



SINGLE COLOR LED

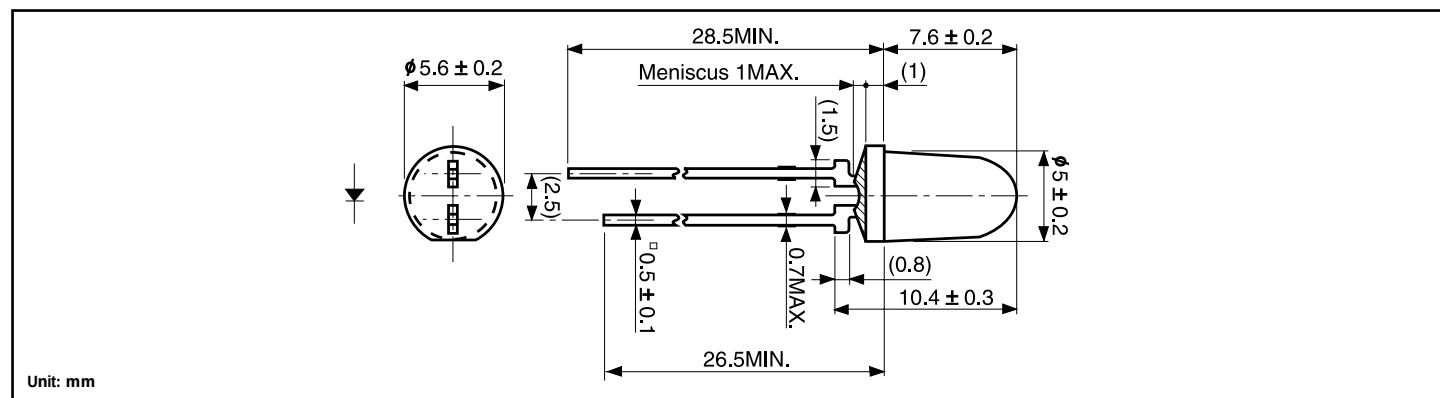
φ 5mm Round Shape



H-1000L / H-2000L / H-3000L

HIGH BRIGHTNESS COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red	Units
		H (KR)	
Power Dissipation	Pd	125	mW
Forward Current	I _F	50	mA
Peak Forward Current	I _{FM}	300	mA
Reverse Voltage	V _R	4	V
Operating Temperature	T _{opr}	-30 to +85	°C
Storage Temperature	T _{stg}	-30 to +100	°C
Derating (DC)*	ΔI _F	0.67	mA/°C

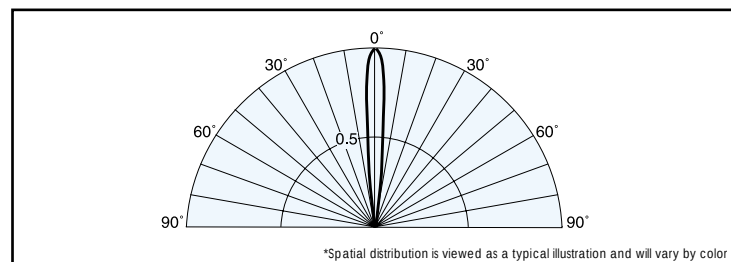
*Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

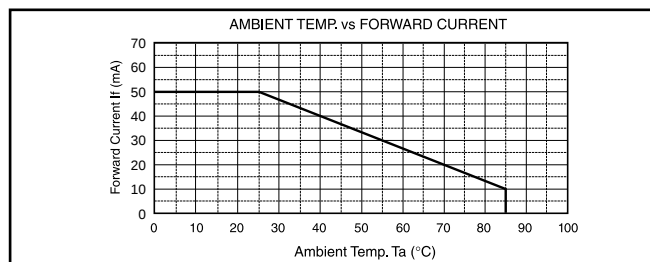
*The viewing angle is an average and will vary by color (Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _V			Wavelength				Forward Voltage V _F			Reverse Current I _R		Viewing Angle (2 θ 1/2)
				MIN.	TYP.	I _F	Peak λ _p TYP.	Dominant λ _d TYP.	Spectral Line Half Width Δλ TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R	
H-3000L	GaAlAs	Red	Water Clear	2,400	3,000	20	660	647	25	20	1.8	2.5	20	100	4	10°
H-2000L				1,400	2,000	20	660	647	25	20	1.8	2.5	20	100	4	
H-1000L				700	1,000	20	660	647	25	20	1.8	2.5	20	100	4	
Units				mcd		mA	nm			mA	V		mA	μA	V	Deg.

