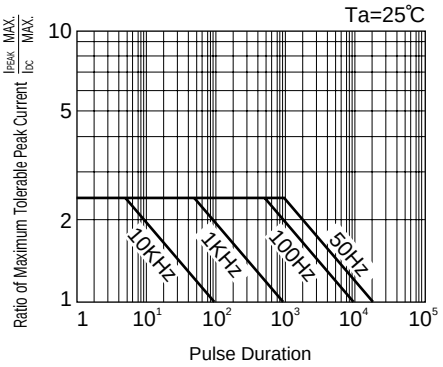
■ Power Dissipation vs. Ambient Temperature



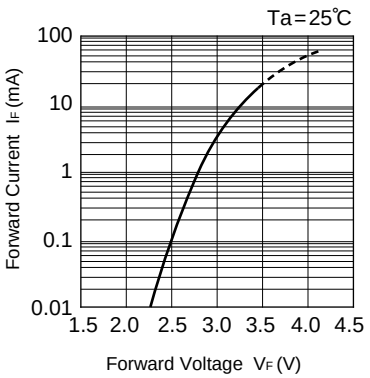
■ Ambient Temperature vs. Maximum Forward Current



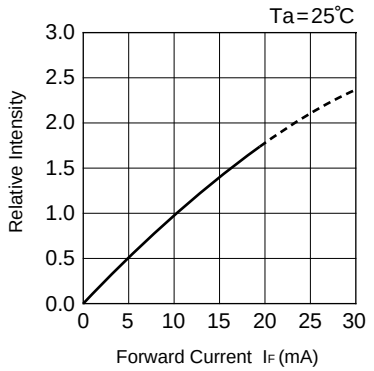
■ Pulse Duration vs.Maximum Tolerable Peak Current



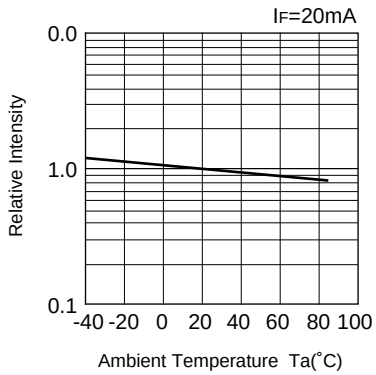
■ Forward Voltage vs. Forward Current



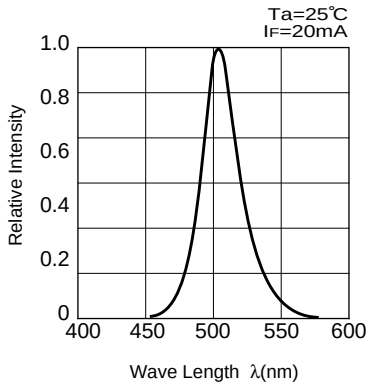
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



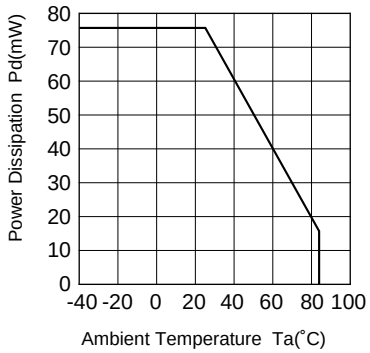
■ Spectral Distribution



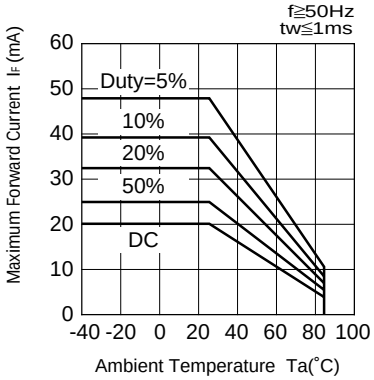
■ SUPER BRIGHT SURFACE MOUNT LED

HDG1105W

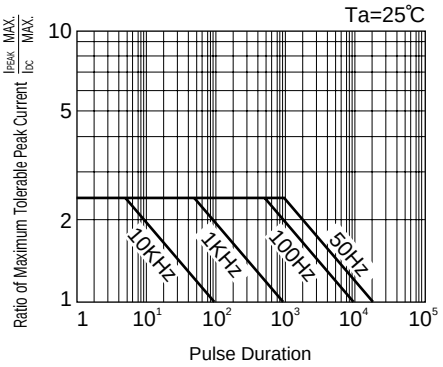
■ Power Dissipation vs. Ambient Temperature



