



### ■ Absolute Maximum Ratings

Ta = 25°C

		Red			Orange	Yellow		Green	Pure Green	Unit
		BR	MPR	MVR	MAA	MAY	MPY	MPG	MBG	
Power Dissipation	Pb	100	75	75	70	85	85	70	70	mW
Forward Current	IF	50	30	30	25	30	30	25	25	mA
Peak Forward Current	IFM	300	75	75	60	75	75	60	60	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	0.40	0.40	0.33	0.40	0.40	0.33	0.33	mA/°C

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

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

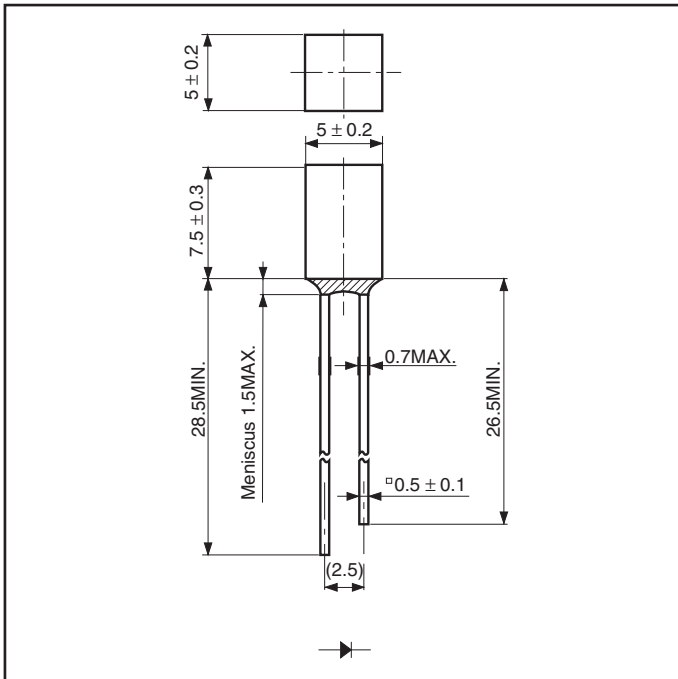
### ■ Electro-Optical Characteristics

Ta = 25°C

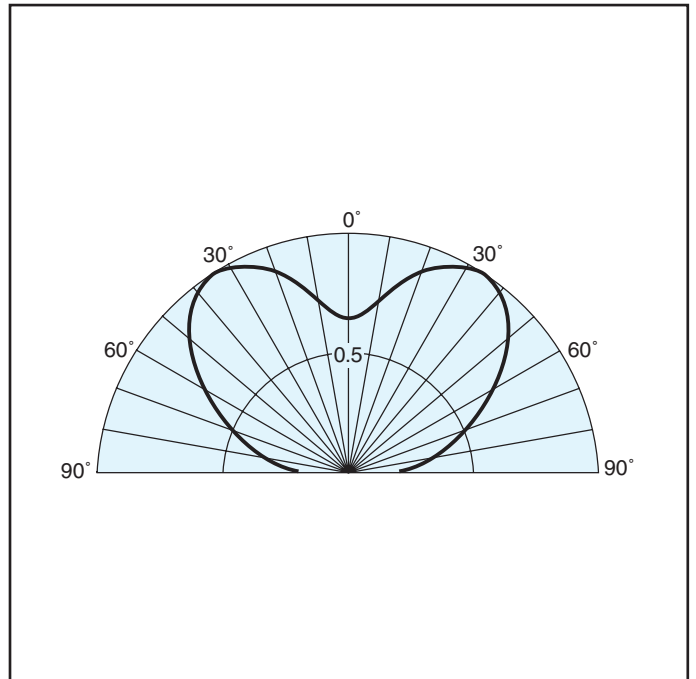
Part No.	Chip		Lens	Luminous Intensity			Wavelength			Forward Voltage			Reverse Current		Capacitance Co	
	Material	Emitted Color		Iv			λp	Δλ		VF			IR			
				MIN	TYP	IF	TYP	TYP	IF	TYP	MAX	IF	MAX	VR		
<b>BR5353K</b>	GaAlAs	Red	Red	Sueface Diffused	1.5	3	20	660	30	20	1.7	2.0	20	100	4	50
<b>MPR5353K</b>	GaP				0.3	0.5	10	700	100	10	2.1	2.8	10	20	4	40
<b>MVR5353K</b>	GaAsP				1.2	2.4	20	630	30	20	2.0	2.8	20	20	4	10
<b>MAA5353K</b>	GaAsP	Orange	Orange		1.2	2.4	20	605	30	20	2.2	2.8	20	20	4	10
<b>MAY5353K</b>	GaAsP	Yellow	Yellow		1.2	2.4	20	580	30	20	2.2	2.8	20	20	4	10
<b>MPY5353K</b>	GaP				2	4	20	570	30	20	2.1	2.8	20	20	4	20
<b>MPG5353K</b>	GaP	Green	Green		1.5	3	20	560	30	20	2.1	2.8	20	20	4	25
<b>MBG5353K</b>	GaP	Pure Green			0.5	1	20	555	30	20	2.1	2.8	20	20	4	25
Units						mcd	mcd	mA	nm	nm	mA	V	V	mA	μA	V

### ■ Package Dimensions

Unit : mm



### ■ Spatial Distribution

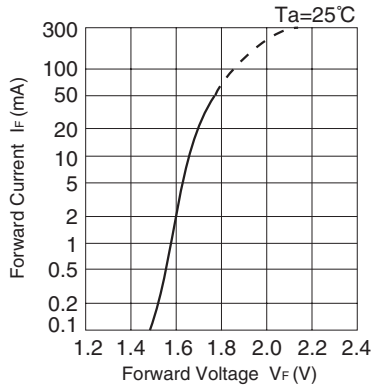




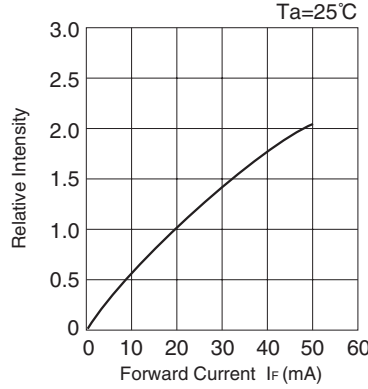
# ■ SUPER BRIGHT LED

## BR5353K

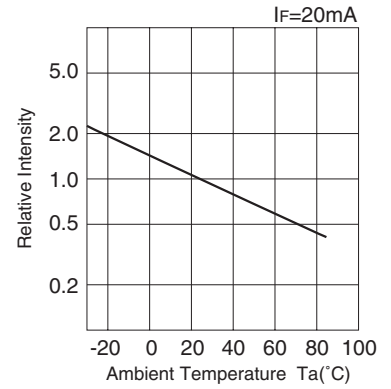
■ Forward Voltage vs. Forward Current



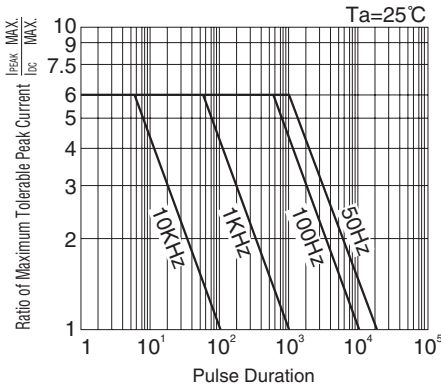
■ Forward Current vs. Relative Intensity



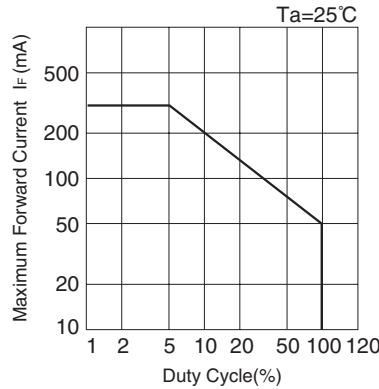
■ Ambient Temperature vs. Relative Intensity



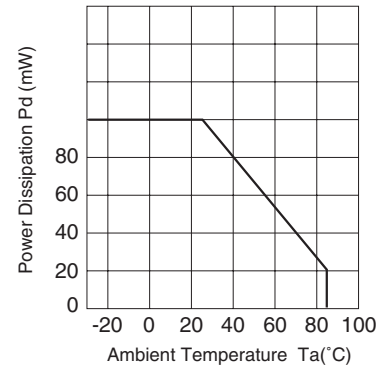
■ Pulse Duration vs. Maximum Tolerable Peak Current



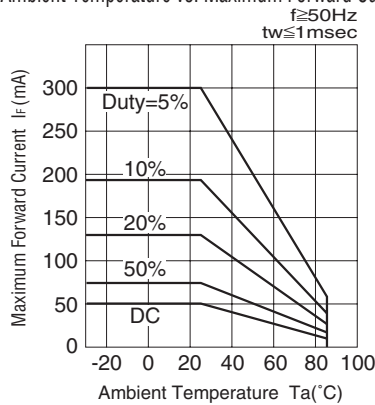
■ Duty Cycle vs. Maximum Forward Current



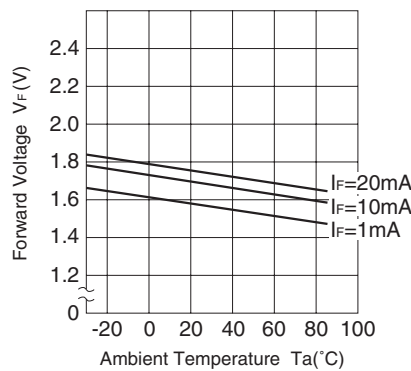
■ Power Dissipation vs. Ambient Temperature



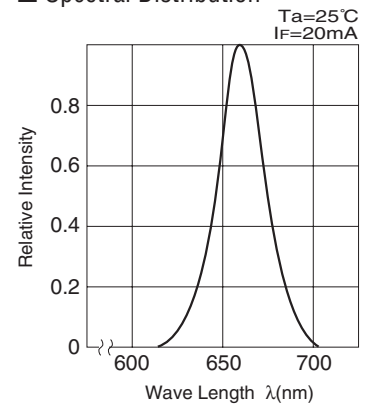
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

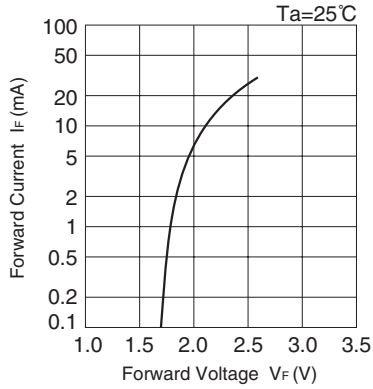




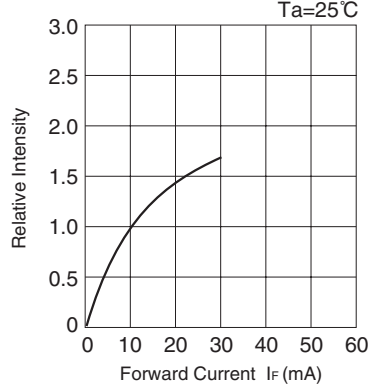
# ■ SUPER BRIGHT LED

## MPR5353K

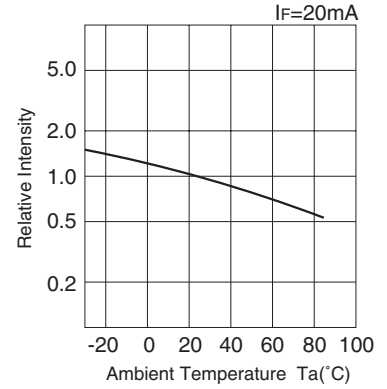
■ Forward Voltage vs. Forward Current



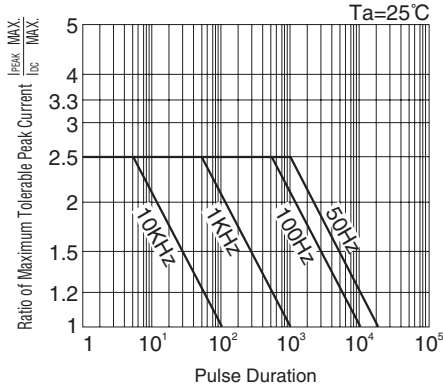
■ Forward Current vs. Relative Intensity



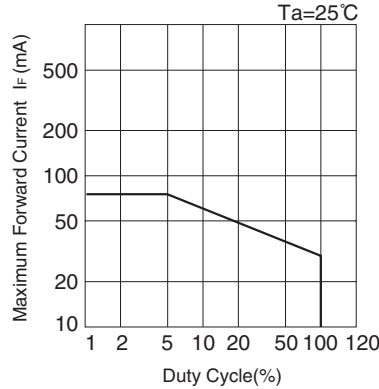
■ Ambient Temperature vs. Relative Intensity



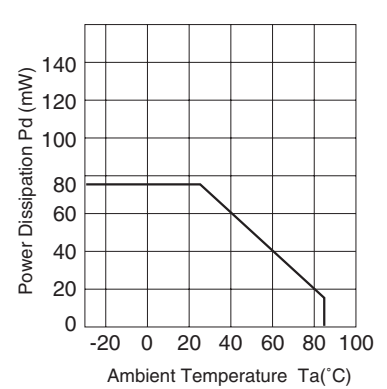
■ Pulse Duration vs. Maximum Tolerable Peak Current



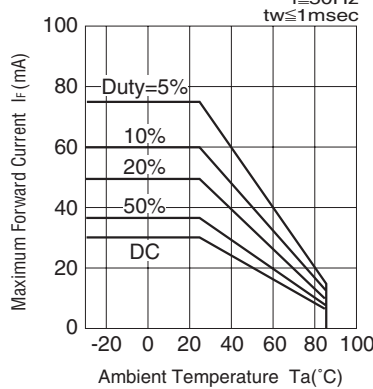
■ Duty Cycle vs. Maximum Forward Current



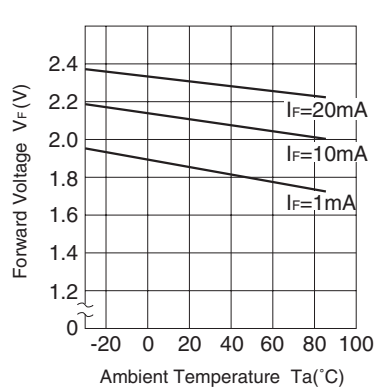
■ Power Dissipation vs. Ambient Temperature



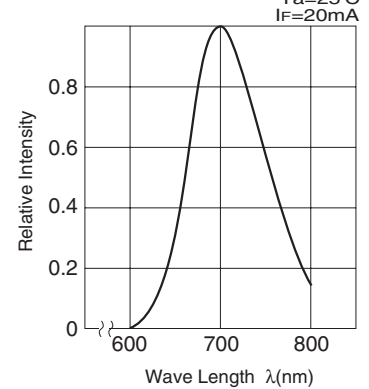
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

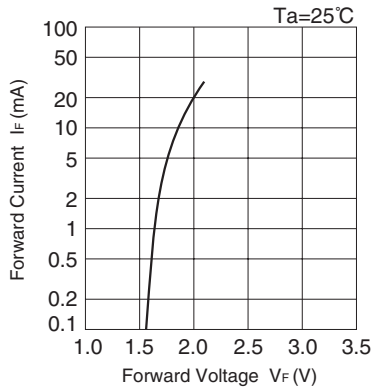




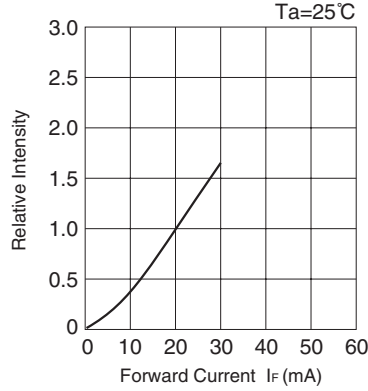
# ■ SUPER BRIGHT LED

## MVR5353K

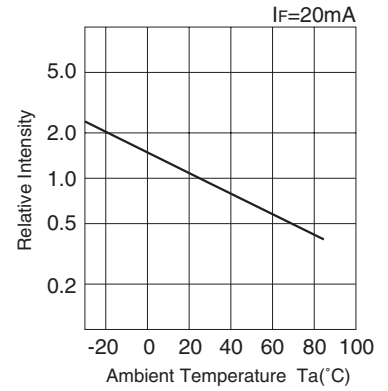
■ Forward Voltage vs. Forward Current



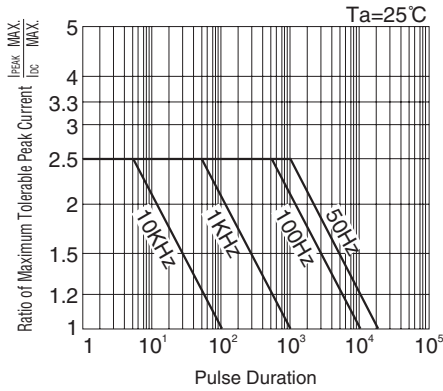
■ Forward Current vs. Relative Intensity



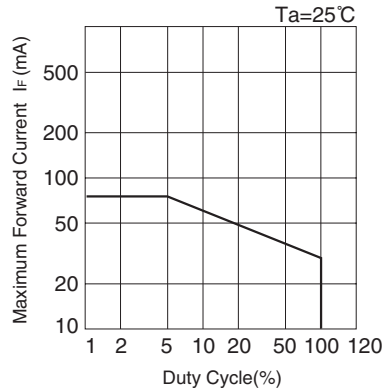
■ Ambient Temperature vs. Relative Intensity



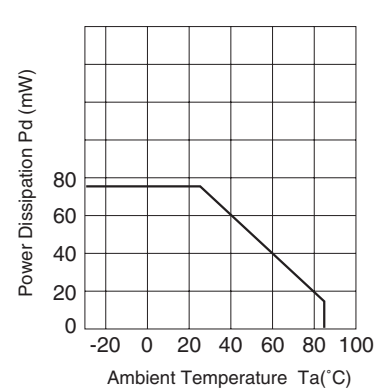
■ Pulse Duration vs. Maximum Tolerable Peak Current



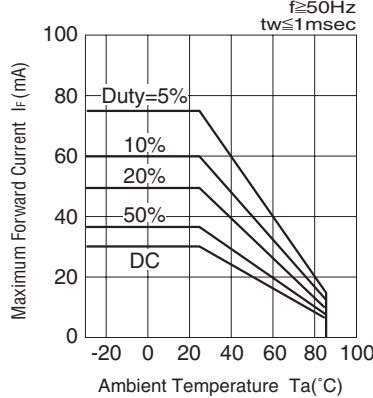
■ Duty Cycle vs. Maximum Forward Current



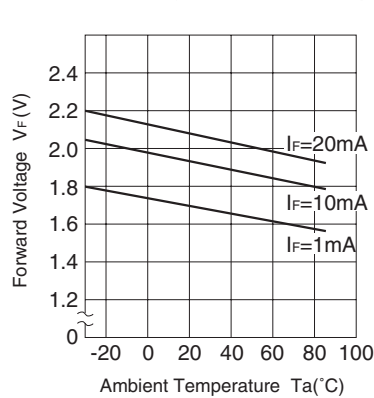
■ Power Dissipation vs. Ambient Temperature



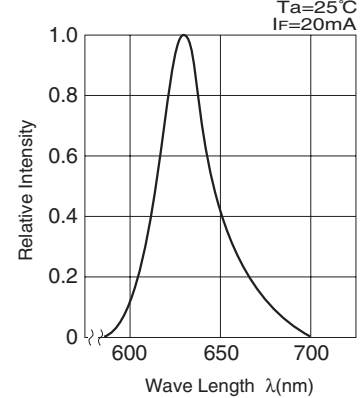
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

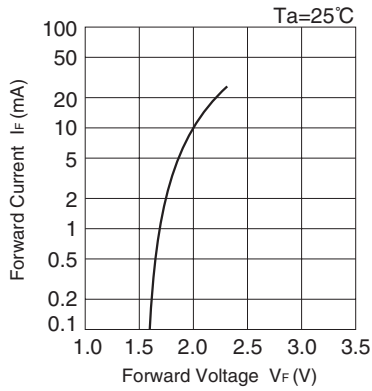




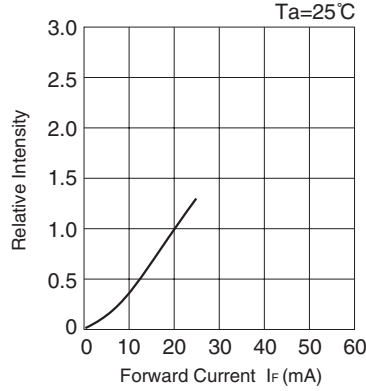
# ■ SUPER BRIGHT LED

## MAA5353K

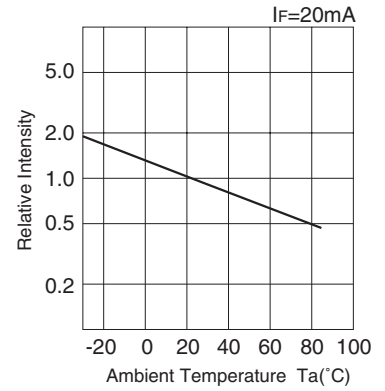
■ Forward Voltage vs. Forward Current



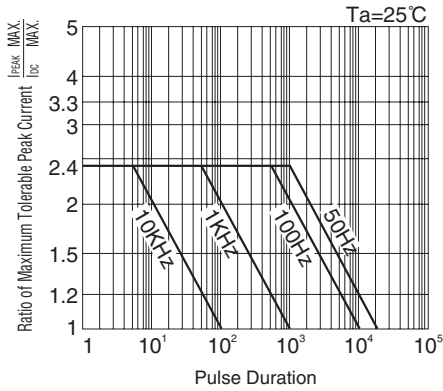
■ Forward Current vs. Relative Intensity



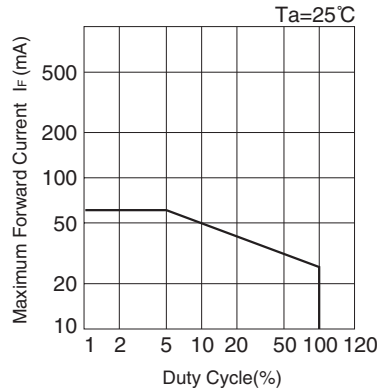
■ Ambient Temperature vs. Relative Intensity



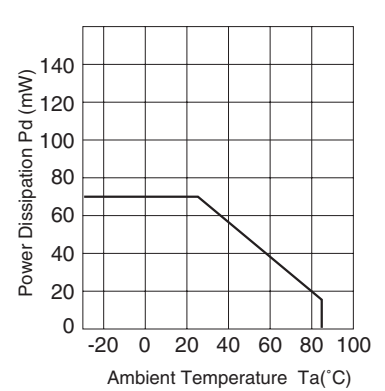
■ Pulse Duration vs. Maximum Tolerable Peak Current



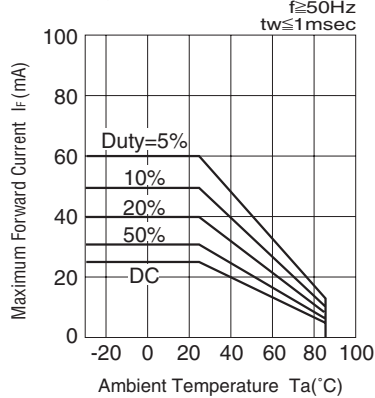
■ Duty Cycle vs. Maximum Forward Current



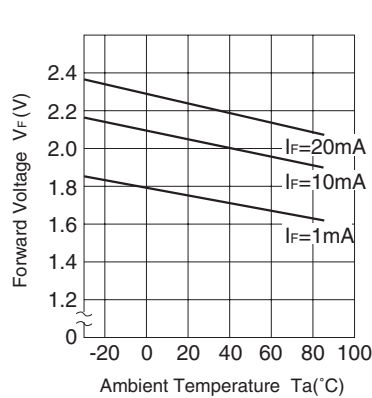
■ Power Dissipation vs. Ambient Temperature



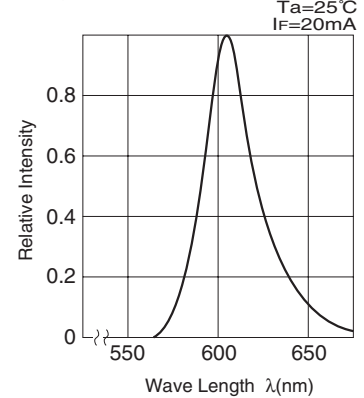
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

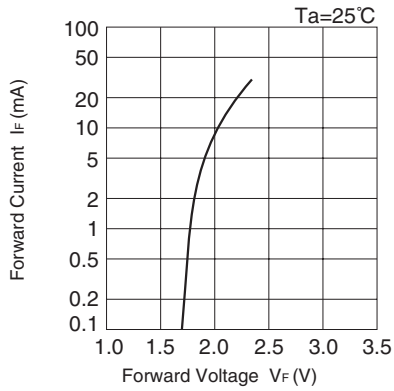




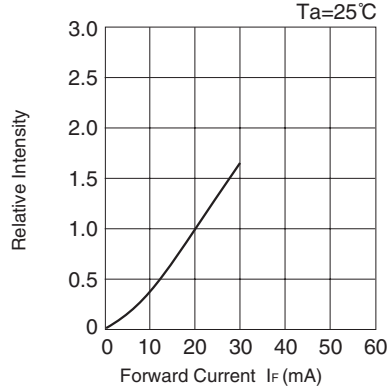
# ■ SUPER BRIGHT LED

## MAY5353K

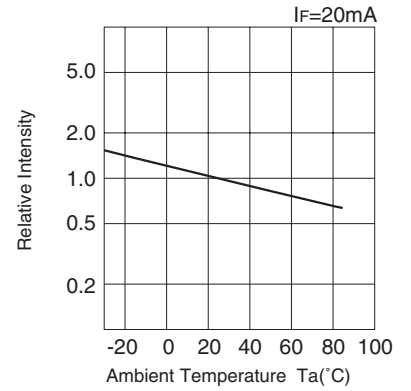
■ Forward Voltage vs. Forward Current



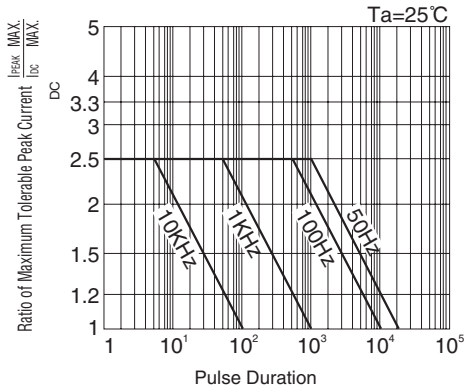
■ Forward Current vs. Relative Intensity



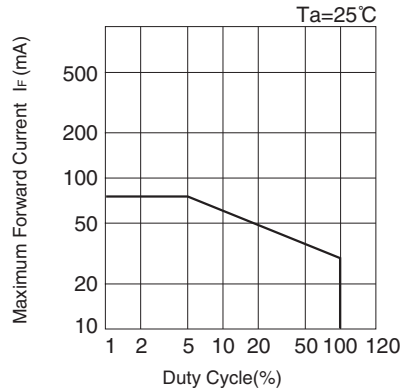
■ Ambient Temperature vs. Relative Intensity



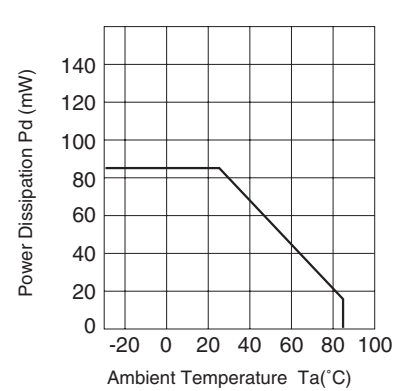
■ Pulse Duration vs. Maximum Tolerable Peak Current



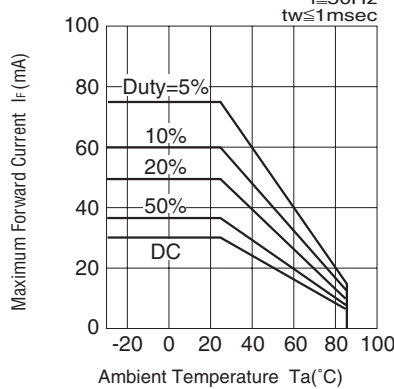
■ Duty Cycle vs. Maximum Forward Current



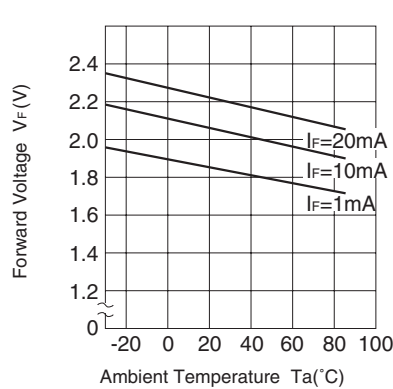
■ Power Dissipation vs. Ambient Temperature



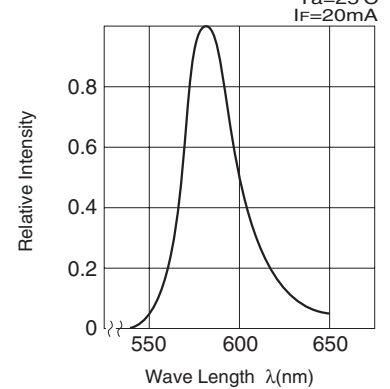
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

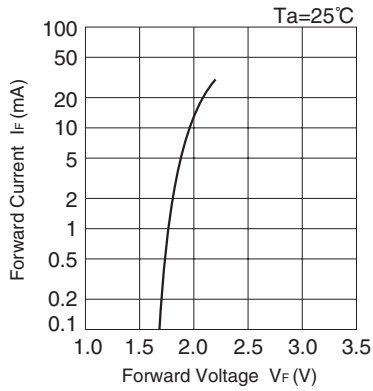




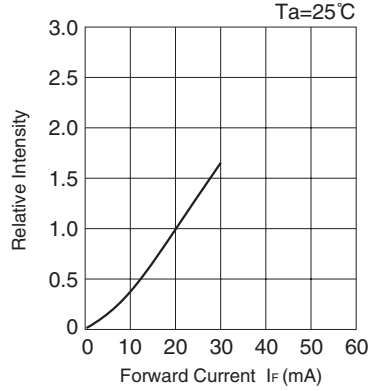
# ■ SUPER BRIGHT LED

## MPY5353K

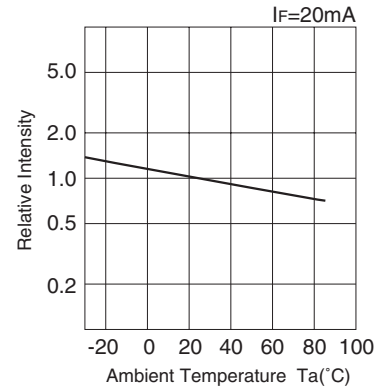
■ Forward Voltage vs. Forward Current



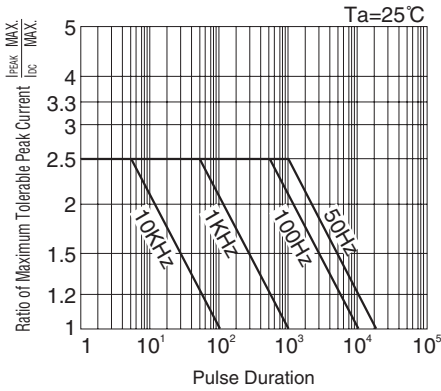
■ Forward Current vs. Relative Intensity



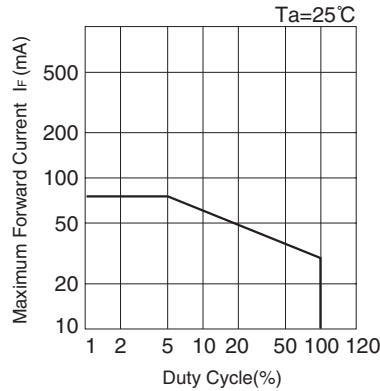
■ Ambient Temperature vs. Relative Intensity



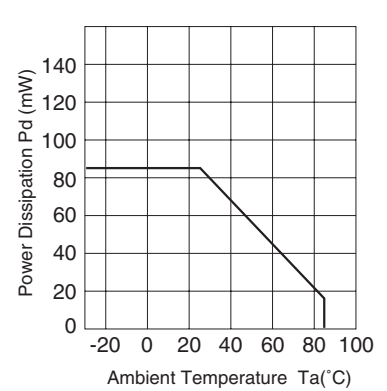
■ Pulse Duration vs. Maximum Tolerable Peak Current



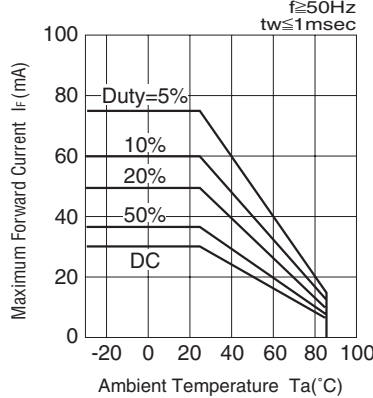
■ Duty Cycle vs. Maximum Forward Current



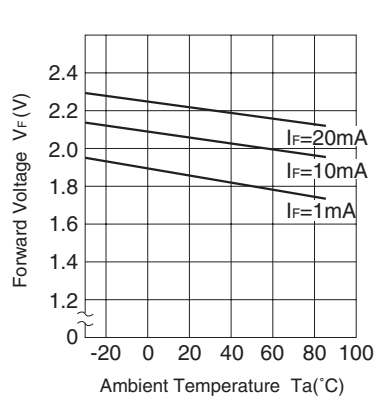
■ Power Dissipation vs. Ambient Temperature



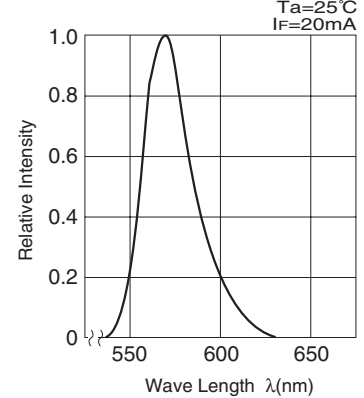
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

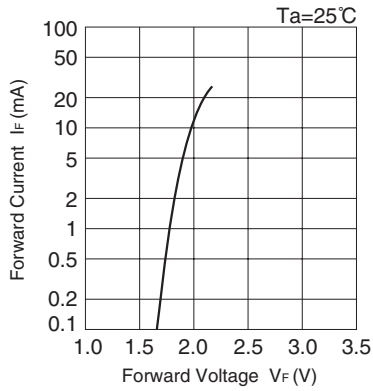




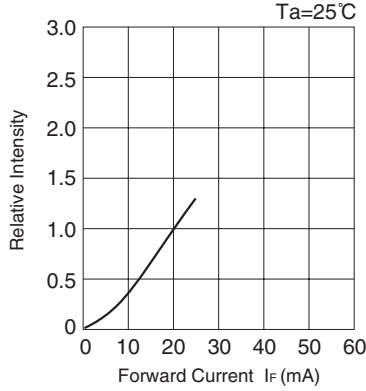
# ■ SUPER BRIGHT LED

## MPG5353K

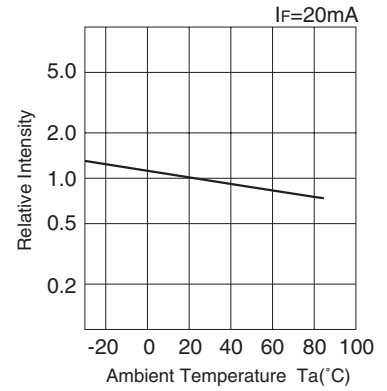
■ Forward Voltage vs. Forward Current



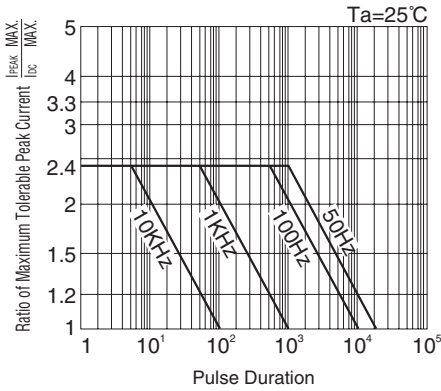
■ Forward Current vs. Relative Intensity



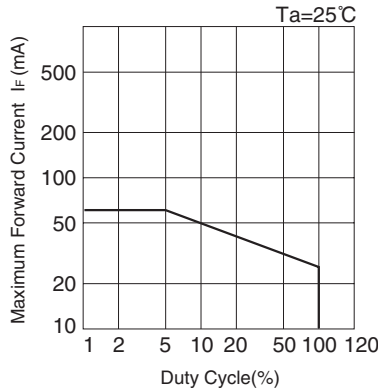
■ Ambient Temperature vs. Relative Intensity



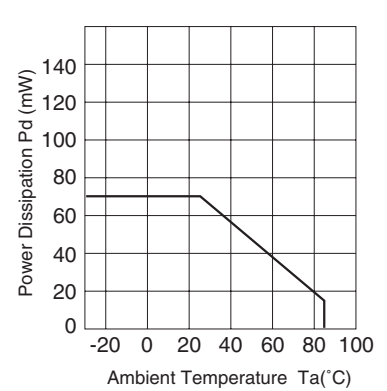
■ Pulse Duration vs. Maximum Tolerable Peak Current



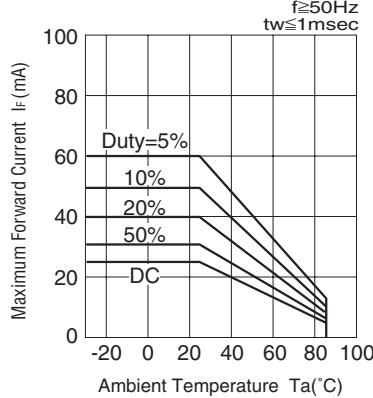
■ Duty Cycle vs. Maximum Forward Current



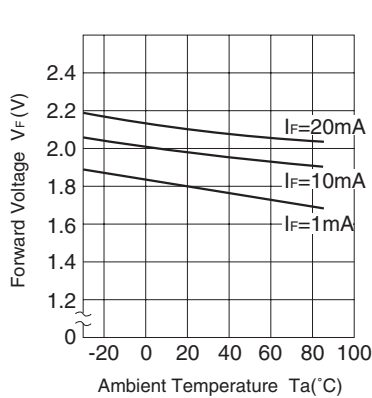
■ Power Dissipation vs. Ambient Temperature



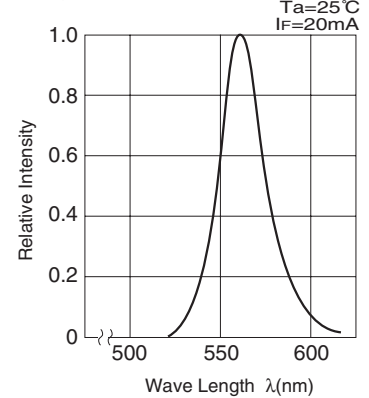
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution



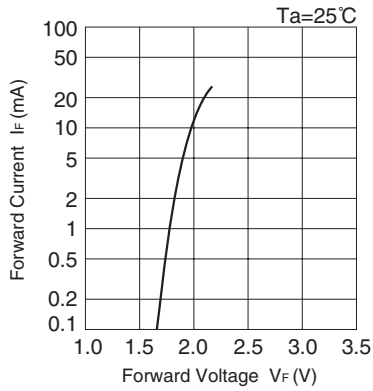




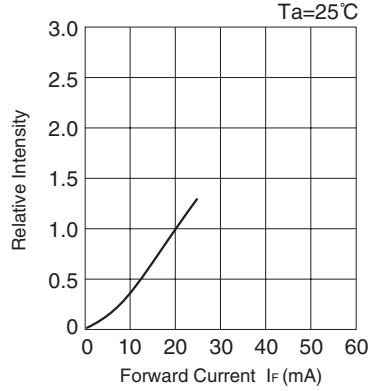
# ■ SUPER BRIGHT LED

## MBG5353K

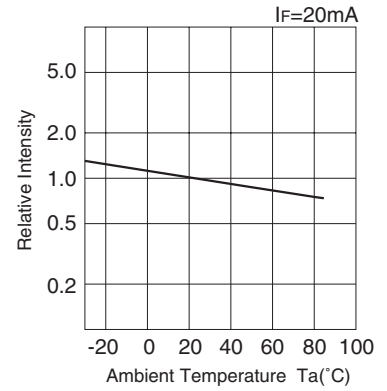
■ Forward Voltage vs. Forward Current



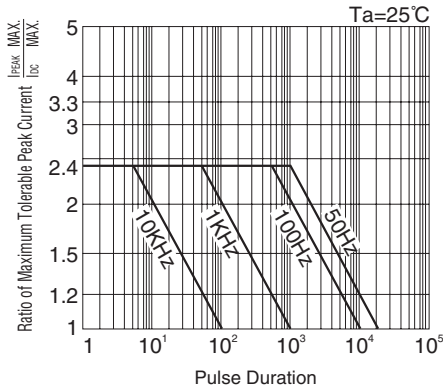
■ Forward Current vs. Relative Intensity



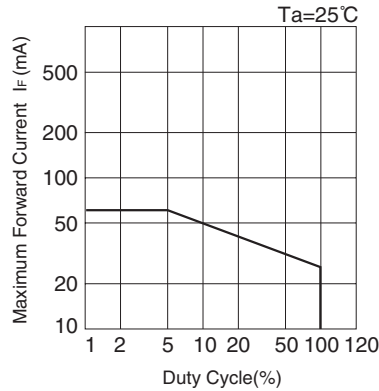
■ Ambient Temperature vs. Relative Intensity



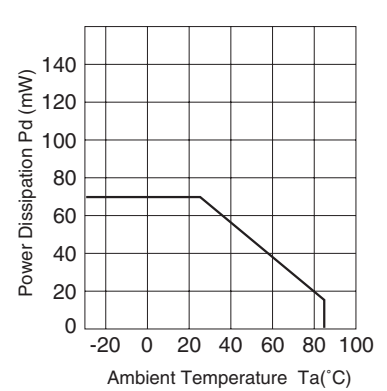
■ Pulse Duration vs. Maximum Tolerable Peak Current



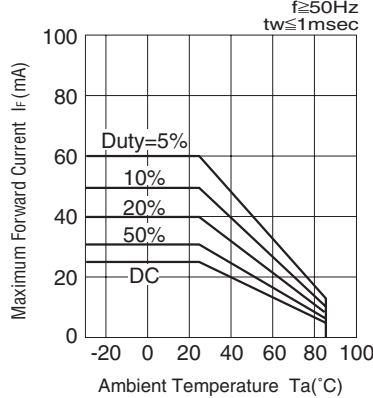
■ Duty Cycle vs. Maximum Forward Current



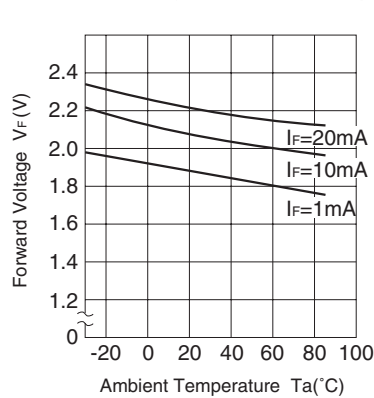
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

