



Right Angle Type 3.0x2.0mm

■ Absolute Maximum Ratings

Ta = 25°C

		Blue		Yellow		Blue		Orange		Blue		Red		Blue Green		Yellow		Blue Green		Orange		Blue Green		Red		Green		Yellow		Green		Orange		Green		Red		Units
		FYDB	FADB	FRDB	FYDC	FADC	FRDC	FYDG	FADG	FRDG																												
Power Dissipation	Pd	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	76	81	mW		
Forward Current	IF	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	20	30	mA		
Peak Forward Current	IFM	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	48	100	mA		
Reverse Voltage	VR	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	V			
Operating Temp.	Topr	-40~+85		-40~+85		-40~+85		-40~+85		-40~+85		-40~+85		-40~+85		-40~+85		-40~+85		-40~+85		-40~+85		-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		-40~+100		-40~+100		-40~+100		-40~+100		-40~+100		-40~+100		-40~+100		-40~+100		-40~+100		-40~+100		-40~+100		°C		
Derating *	ΔIF	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	0.28	0.43	mA/°C				

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

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

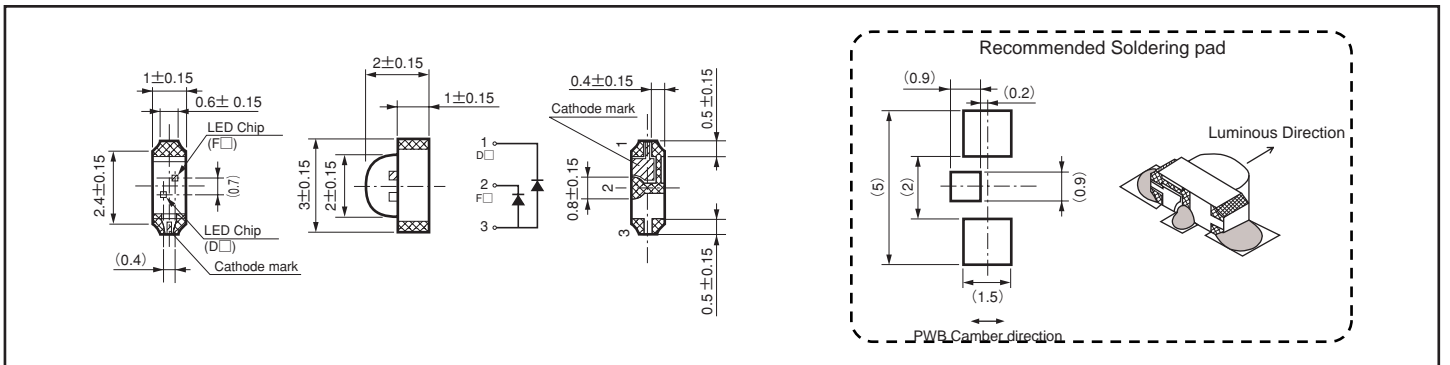
■ Electro-Optical Characteristics

Ta = 25°C

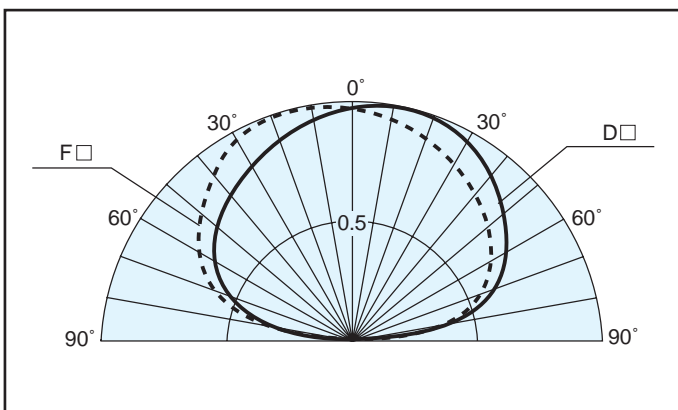
Part No.	Chip		Lens Color	Luminous Intensity			Wavelength			Forward Voltage			Reverse Current	
	Material	Emitted Color		Iv			λ d			VF			IR	
				MIN	TYP	IF	TYP	λ p	Δ λ	IF	TYP	MAX	IF	MAX
FYDB1211F	InGaN	Blue	8.5	14	10	470	467	26	10	3.3	3.8	10	100	5
	AlGaInP	Yellow	10	24	10	590	592	15	20	1.9	2.4	20	100	5
FADB1211F	InGaN	Blue	8.5	14	10	470	467	26	10	3.3	3.8	10	100	5
	AlGaInP	Orange	14	34	10	605	609	15	20	1.9	2.4	20	100	5
FRDB1211F	InGaN	Blue	8.5	14	10	470	467	26	10	3.3	3.8	10	100	5
	AlGaInP	Red	10	24	10	626	635	15	20	1.9	2.4	20	100	5
FYDC1211F	InGaN	Blue Green	24	34	10	508	502	30	10	3.3	3.8	10	100	5
	AlGaInP	Yellow	10	24	10	590	592	15	20	1.9	2.4	20	100	5
FADC1211F	InGaN	Blue Green	24	34	10	508	502	30	10	3.3	3.8	10	100	5
	AlGaInP	Orange	14	34	10	605	609	15	20	1.9	2.4	20	100	5
FRDC1211F	InGaN	Blue Green	24	34	10	508	502	30	10	3.3	3.8	10	100	5
	AlGaInP	Red	10	24	10	626	635	15	20	1.9	2.4	20	100	5
FYDG1211F	InGaN	Green	24	40	10	530	522	30	10	3.3	3.8	10	100	5
	AlGaInP	Yellow	10	24	10	590	592	15	20	1.9	2.4	20	100	5
FADG1211F	InGaN	Green	24	40	10	530	522	30	10	3.3	3.8	10	100	5
	AlGaInP	Orange	14	34	10	605	609	15	20	1.9	2.4	20	100	5
FRDG1211F	InGaN	Green	24	40	10	530	522	30	10	3.3	3.8	10	100	5
	AlGaInP	Red	10	24	10	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