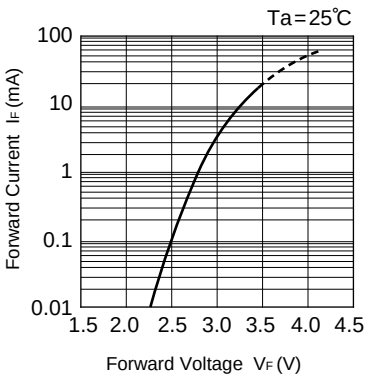
■ Ambient Temperature vs. Maximum Forward Current



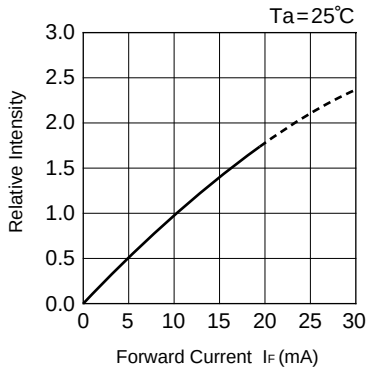
■ Pulse Duration vs.Maximum Tolerable Peak Current



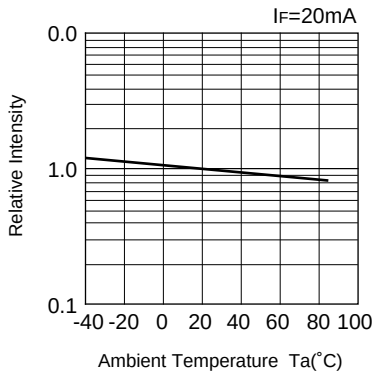
■ Forward Voltage vs. Forward Current



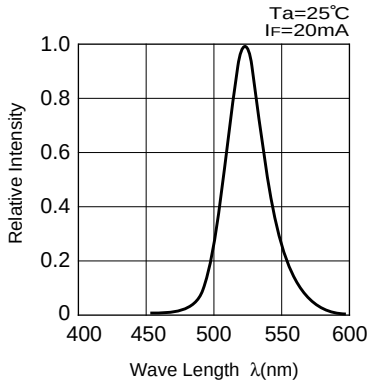
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



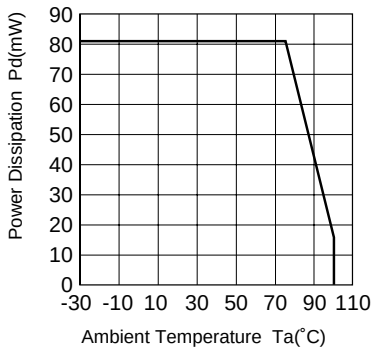
■ Spectral Distribution



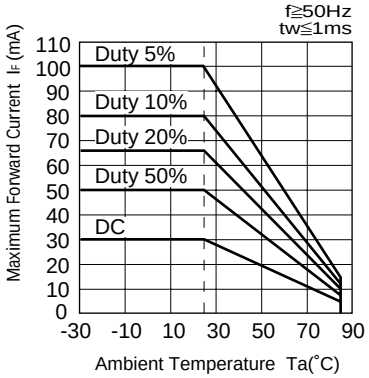
■ SUPER BRIGHT SURFACE MOUNT LED

FY1105W

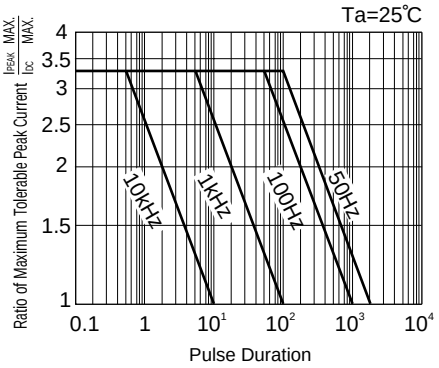
■ Power Dissipation vs. Ambient Temperature



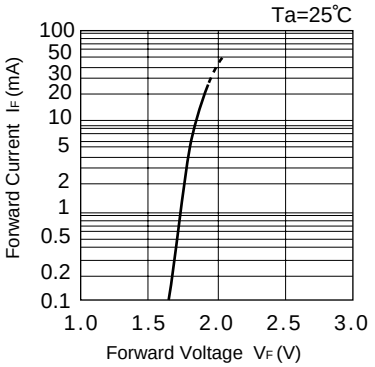
■ Ambient Temperature vs. Maximum Forward Current



