

STANLEY

■ HI-SUPER BRIGHT LED

5305S / 5365S Series



Ø 5mm Round Shape Type

■ Absolute Maximum Ratings

Ta = 25°C

		Blue	Blue Green	Green	Yellow		Orange		Red		Unit
Power Dissipation	Pb	DB	DC	DG	EFY	FY	EFA	FA	EFR	FR	
Forward Current	IF	25	25	25	50	50	50	50	50	50	mA
Peak Forward Current	IFM	60	60	60	200	200	200	200	200	200	mA
Reverse Voltage	VR	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	°C
Storage Temp.	Tstg	-40~+100	-40~+100	-40~+100	-40~+100	-40~+100	-40~+100	-40~+100	-40~+100	-40~+100	°C
Derating *	ΔIF	0.33	0.33	0.33	0.67	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

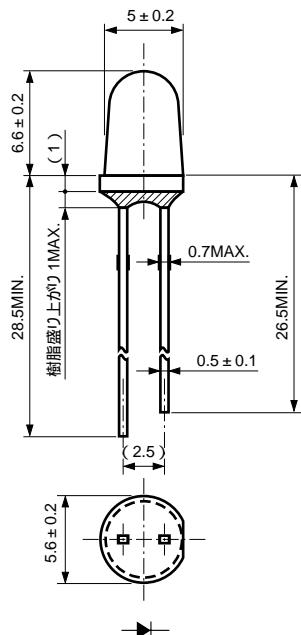
■ Electro-Optical Characteristics

Ta = 25°C

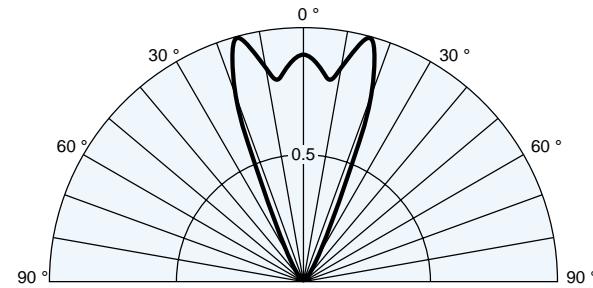
Part No.	Chip		Lens	Luminous Intensity Iv			Wavelength		Forward Voltage VF			Reverse Current IR	Capacitance Co		
	Material	Emitted Color		MIN	TYP	IF	λ d TYP	Δλ TYP	IF	TYP	MAX	IF			
DB5305S	InGaN/SiC	Blue	Clear	120	240	20	470	26	20	2.5	4.0	20	100	5	40
DC5305S	InGaN/SiC	Blue Green		400	800	20	505	30	20	2.5	4.0	20	100	5	40
DG5305S	InGaN/SiC	Green		400	800	20	525	30	20	2.5	4.0	20	100	5	40
EFY5365S	AlGaNp	Yellow		700	1,000	20	590	15	20	1.9	2.4	20	100	5	40
FY5365S		Pastel Yellow		250	500	20									
EFA5365S	AlGaNp	Orange		820	1,160	20	605	15	20	1.9	2.4	20	100	5	40
FA5365S		Pastel Orange		290	580	20									
EFR5365S	AlGaNp	Red		620	880	20	626	15	20	1.9	2.4	20	100	5	40
FR5365S		Pastel Red		220	880	20									
Units				mcd	mcd	mA	nm	nm	mA	V	V	mA	μA	V	pF

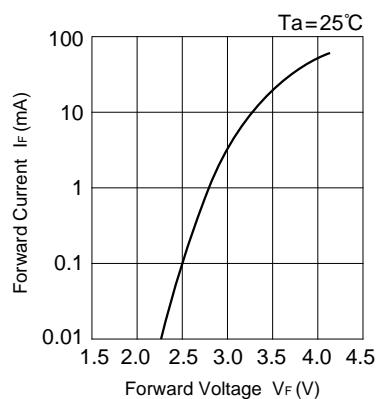
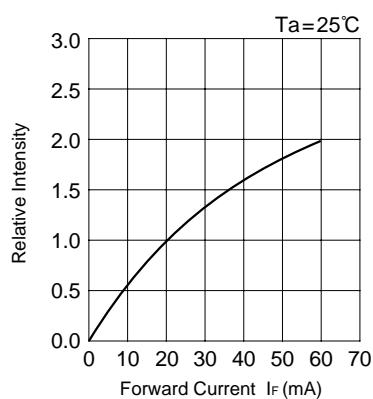
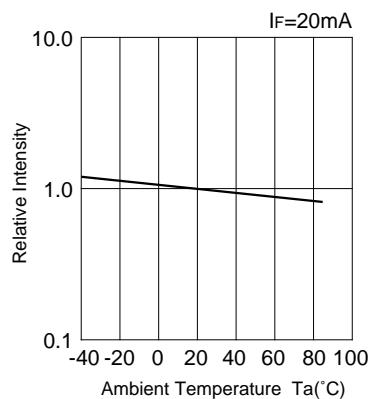
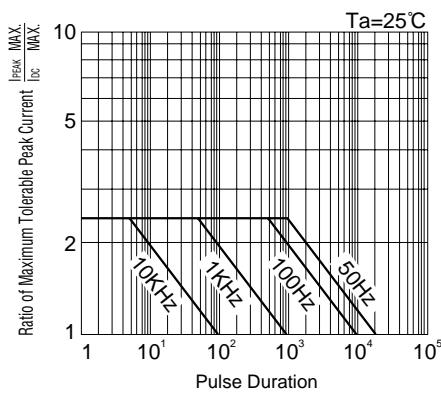
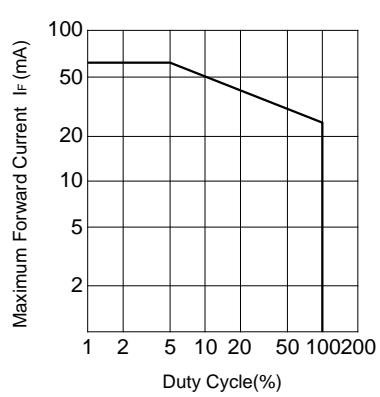
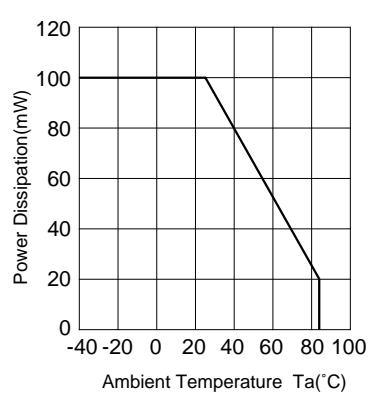
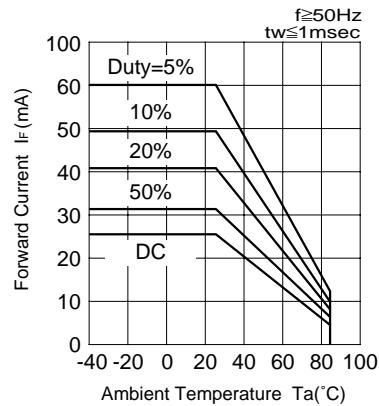
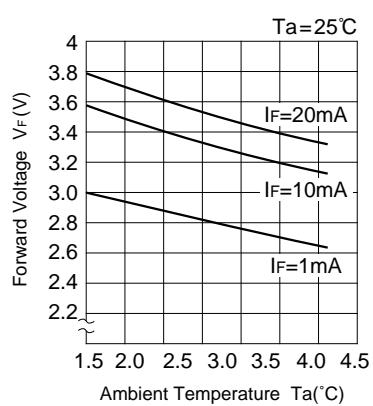
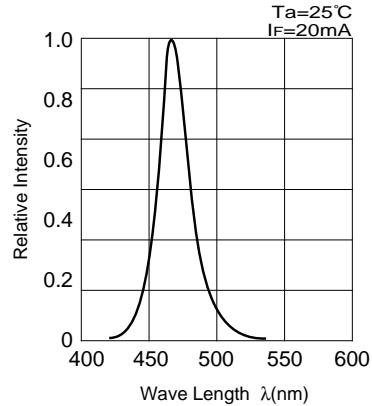
■ Package Dimensions

Unit : mm



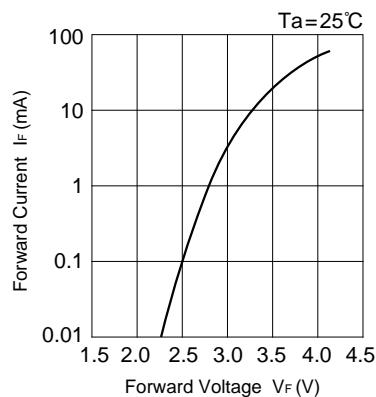
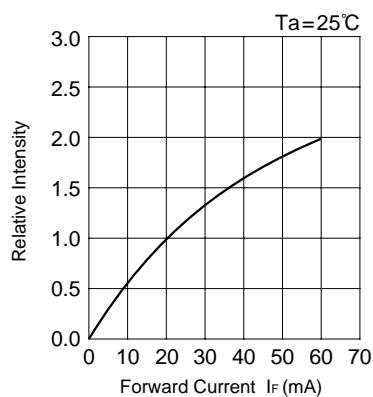
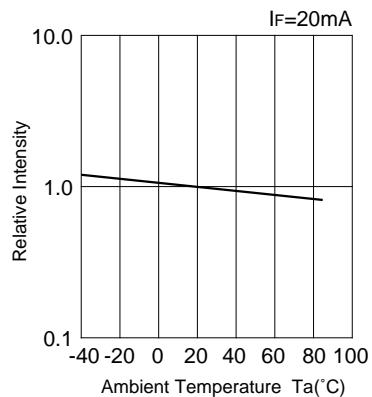
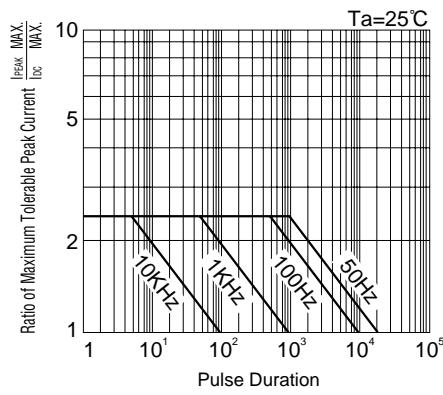
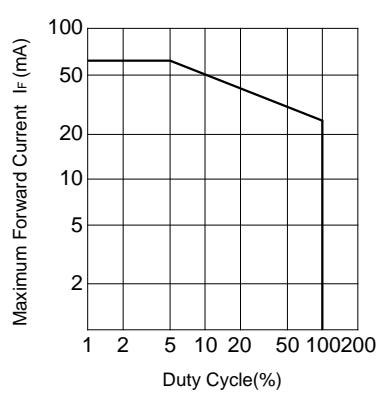
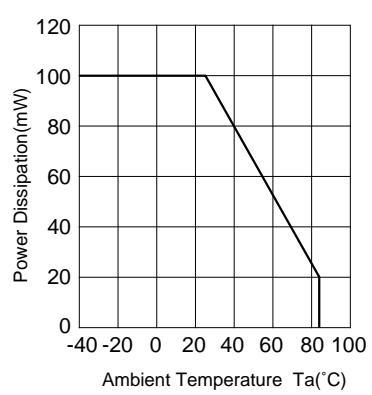
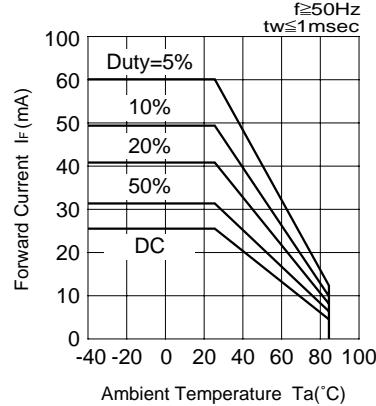
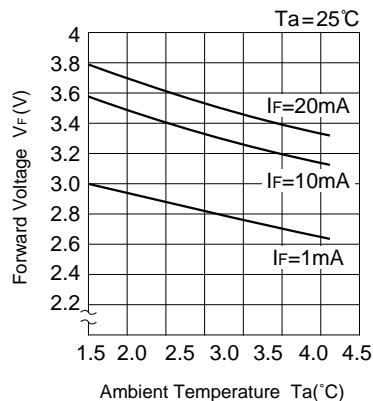
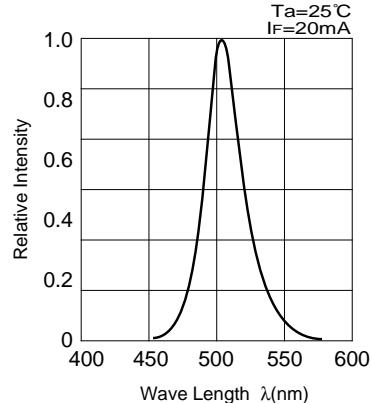
■ Spatial Distribution



STANLEY**HI-SUPER BRIGHT LED****DB 5305S****■ 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**

STANLEY**HI-SUPER BRIGHT LED**

DC 5305S

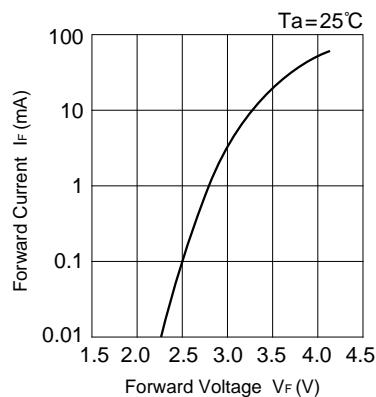
■ Forward Voltage vs. Forward Current**■ Forward Current vs. Relative Intensity****■ Ambient Temperature vs. Intensity****■ Pulse Duration vs. Maximum Tolerable Peak Current****■ Duty Cycle vs. Maximum Forward Current****■ Power Dissipation vs. Ambient Temperature****■ Ambient Temperature vs. Maximum Forward Current****■ Forward Voltage vs. Ambient Temperature****■ Spectral Distribution**

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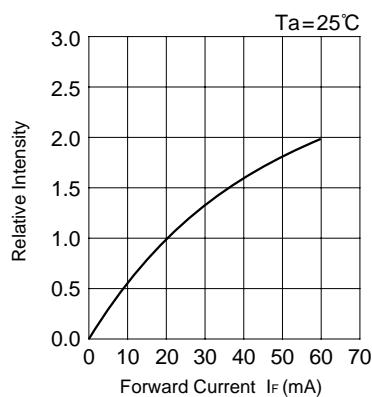
HI-SUPER BRIGHT LED

DG 5305S

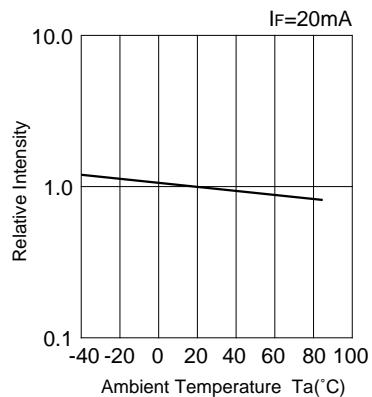
■ Forward Voltage vs. Forward Current



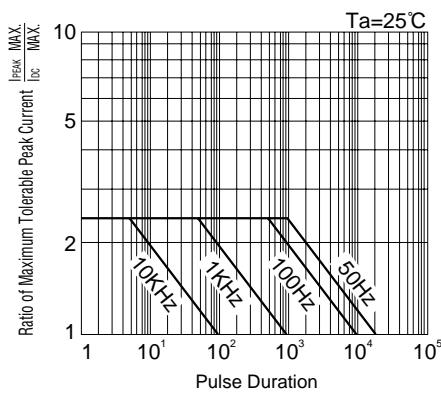
■ Forward Current vs. Relative Intensity



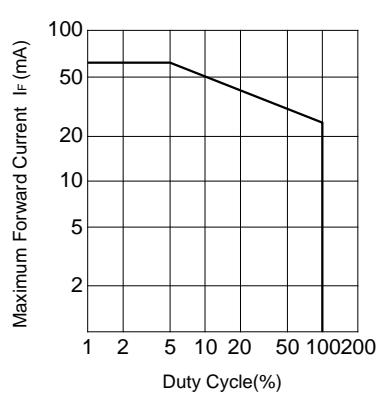
■ Ambient Temperature vs. Intensity



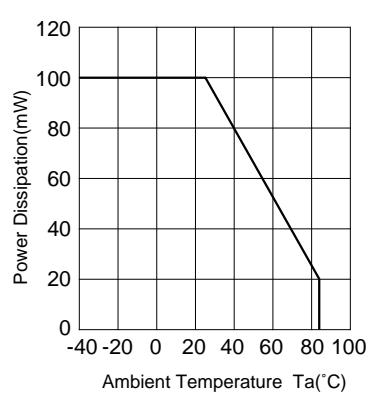
■ Pulse Duration vs. Maximum Tolerable Peak Current



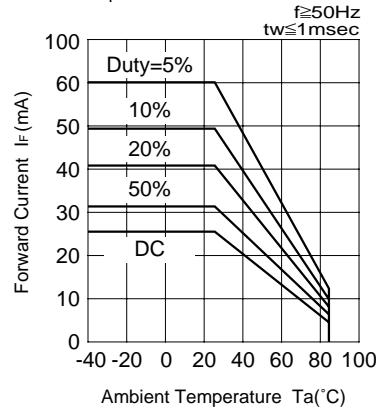
■ Duty Cycle vs. Maximum Forward Current



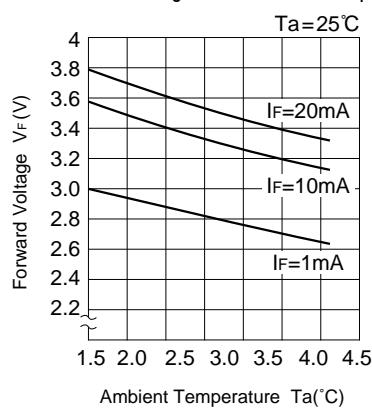
■ Power Dissipation vs. Ambient Temperature



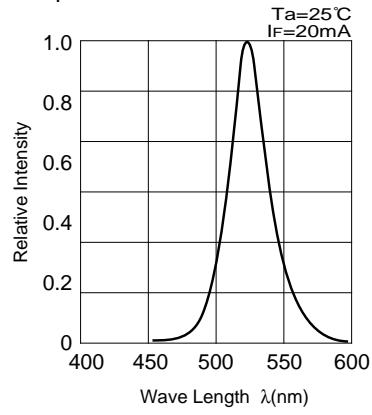
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

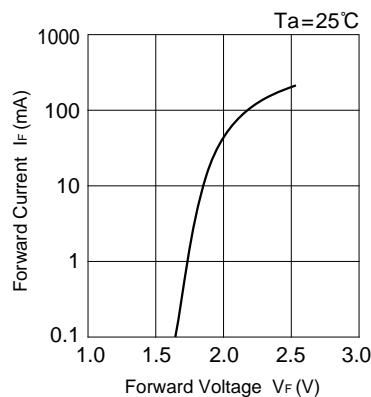


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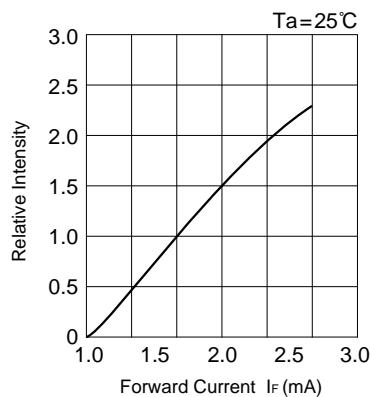
HI-SUPER BRIGHT LED

EFY / FY 5365S

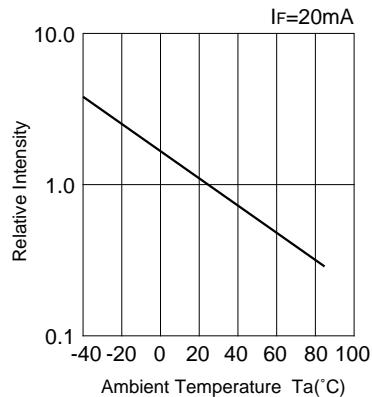
■ Forward Voltage vs. Forward Current



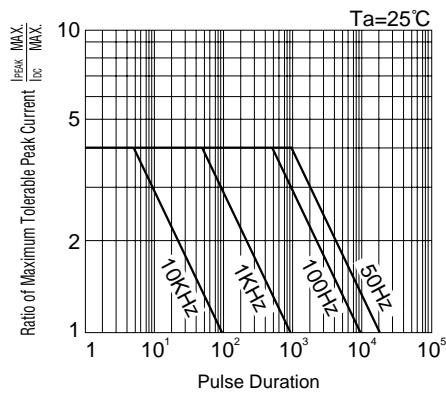
■ Forward Current vs. Relative Intensity



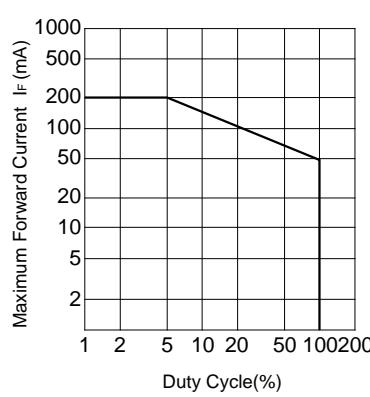
■ Ambient Temperature vs. Intensity



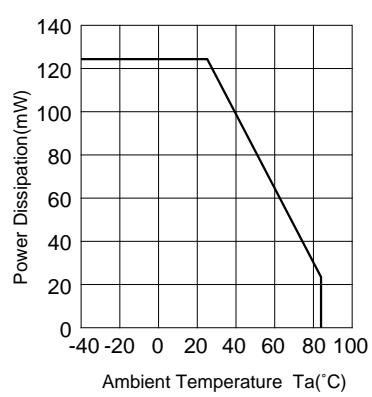
■ Pulse Duration vs. Maximum Tolerable Peak Current



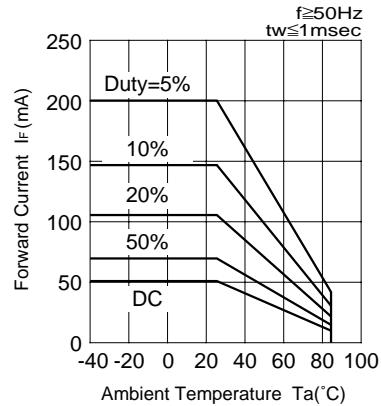
■ Duty Cycle vs. Maximum Forward Current



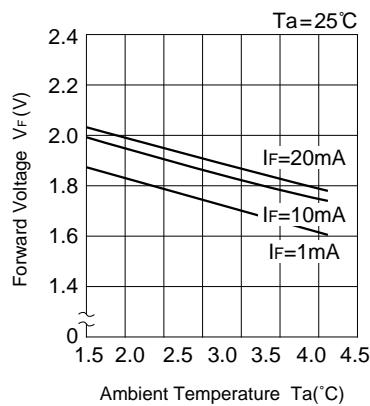
■ Power Dissipation vs. Ambient Temperature



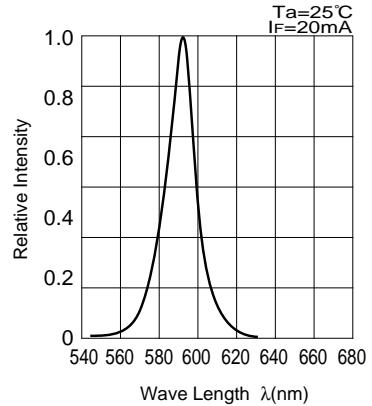
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

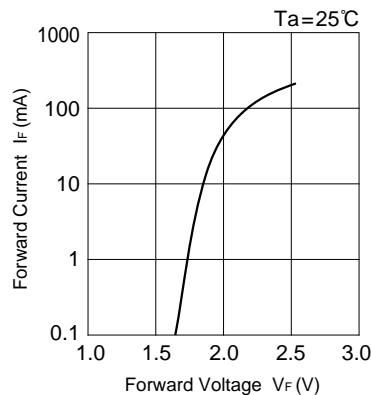


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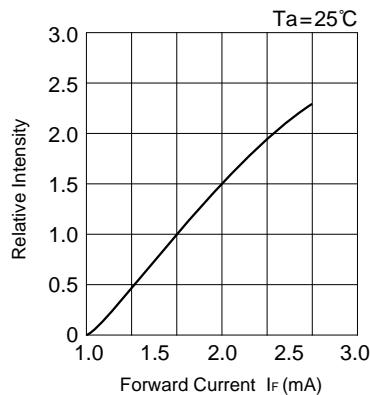
HI-SUPER BRIGHT LED

EFA / FA 5365S

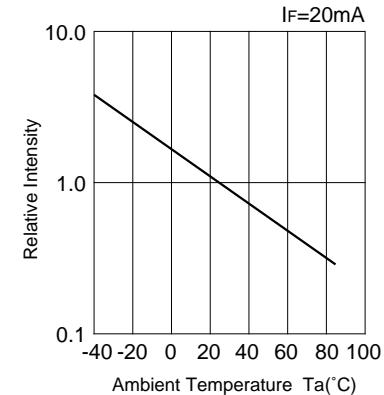
■ Forward Voltage vs. Forward Current



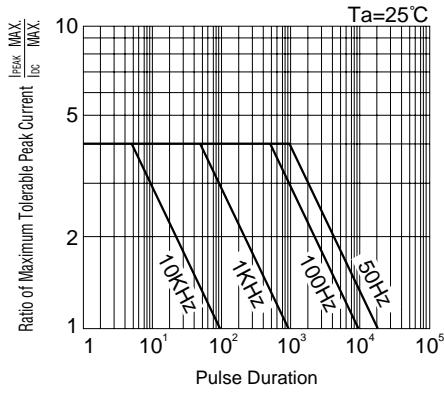
■ Forward Current vs. Relative Intensity



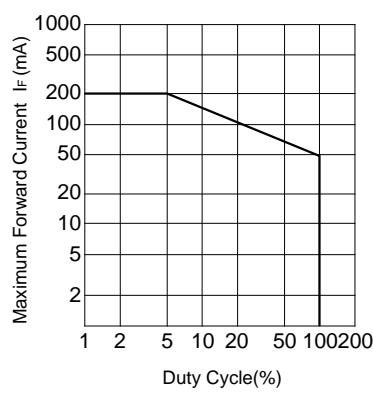
■ Ambient Temperature vs. Intensity



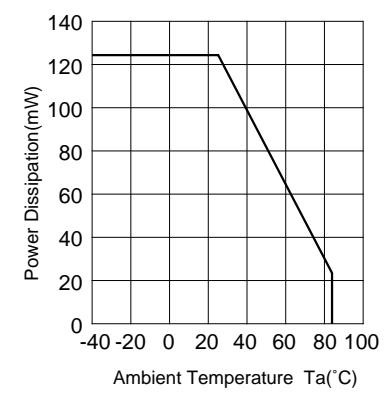
■ Pulse Duration vs. Maximum Tolerable Peak Current



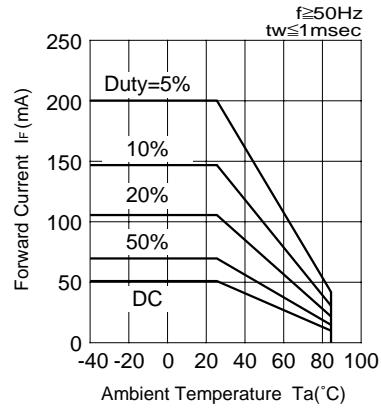
■ Duty Cycle vs. Maximum Forward Current



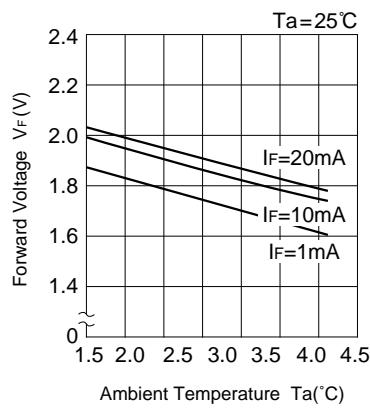
■ Power Dissipation vs. Ambient Temperature



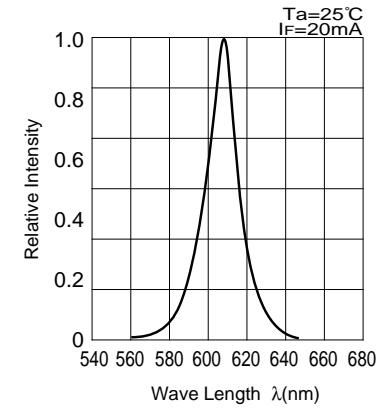
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

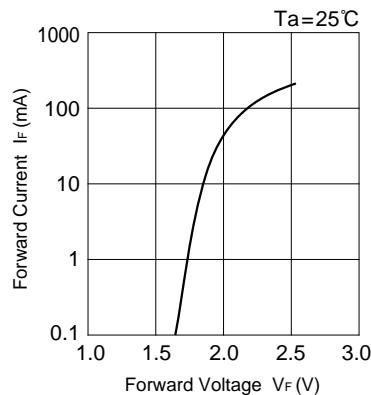


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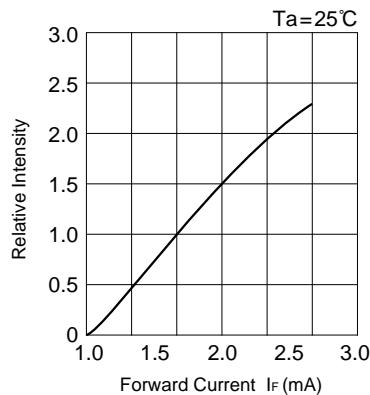
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EFR / FR 5365S

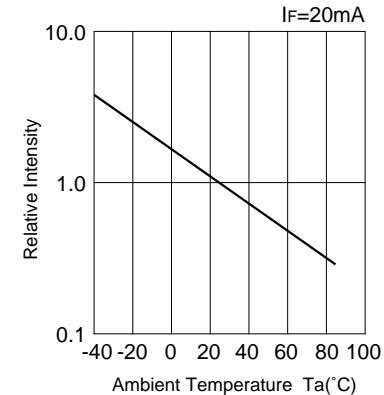
■ Forward Voltage vs. Forward Current



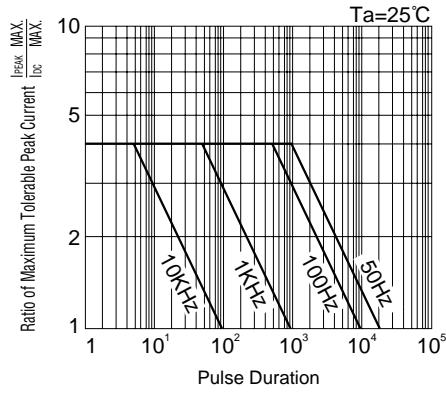
■ Forward Current vs. Relative Intensity



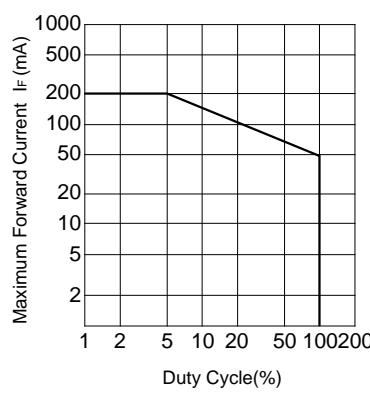
■ Ambient Temperature vs. Intensity



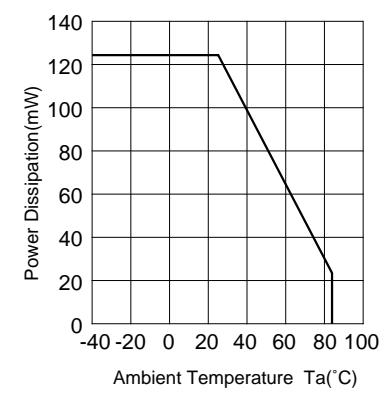
■ Pulse Duration vs. Maximum Tolerable Peak Current



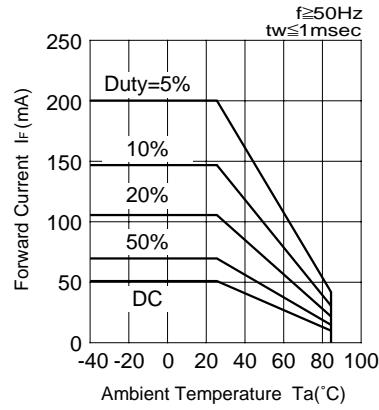
■ Duty Cycle vs. Maximum Forward Current



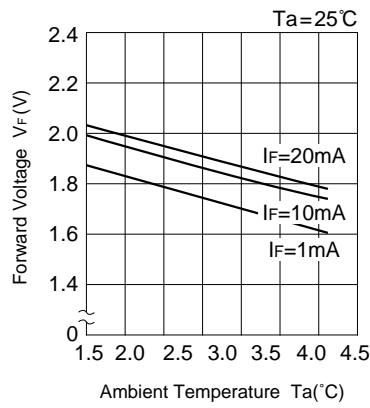
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