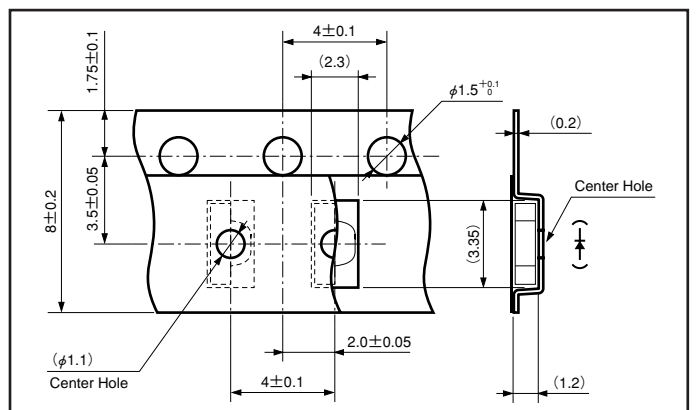


■ Spatial Distribution



■ Taping Specification

Unit : mm



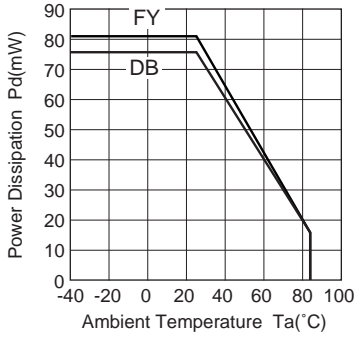
* Quantity 3,000 pcs/Reel



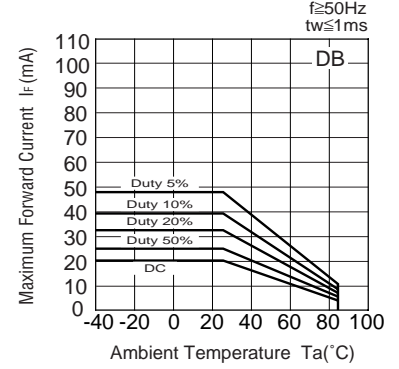
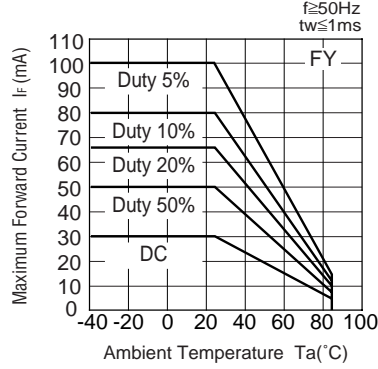
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FYDB1211F

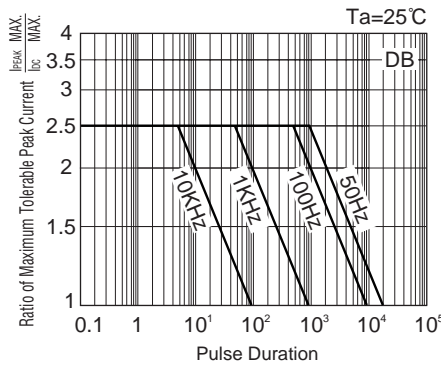
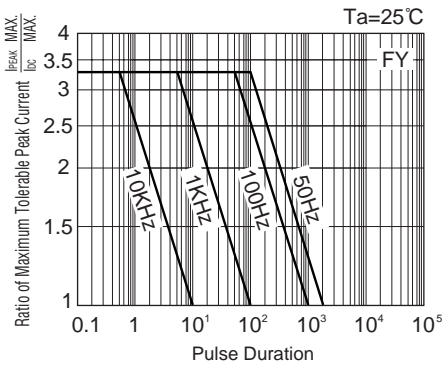
■ Power Dissipation vs. Ambient Temperature



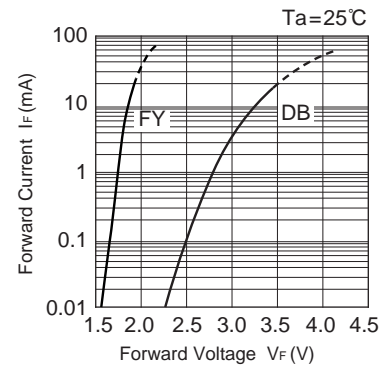
■ Ambient Temperature vs. Maximum Forward Current



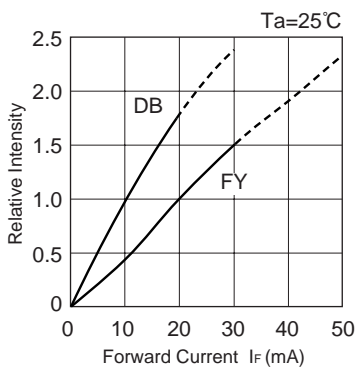
■ Pulse Duration vs. Maximum Tolerable Peak Current



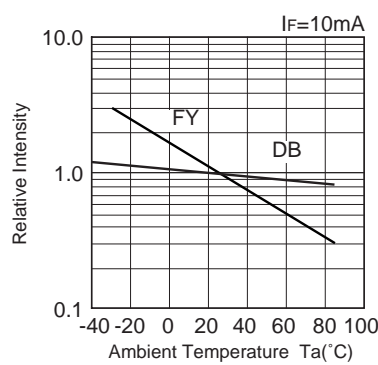
■ Forward Voltage vs. Forward Current



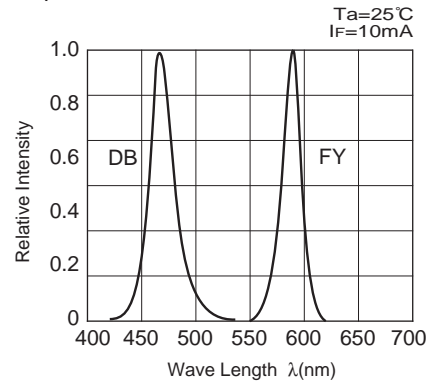
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

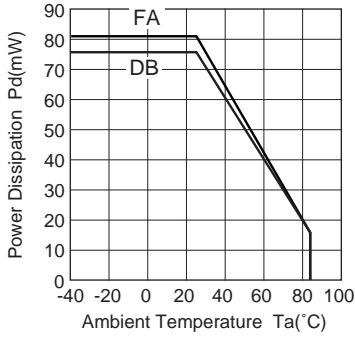




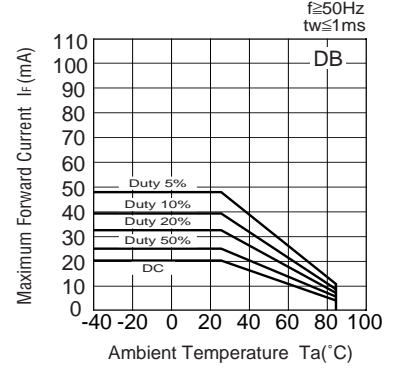
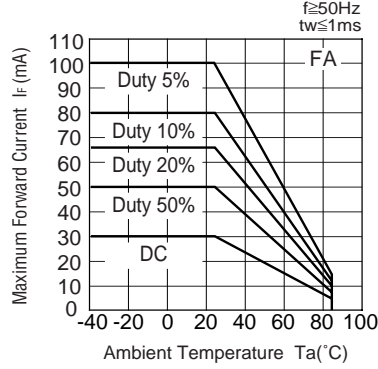
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FADB1211F

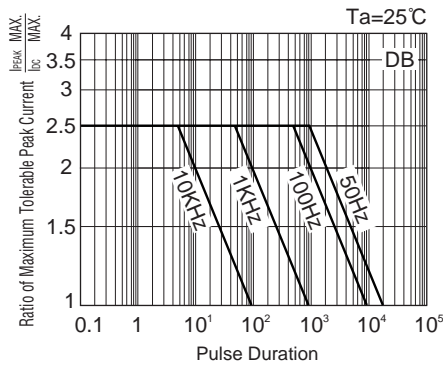
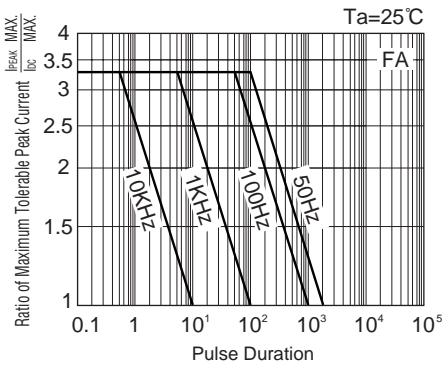
■ Power Dissipation vs. Ambient Temperature



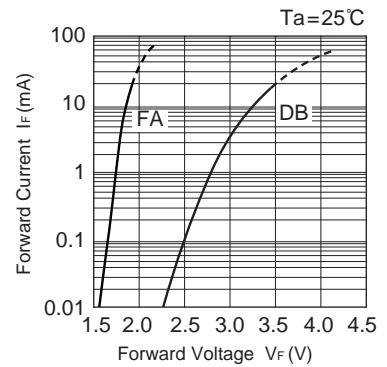
■ Ambient Temperature vs. Maximum Forward Current



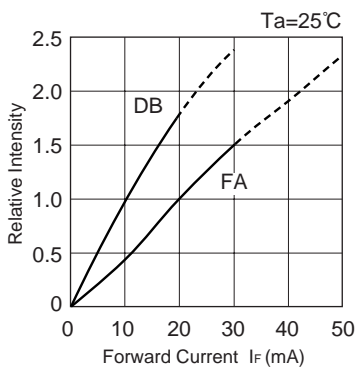
■ Pulse Duration vs. Maximum Tolerable Peak Current



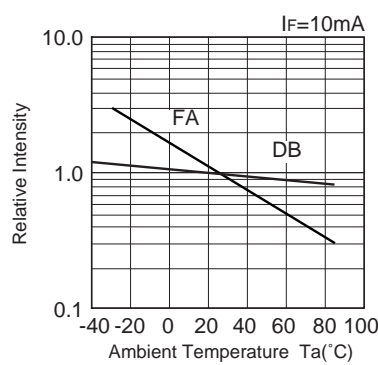
■ Forward Voltage vs. Forward Current



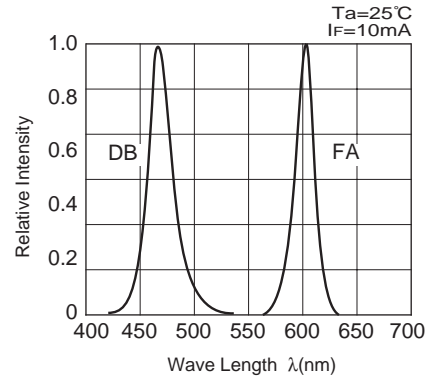
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

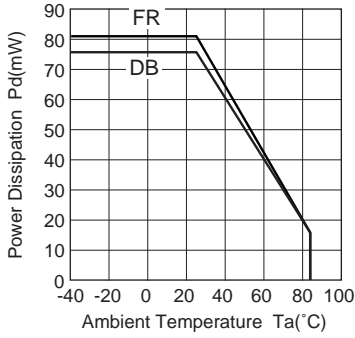




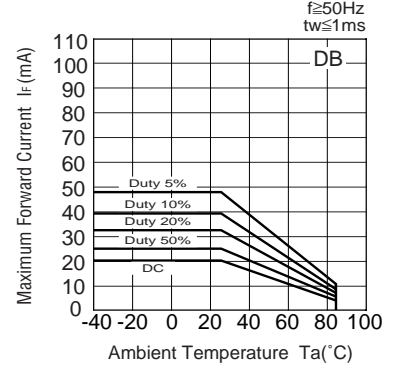
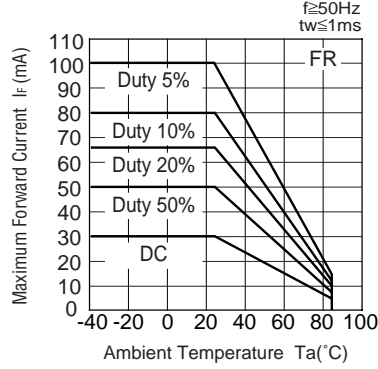
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FRDB1211F

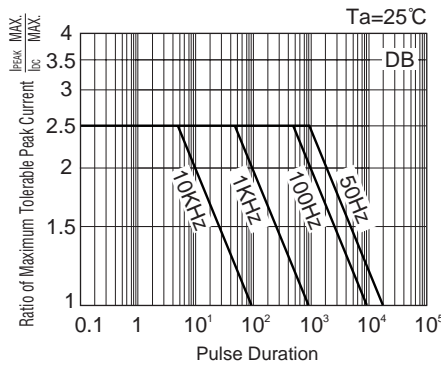
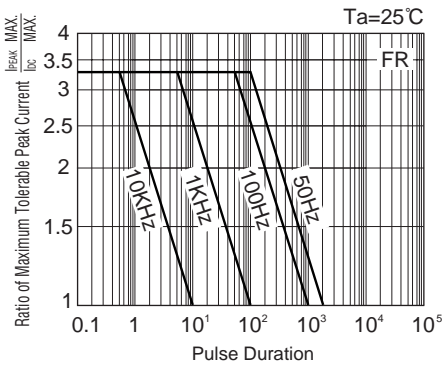
■ Power Dissipation vs. Ambient Temperature



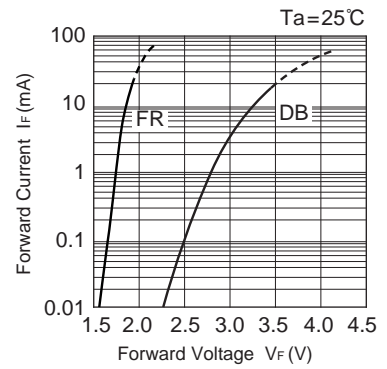
■ Ambient Temperature vs. Maximum Forward Current



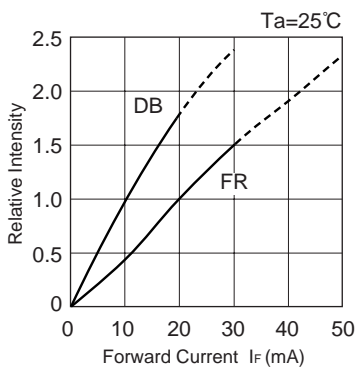
■ Pulse Duration vs. Maximum Tolerable Peak Current



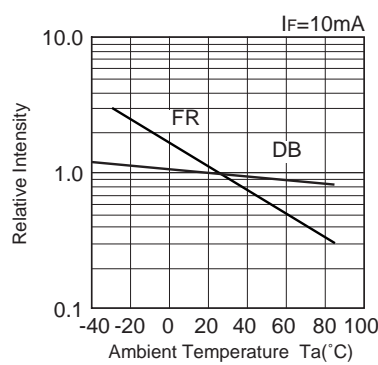
■ Forward Voltage vs. Forward Current



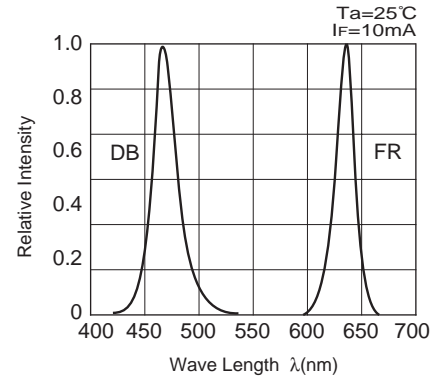
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

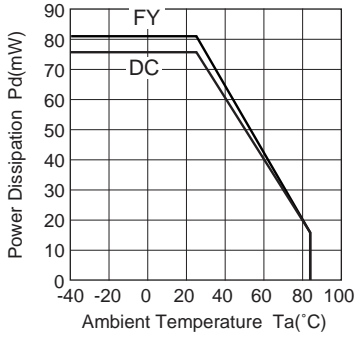




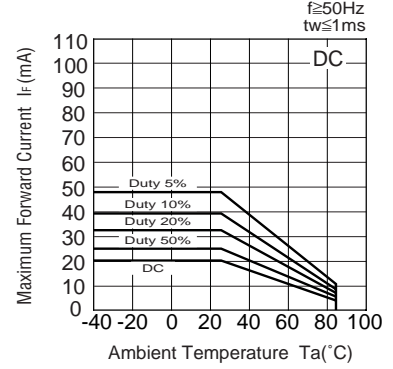
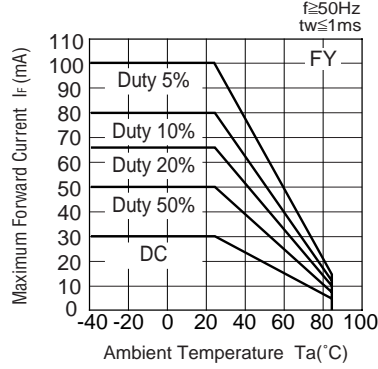
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FYDC1211F

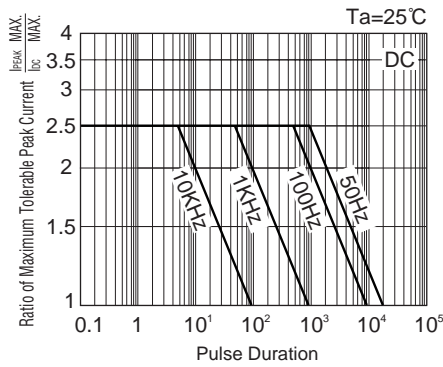
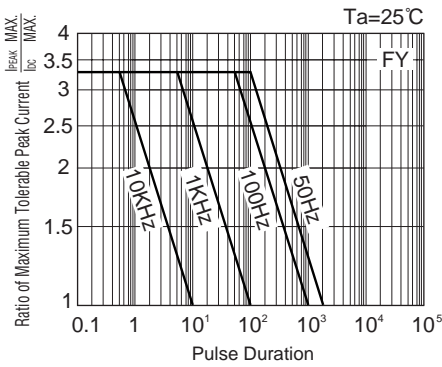
■ Power Dissipation vs. Ambient Temperature



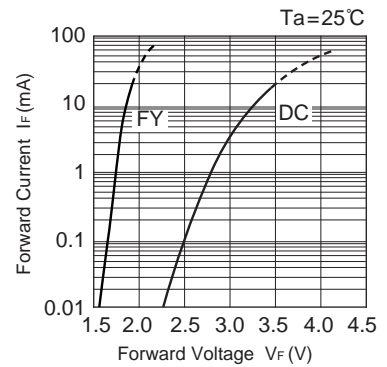
■ Ambient Temperature vs. Maximum Forward Current



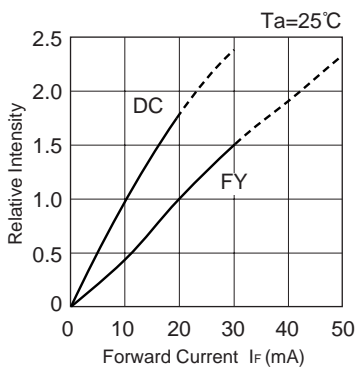
■ Pulse Duration vs. Maximum Tolerable Peak Current



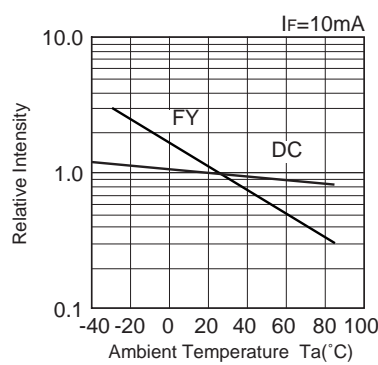
■ Forward Voltage vs. Forward Current



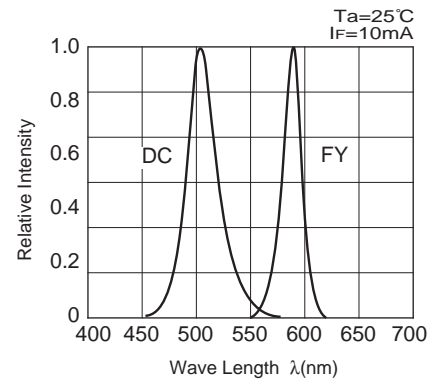
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

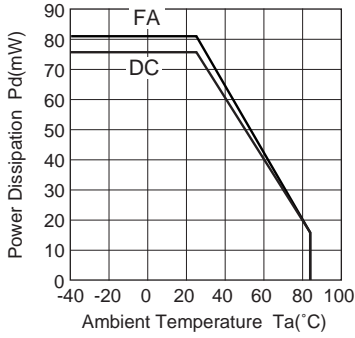




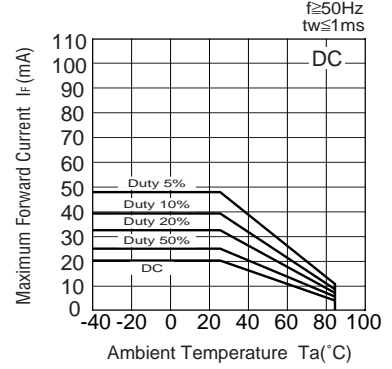
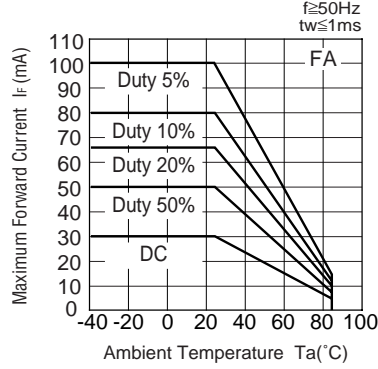
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FADC1211F

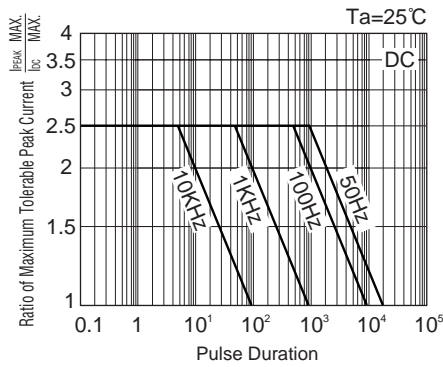
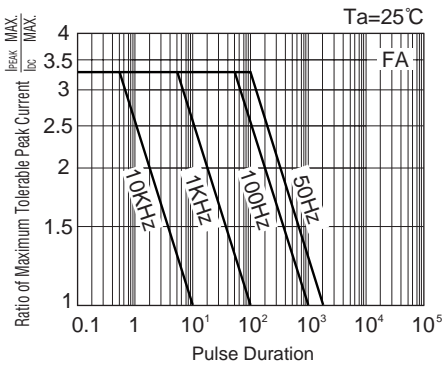
■ Power Dissipation vs. Ambient Temperature



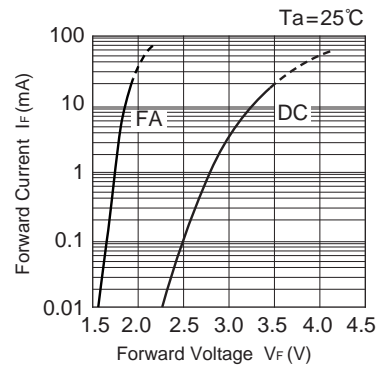
■ Ambient Temperature vs. Maximum Forward Current



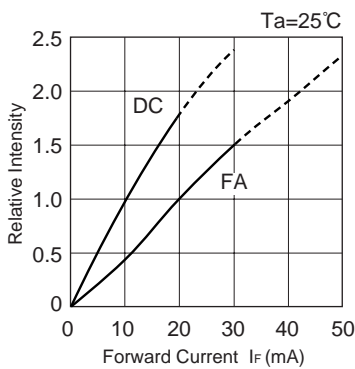
■ Pulse Duration vs. Maximum Tolerable Peak Current



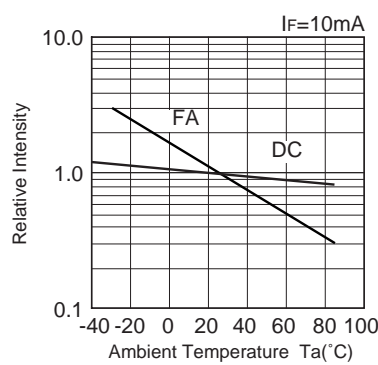
■ Forward Voltage vs. Forward Current



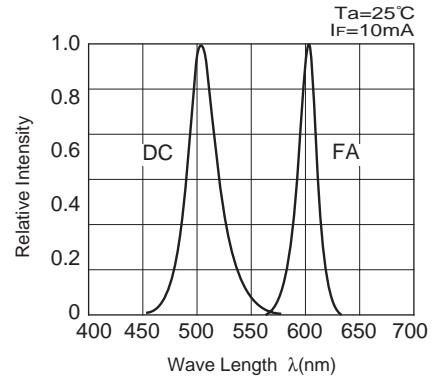
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

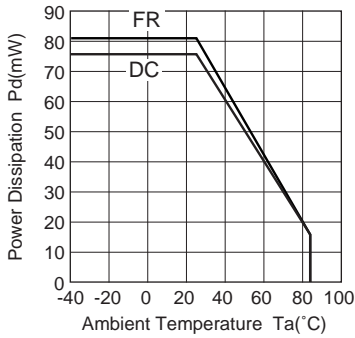




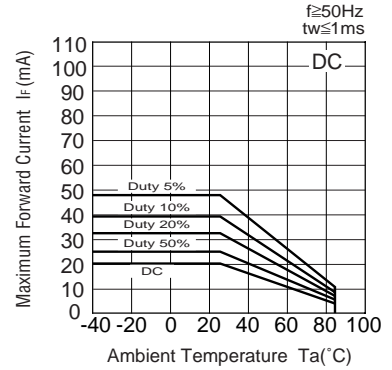
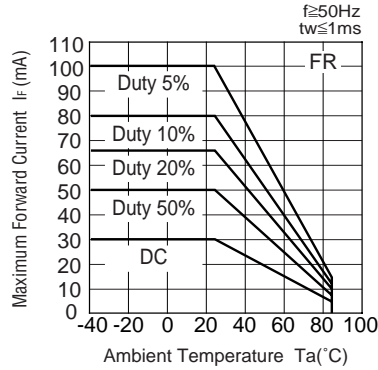
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FRDC1211F

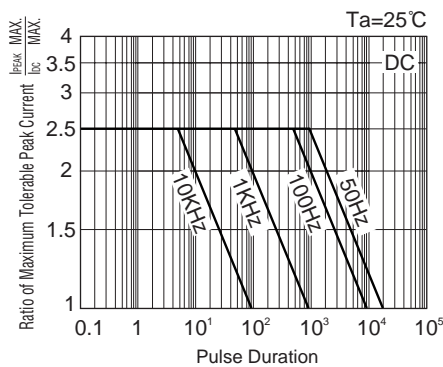
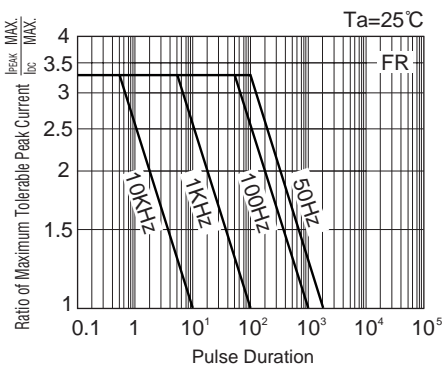
■ Power Dissipation vs. Ambient Temperature



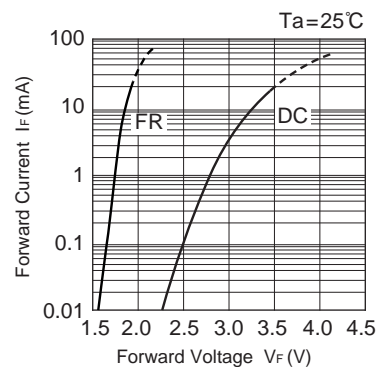
■ Ambient Temperature vs. Maximum Forward Current



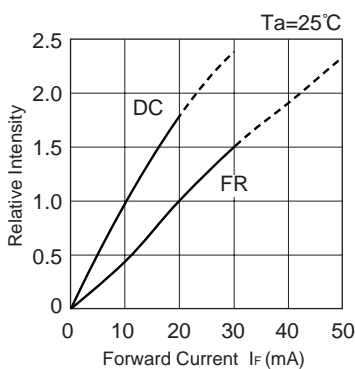
■ Pulse Duration vs. Maximum Tolerable Peak Current



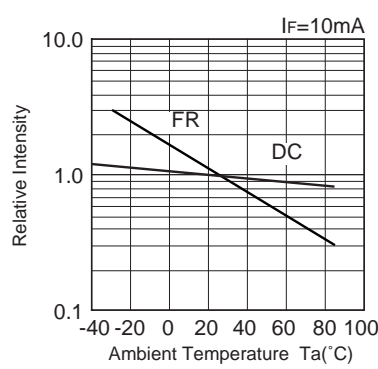
■ Forward Voltage vs. Forward Current



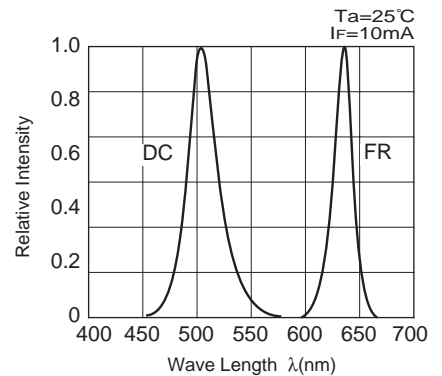
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

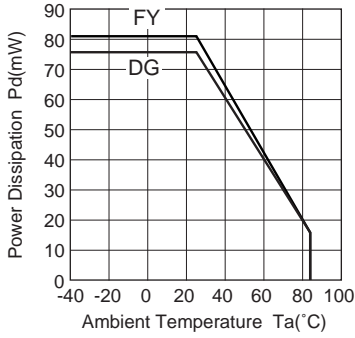




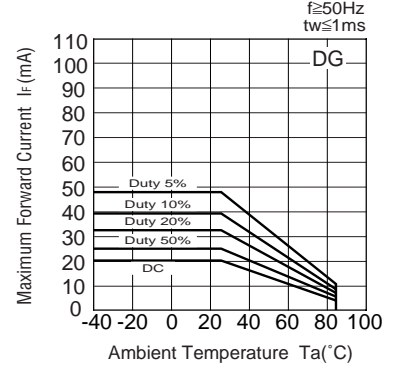
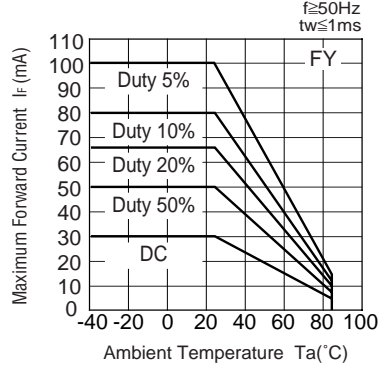
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FYDG1211F

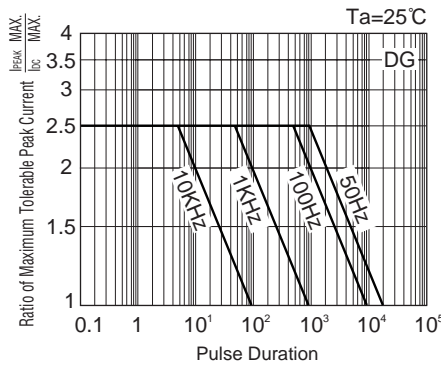
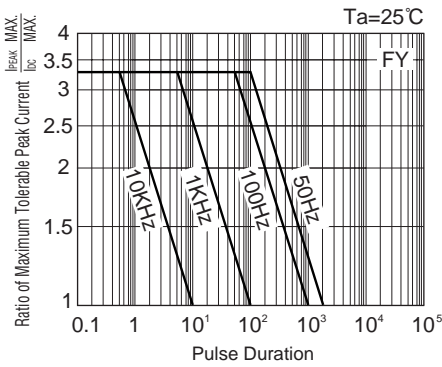
■ Power Dissipation vs. Ambient Temperature



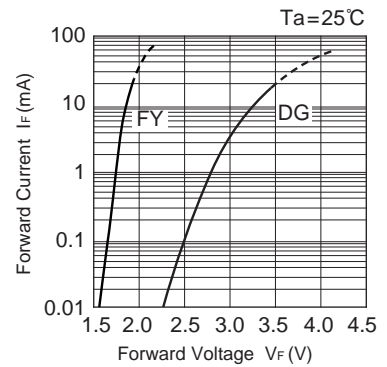
■ Ambient Temperature vs. Maximum Forward Current



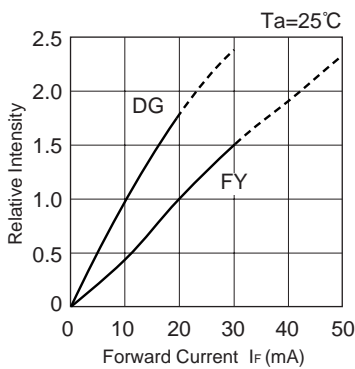
■ Pulse Duration vs. Maximum Tolerable Peak Current



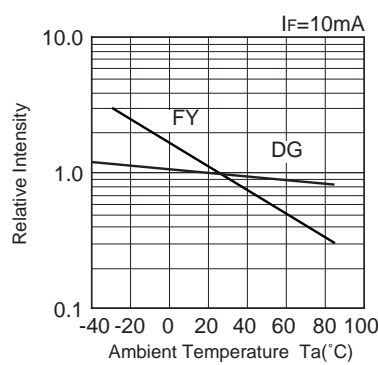
■ Forward Voltage vs. Forward Current



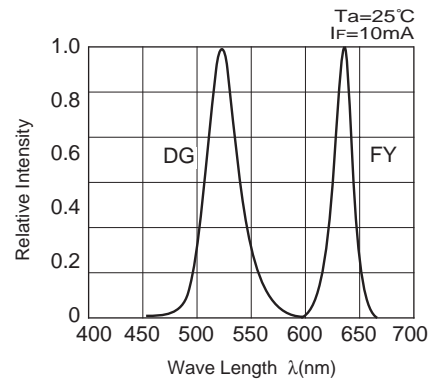
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

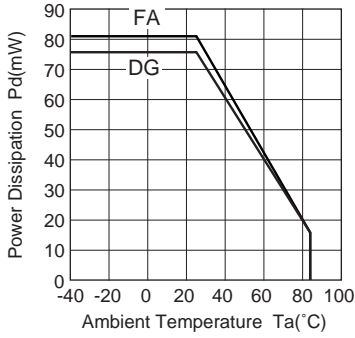




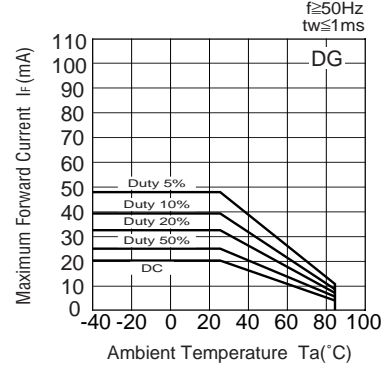
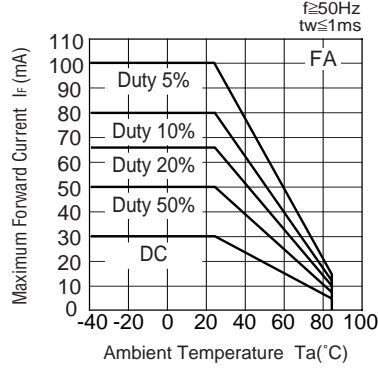
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FADG1211F

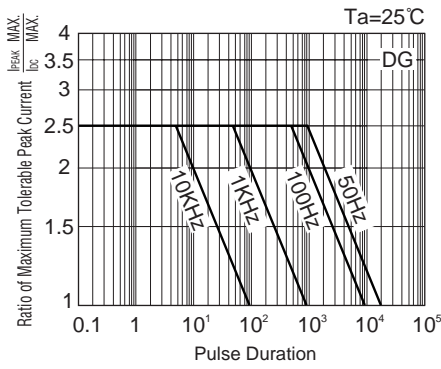
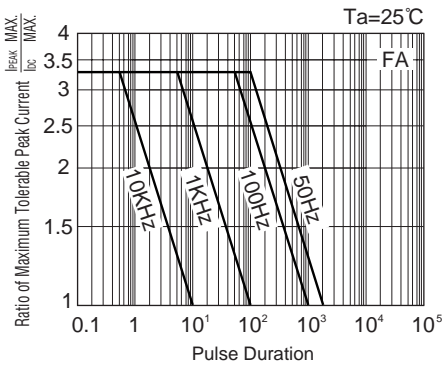
■ Power Dissipation vs. Ambient Temperature



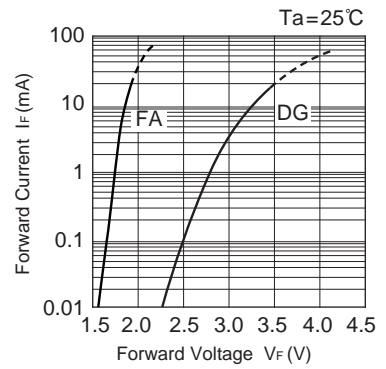
■ Ambient Temperature vs. Maximum Forward Current



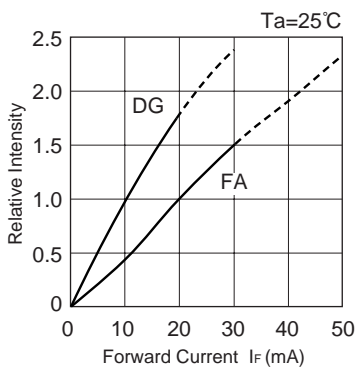
■ Pulse Duration vs. Maximum Tolerable Peak Current



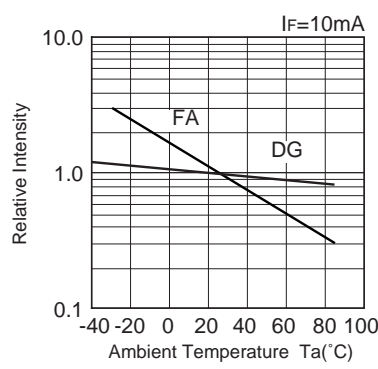
■ Forward Voltage vs. Forward Current



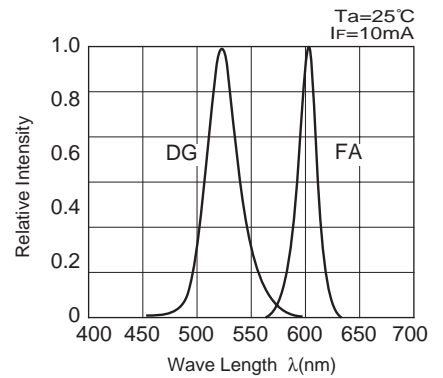
■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

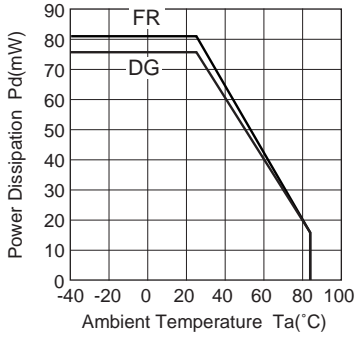




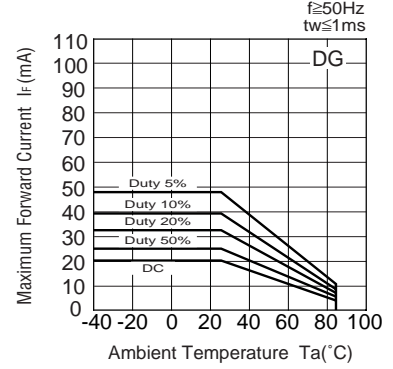
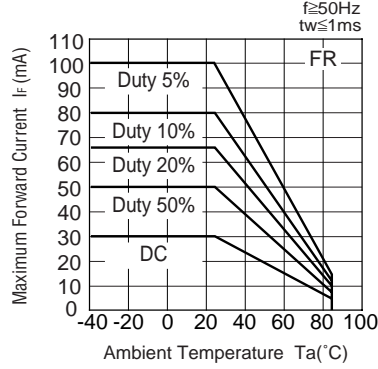
■ HIGH BRIGHTNESS TYPE SURFACE MOUNT LED

FRDG1211F

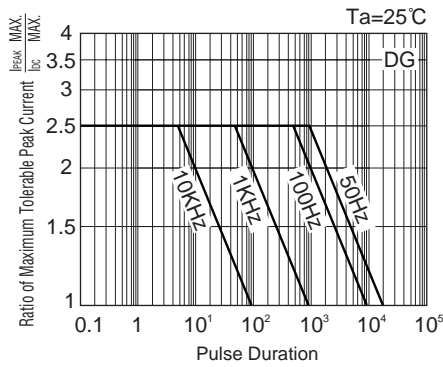
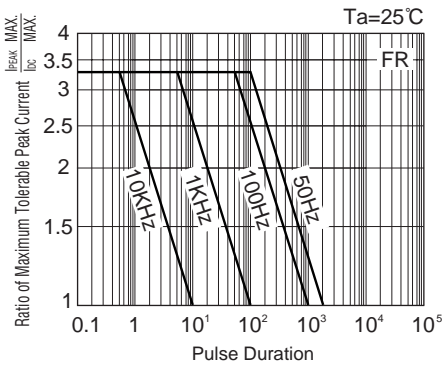
■ Power Dissipation vs. Ambient Temperature



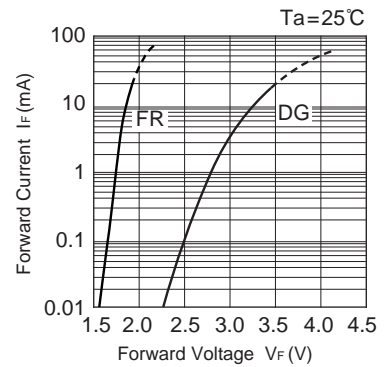
■ Ambient Temperature vs. Maximum Forward Current



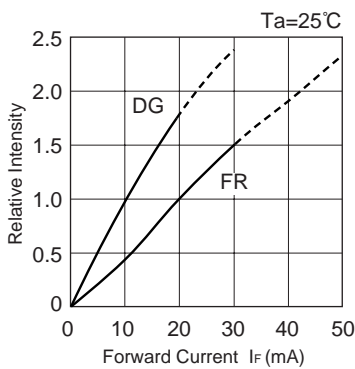
■ Pulse Duration vs. Maximum Tolerable Peak Current



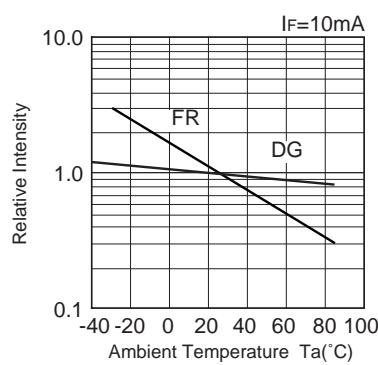
■ Forward Voltage vs. Forward Current



■ Forward Current vs. Relative Intensity



■ Ambient Temperature vs. Relative Intensity



■ Spectral Distribution