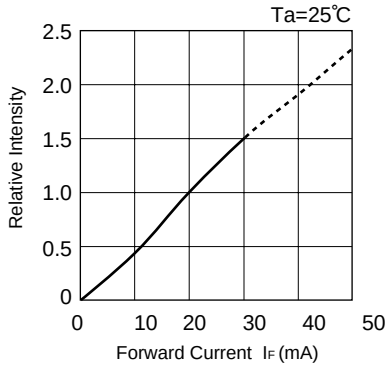
■ Pulse Duration vs.Maximum Tolerable Peak Current



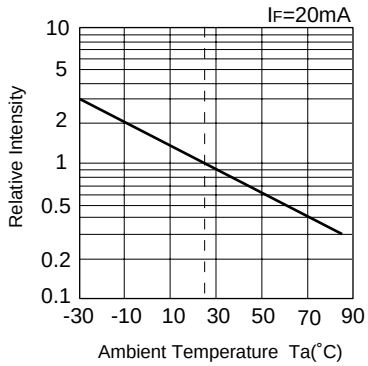
■ Forward Voltage vs. Forward Current



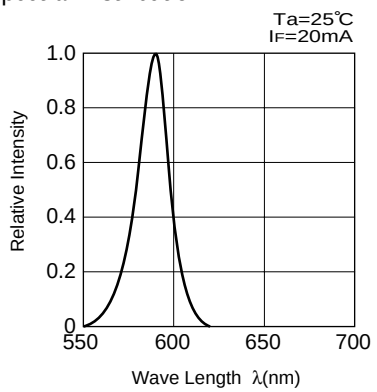
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



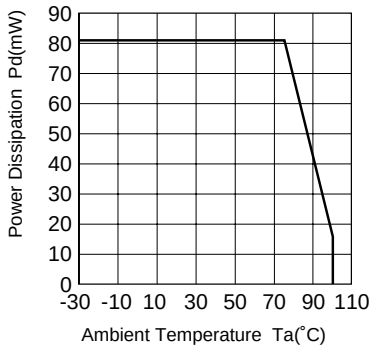
■ Spectral Distribution



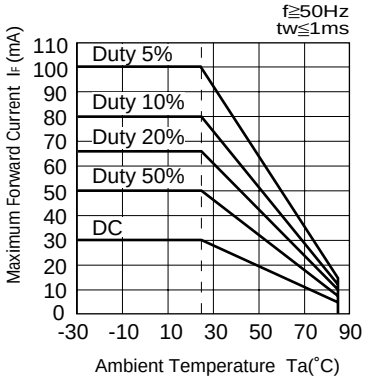
■ SUPER BRIGHT SURFACE MOUNT LED

FA1105W

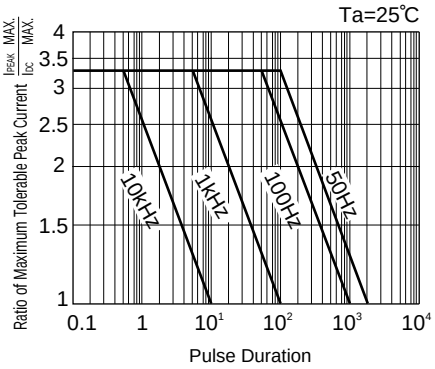
■ Power Dissipation vs. Ambient Temperature



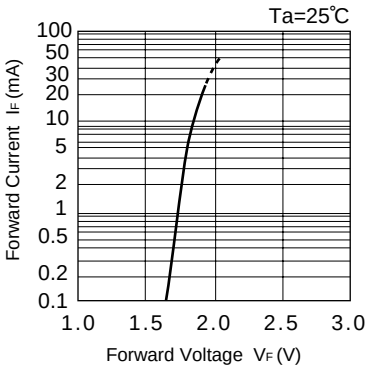
■ Ambient Temperature vs. Maximum Forward Current



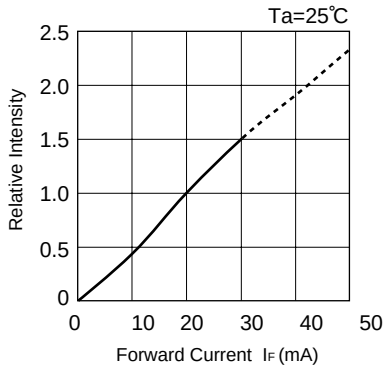
■ Pulse Duration vs.Maximum Tolerable Peak Current