Spatial Distribution (x)



Operation Current Derating Chart





SINGLE COLOR LED

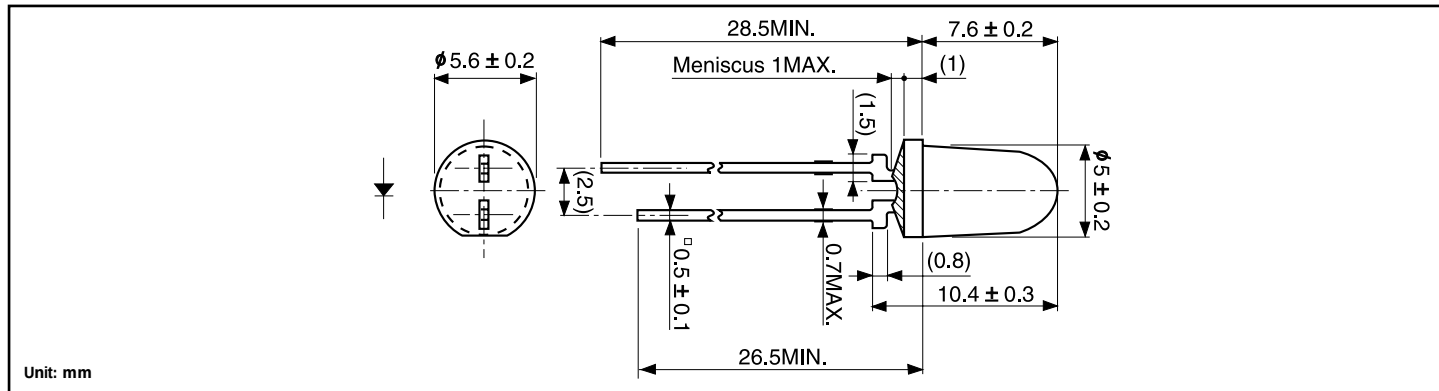
φ 5mm Round Shape



ER-300L / ER-500L

HIGH BRIGHTNESS COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red		Units
		ER		
Power Dissipation	Pd	100		mW
Forward Current	I _F	50		mA
Peak Forward Current	I _{FM}	300		mA
Reverse Voltage	V _R	4		V
Operating Temperature	T _{opr}	-30 to 85		°C
Storage Temperature	T _{stg}	-30 to 100		°C
Derating (DC)*	ΔI _F	0.67		mA/°C

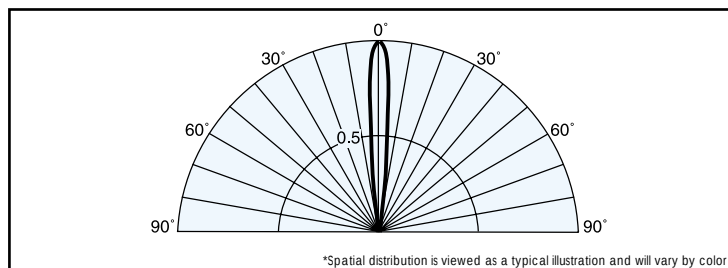
* Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

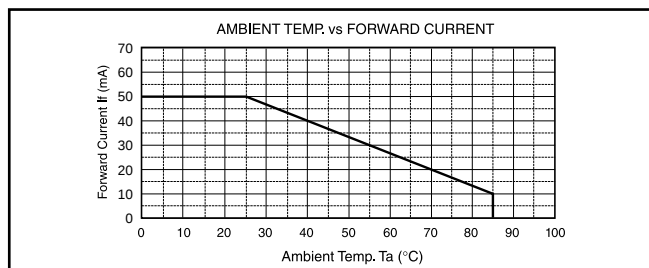
*The viewing angle is an average and will vary by color (Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _V			Wavelength				Forward Voltage V _F			Reverse Current I _R		Viewing Angle (2 θ 1/2)
				MIN.	TYP.	I _F	Peak λ _p TYP.	Dominant λ _d TYP.	Spectral Line Half Width Δλ TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R	
ER-500L	GaAlAs	Red	Water Clear	400	500	20	660	647	30	20	1.7	2.0	20	20	4	10°
ER-300L				200	300	20	660	647	30	20	1.7	2.0	20	20	4	
Units				mcd		mA	nm			mA	V	mA	μA	V	Deg.	

Spatial Distribution (x)



Operation Current Derating Chart





SINGLE COLOR LED

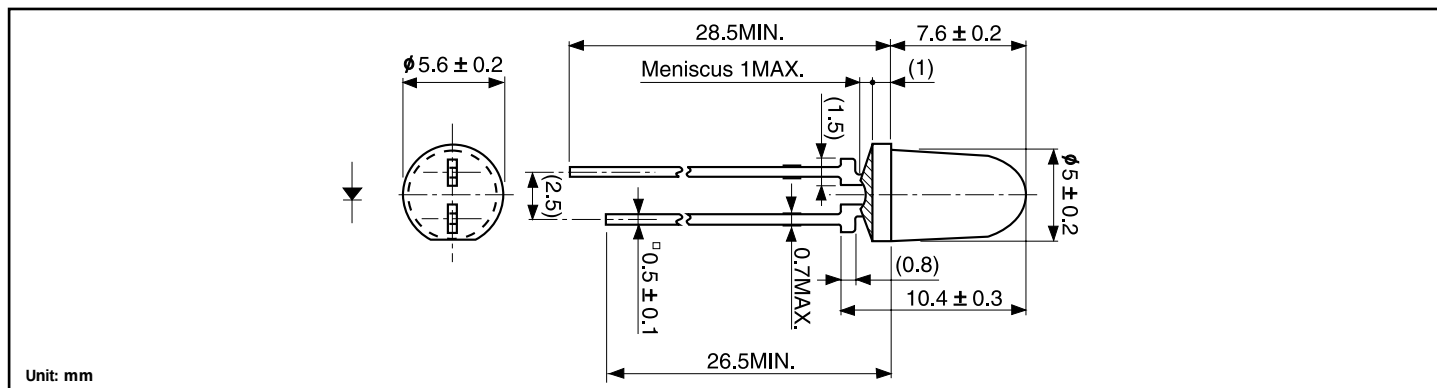
φ 5mm Round Shape



5066X Series

HIGH BRIGHTNESS COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red	Orange	Yellow	Yellow Green	Green	Pure Green	Units
		HBR	HAA	HAY	HPY	HPG	HBG	
Power Dissipation	Pd	100	125	125	125	125	125	mW
Forward Current	I _F	50	50	50	50	50	50	mA
Peak Forward Current	I _{FM}	300	100	100	100	100	100	mA
Reverse Voltage	V _R	4	4	4	4	4	4	V
Operating Temperature	T _{opr}	-30 to +85						°C
Storage Temperature	T _{stg}	-30 to +100						°C
Derating (DC)*	ΔI _F	0.67						mA/°C

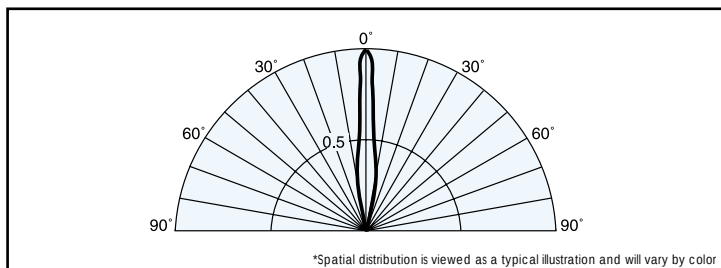
*Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

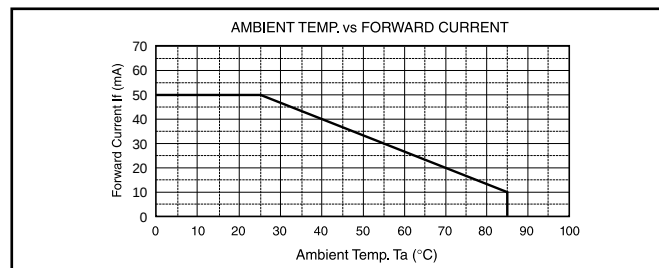
*The viewing angle is an average and will vary by color (Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _V			Wavelength Spectral Line Half Width				Forward Voltage V _F			Reverse Current I _R		Viewing Angle (2 θ 1/2)
				MIN.	TYP.	I _F	Peak λ _p TYP.	Dominant λ _d TYP.	Δλ TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R	
HBR5066X	GaAlAs	Red	Clear Pastel Red	200	300	20	660	647	30	20	1.7	2.0	20	20	4	10°
HAA5066X	GaAsP	Orange	Clear Pastel Orange	160	250	20	605	606	30	20	2.2	2.5	20	20	4	
HAY5066X	GaAsP	Yellow	Clear Pastel Yellow	100	150	20	580	590	30	20	2.2	2.5	20	20	4	
HPY5066X	GaP	Yellow Green		200	300	20	570	572	30	20	2.1	2.5	20	20	4	
HPG5066X	GaP	Green	Clear Pastel Green	150	200	20	560	567	30	20	2.1	2.5	20	20	4	
HBG5066X	GaP	Pure Green		100	150	20	555	558	30	20	2.1	2.5	20	20	4	
Units				mcd		mA	nm			mA	V		mA	μA	V	Deg.

Spatial Distribution (x)



Operation Current Derating Chart





SINGLE COLOR LED

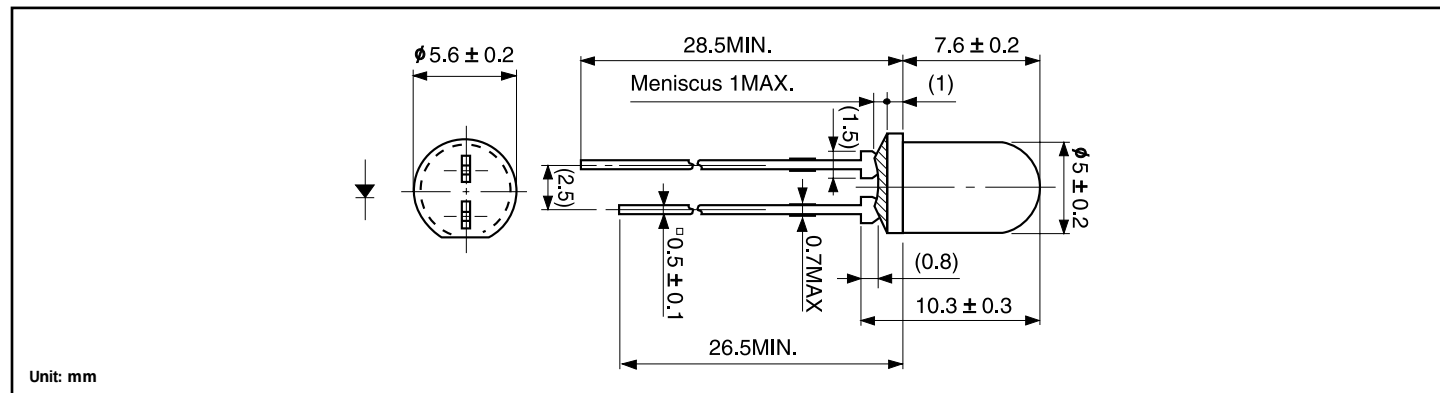
φ 5mm Round Shape



KR5004X

HIGH BRIGHTNESS COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red	Units
		KR	
Power Dissipation	Pd	125	mW
Forward Current	I _F	50	mA
Peak Forward Current	I _{FM}	300	mA
Reverse Voltage	V _R	4	V
Operating Temperature	T _{opr}	-30 to +85	°C
Storage Temperature	T _{stg}	-30 to +100	°C
Derating (DC)*	ΔI _F	0.67	mA/°C

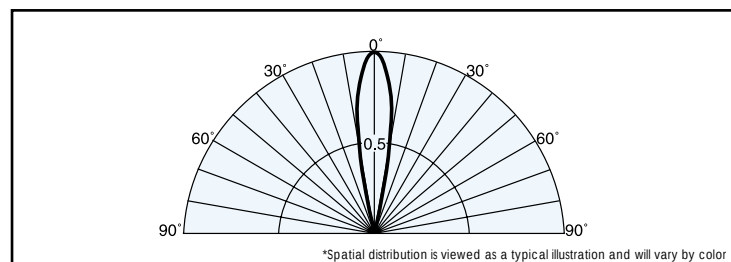
* Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
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Electro-Optical Characteristics

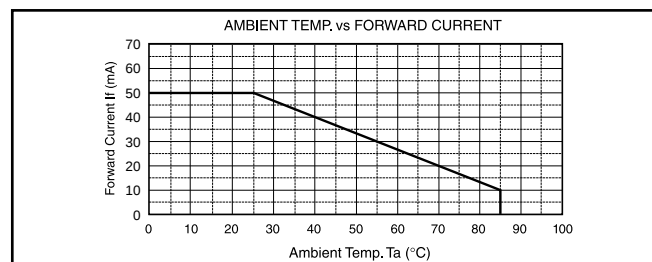
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Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _V			Wavelength				Forward Voltage V _F			Reverse Current I _R		Viewing Angle (2θ 1/2)
				MIN.	TYP.	I _F	Peak λ _p TYP.	Dominant λ _d TYP.	Spectral Line Half Width Δλ TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R	
KR5004X	GaAlAs	Red	Water Clear	400	800	20	660	647	25	20	1.8	2.5	20	100	4	20°
Units				mcd		mA	nm			mA	V		mA	μA	V	Deg.

Spatial Distribution (x)



Operation Current Derating Chart





SINGLE COLOR LED

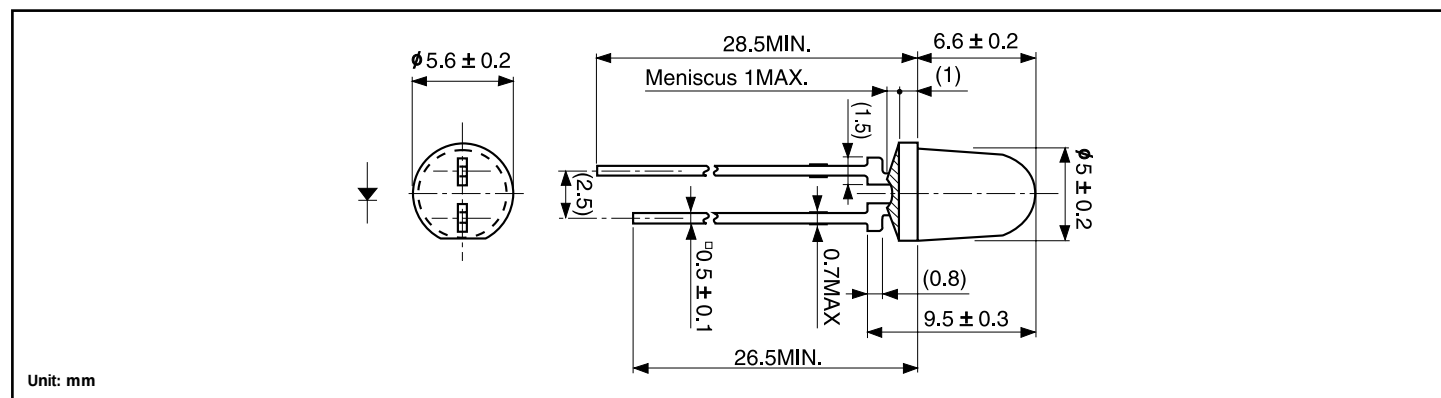
φ 5mm Round Shape



KR5005S

HIGH BRIGHTNESS COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red	Units
		KR	
Power Dissipation	Pd	125	mW
Forward Current	I _F	50	mA
Peak Forward Current	I _{FM}	300	mA
Reverse Voltage	V _R	4	V
Operating Temperature	T _{opr}	-30 to +85	°C
Storage Temperature	T _{stg}	-30 to +100	°C
Derating (DC)*	ΔI _F	0.67	mA/°C

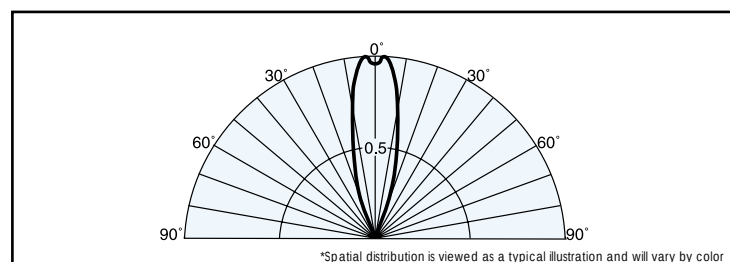
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Electro-Optical Characteristics

*The viewing angle is an average and will vary by color (Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _V			Wavelength				Forward Voltage V _F			Reverse Current I _R		Viewing Angle (2θ 1/2)
				MIN.	TYP.	I _F	Peak λ _p TYP.	Dominant λ _d TYP.	Spectral Line Half Width Δλ TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R	
KR5005S	GaAlAs	Red	Water Clear	200	300	20	660	647	25	20	1.8	2.5	20	100	4	25°
Units				mcd		mA	nm			mA	V		mA	μA	V	Deg.

Spatial Distribution (x)



Operation Current Derating Chart

