



■ Absolute Maximum Ratings

Ta = 25°C

		Blue	Blue Green	Green	Yellow	Orange	Red	Unit
		DB	DC	DG	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~+85	-40~+85	-40~+85	°C
Storage Temp.	Tstg	-40~+100	-40~+100	-40~+100	-40~+100	-40~+100	-40~+100	°C
Derating *	ΔIF	0.28	0.28	0.28	0.43	0.43	0.43	mA/°C

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

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

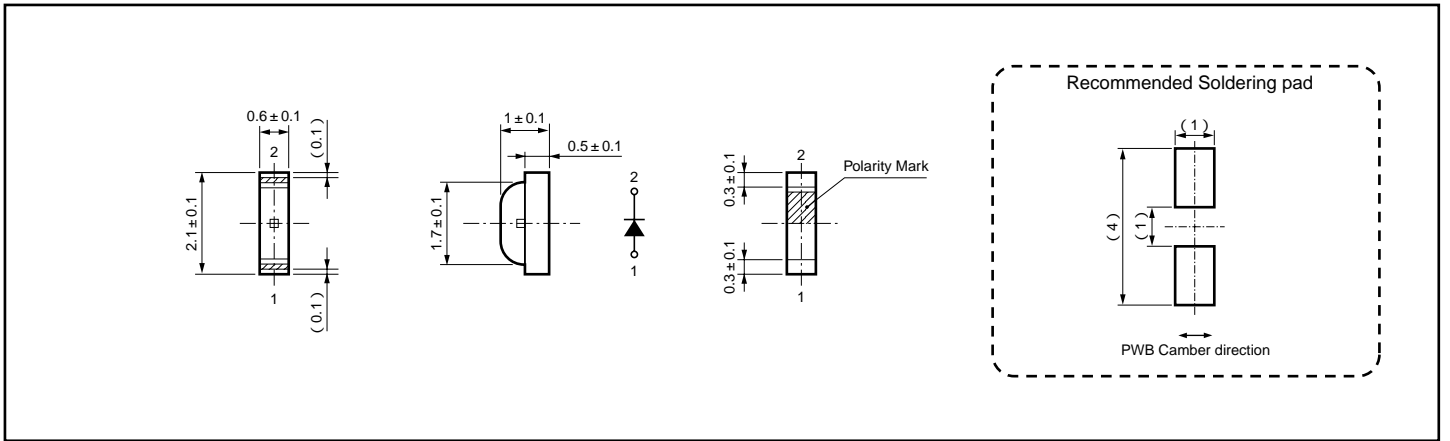
■ Electro-Optical Characteristics

Ta = 25°C

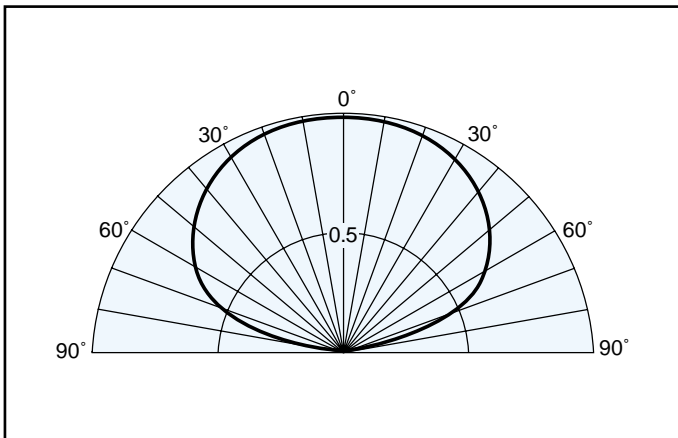
Part No.	Chip		Lens Color	Luminous Intensity			Wavelength				Forward Voltage			Reverse Current	
	Material	Emitted Color		MIN	TYP	IF	λ d	λ p	Δλ	TYP	MAX	IF	MAX	VR	
															IF
DB1113F	InGaN/SiC	Blue	8.5	14	10	470	467	26	10	3.3	3.8	10	100	5	
DC1113F	InGaN/SiC	Blue Green	24	34	10	508	502	30	10	3.3	3.8	10	100	5	
DG1113F	InGaN/SiC	Green	24	40	10	530	522	30	10	3.3	3.8	10	100	5	
FY1113F	AlGaInP	Yellow	25	65	20	590	592	15	20	1.9	2.4	20	100	5	
FA1113F	AlGaInP	Orange	25	65	20	605	609	15	20	1.9	2.4	20	100	5	
FR1113F	AlGaInP	Red	25	50	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

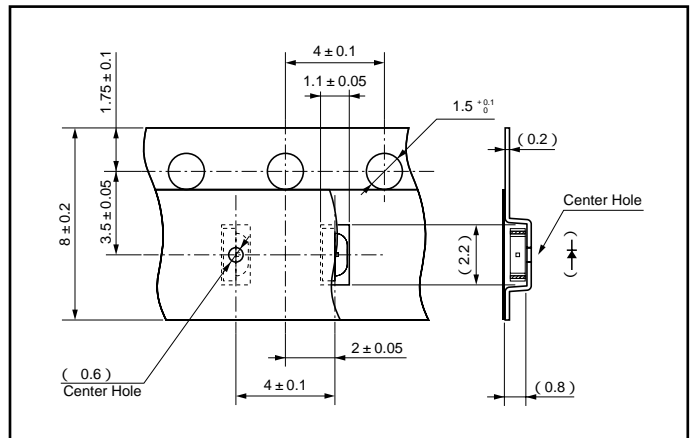


■ Spatial Distribution



■ Taping Specification

Unit : mm



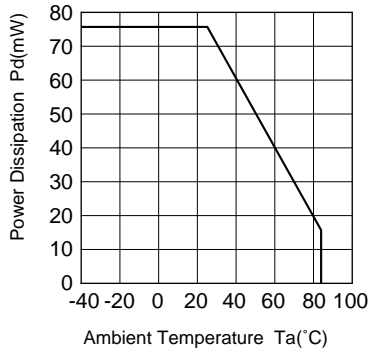
* Quantity 4,000 pcs/Reel



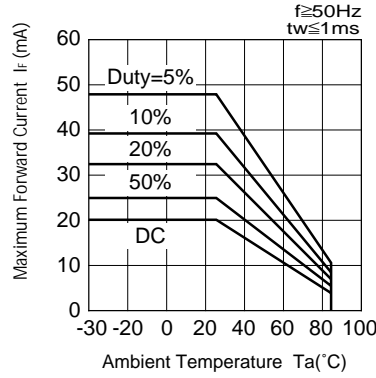
■ SUPER BRIGHT SURFACE MOUNT LED

DG1113F

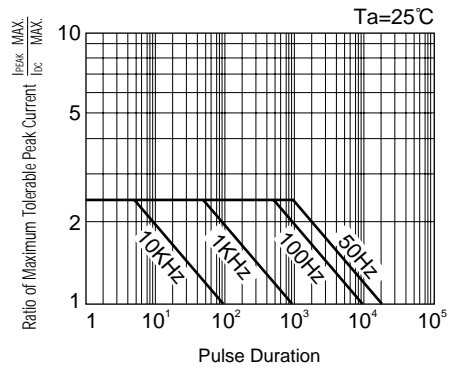
■ Power Dissipation vs. Ambient Temperature



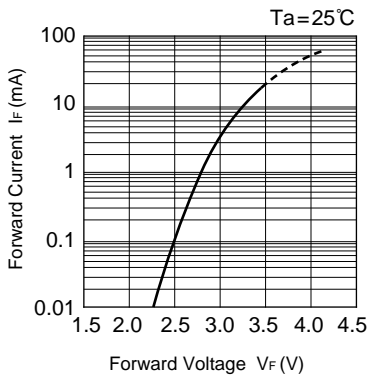
■ Ambient Temperature vs. Maximum Forward Current



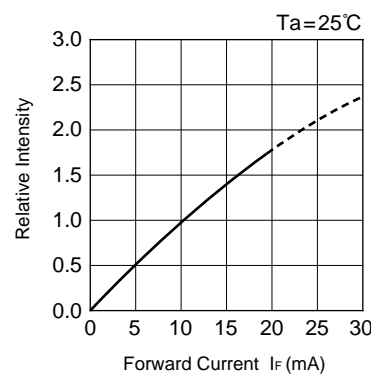
■ Pulse Duration vs. Maximum Tolerable Peak Current



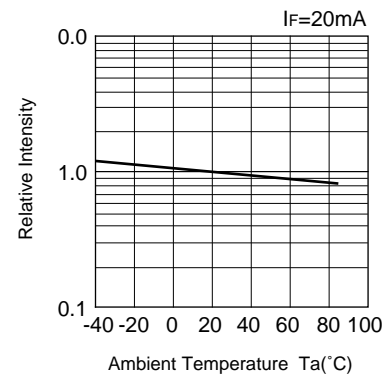
■ Forward Voltage vs. Forward Current



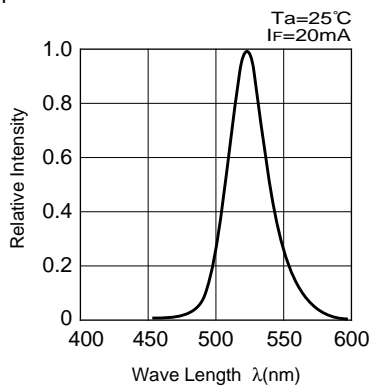
■ Forward Current vs. Relative Intensity



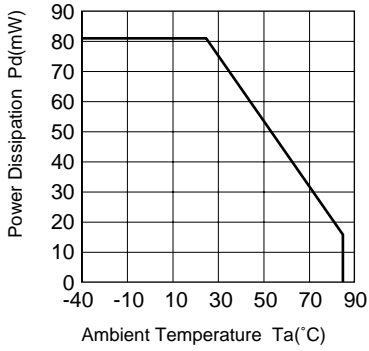
■ Ambient Temperature vs. Relative Intensity



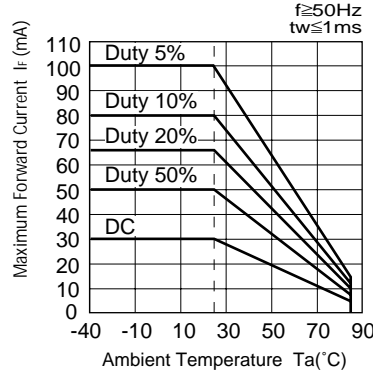
■ Spectral Distribution



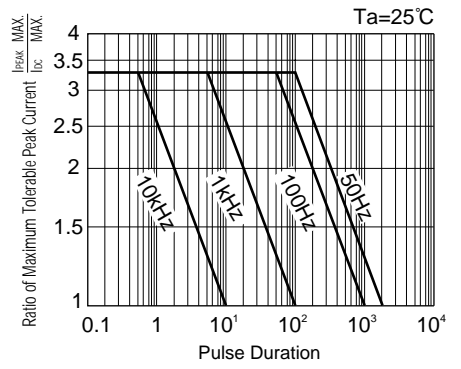
■ Power Dissipation vs. Ambient Temperature



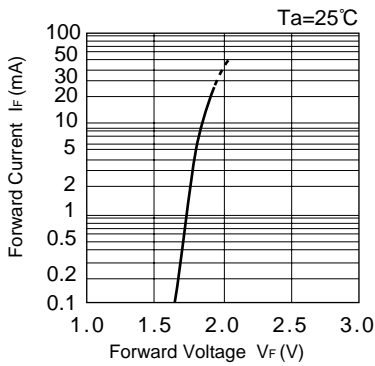
■ Ambient Temperature vs. Maximum Forward Current



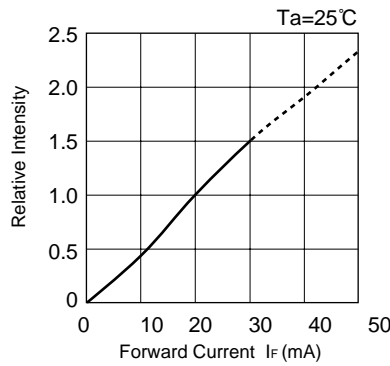
■ Pulse Duration vs. Maximum Tolerable Peak Current



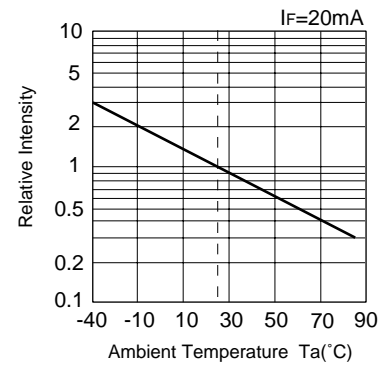
■ Forward Voltage vs. Forward Current



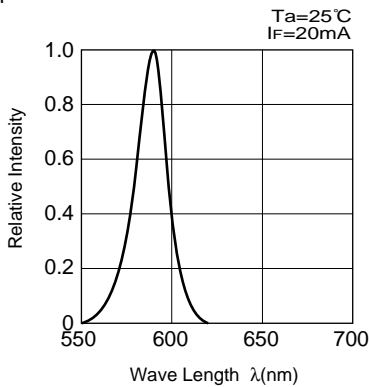
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

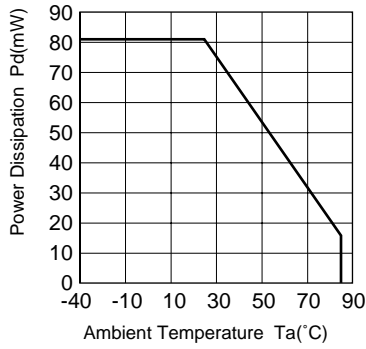




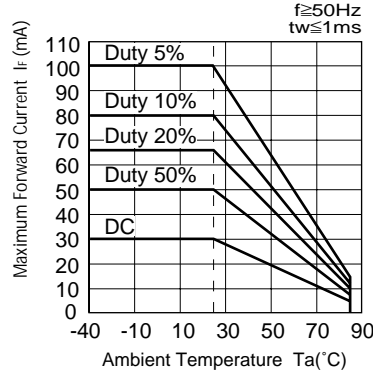
■ SUPER BRIGHT SURFACE MOUNT LED

FR1113F

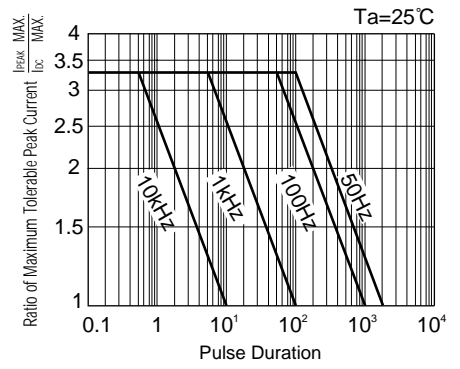
■ Power Dissipation vs. Ambient Temperature



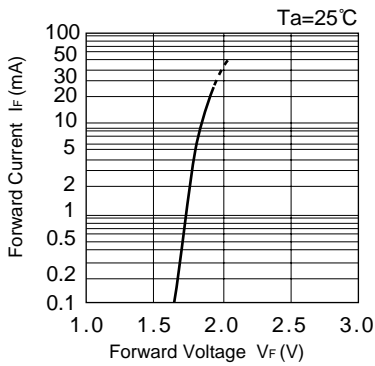
■ Ambient Temperature vs. Maximum Forward Current



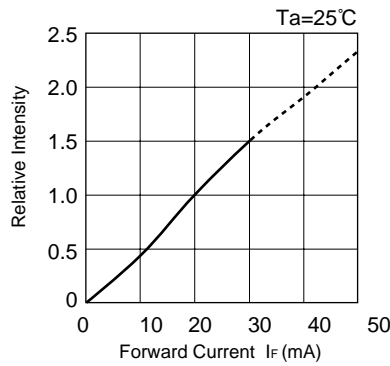
■ Pulse Duration vs. Maximum Tolerable Peak Current



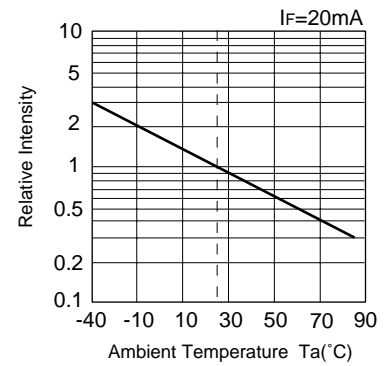
■ Forward Voltage vs. Forward Current



■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