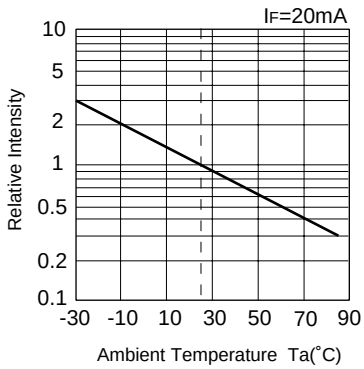
■ Forward Voltage vs. Forward Current



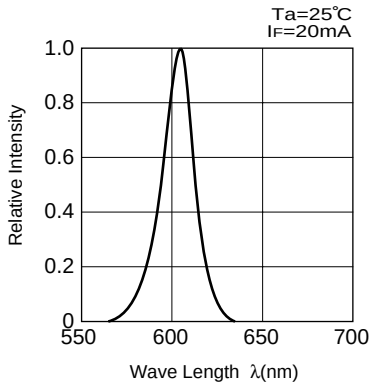
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



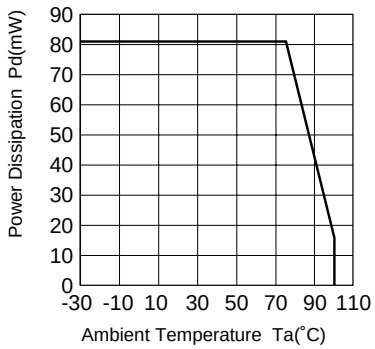
■ Spectral Distribution



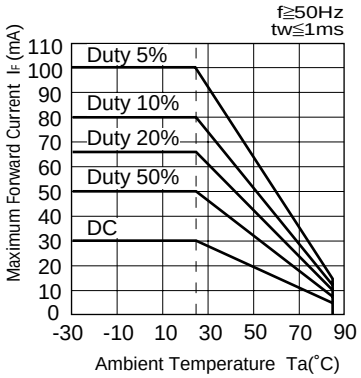
■ SUPER BRIGHT SURFACE MOUNT LED

FR1105W

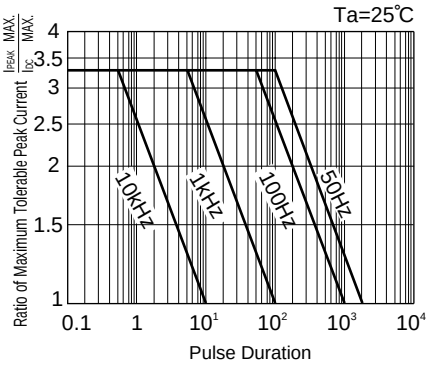
■ Power Dissipation vs. Ambient Temperature



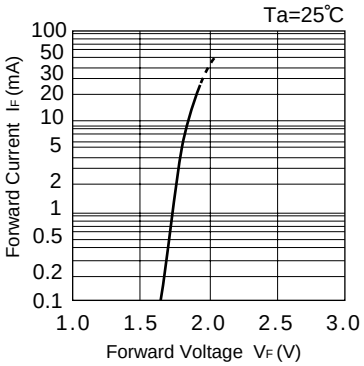
■ Ambient Temperature vs. Maximum Forward Current



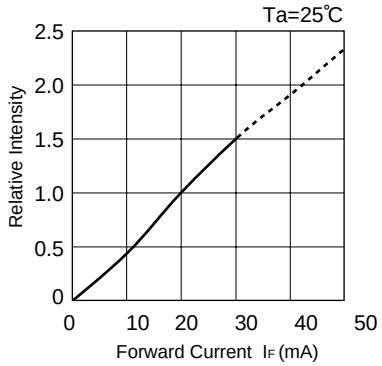
■ Pulse Duration vs.Maximum Tolerable Peak Current



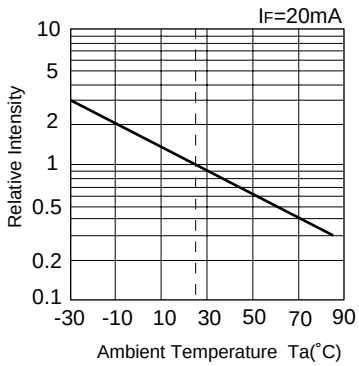
■ Forward Voltage vs. Forward Current



■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution