



SINGLE COLOR LED

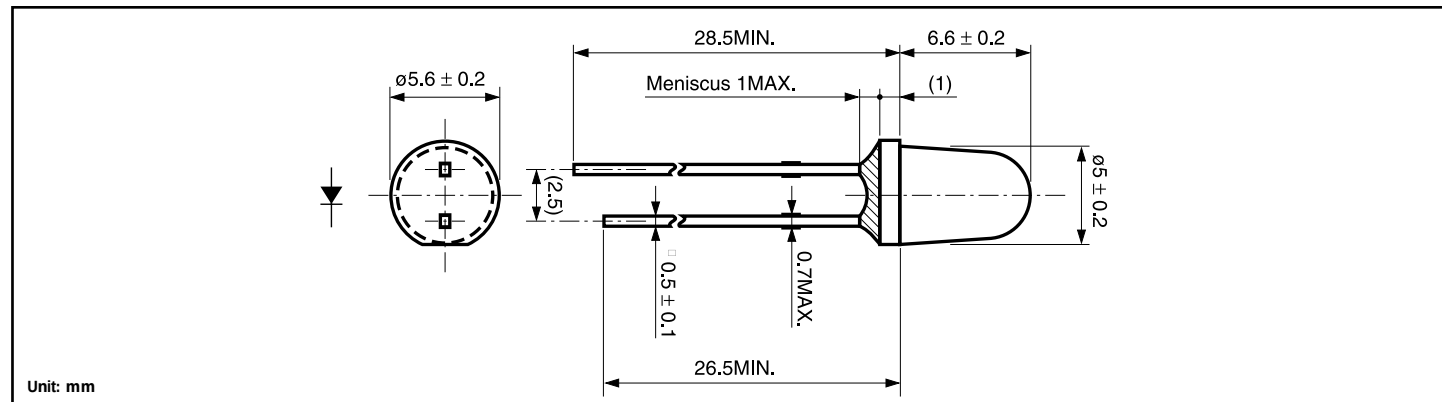
φ 5mm Round Shape



D_5305S / F_5365S Series

HIGH BRIGHTNESS COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Blue	Blue Green	Green	Yellow		Orange		Red		Units
		DB	DC	DG	EFY	FY	EFA	FA	EFR	FR	
Power Dissipation	Pd	100	100	100	125	125	125	125	125	125	mW
Forward Current	I _F	25	25	25	50	50	50	50	50	50	mA
Peak Forward Current	I _{FM}	60	60	60	200	200	200	200	200	200	mA
Reverse Voltage	V _R	5	5	5	5	5	5	5	5	5	V
Operating Temperature	Topr	-40 to +85									°C
Storage Temperature	Tstg	-40 to +100									°C
Derating (DC)*	ΔI _F	0.33			0.67						mA/°C

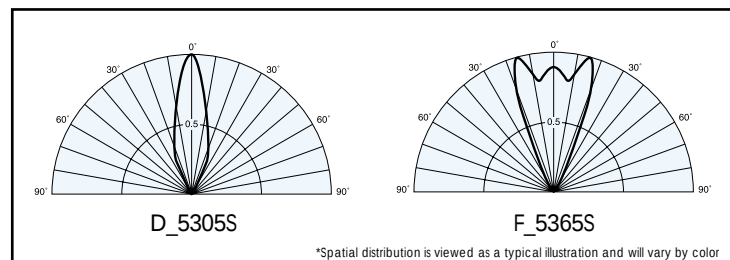
*Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

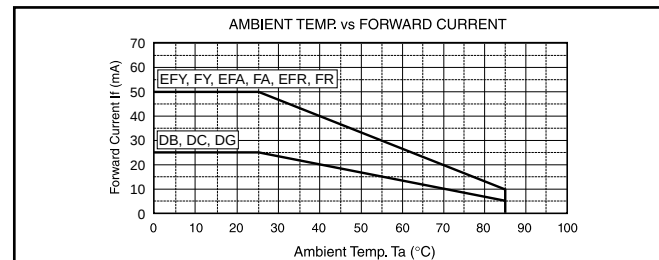
*The viewing angle is an average and will vary by color (Ta=25°C)

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	Dominant λ _d	Δλ	I _F	TYP.	MAX.	I _F	MAX.	V _R	
							TYP.	TYP.	TYP.							
DB5305S	InGaN/SiC	Blue	Water Clear	120	240	20	467	470	26	20	3.5	4.0	20	100	5	30°
DC5305S	InGaN/SiC	Blue Green		400	800	20	502	505	30	20	3.5	4.0	20	100	5	
DG5305S	InGaN/SiC	Green		400	800	20	522	525	30	20	3.5	4.0	20	100	5	
EFY5365S	AlInGaP	Yellow	Clear Pastel Yellow	700	1,000	20	592	590	15	20	1.9	2.4	20	100	5	45°
FY5365S				250	500	20										
EFA5365S	AlInGaP	Orange	Clear Pastel Orange	820	1,160	20	609	605	15	20	1.9	2.4	20	100	5	
FA5365S				290	580	20										
EFR5365S	AlInGaP	Red	Clear Pastel Red	620	880	20	635	626	15	20	1.9	2.4	20	100	5	
FR5365S				220	440	20										
Units				mcd		mA	nm		mA		V		mA	μA	V	

Spatial Distribution (x)



Operation Current Derating Chart





SINGLE COLOR LED

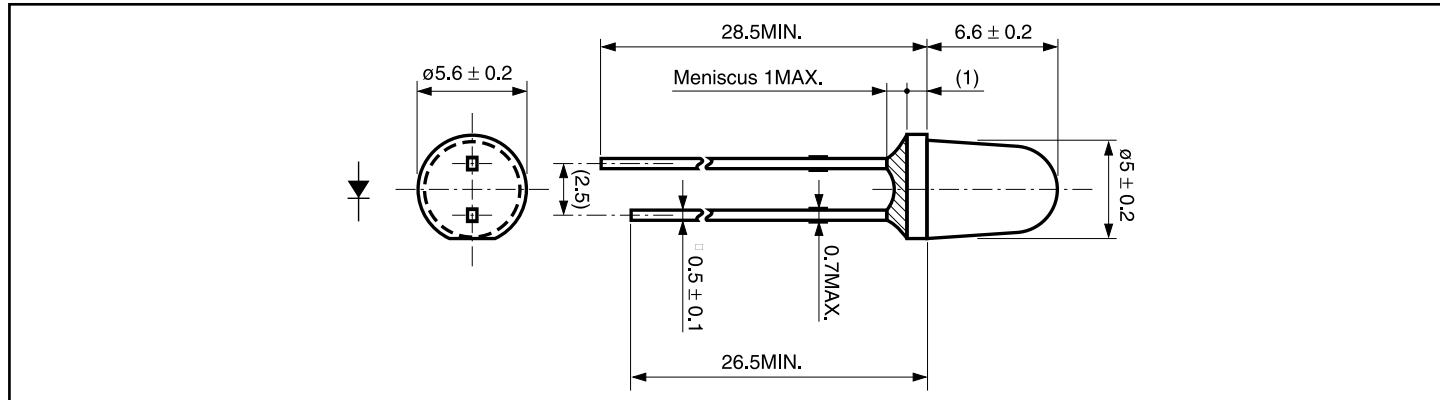
φ 5mm Round Shape



5335S Series

S T A N D A R D C O L O R

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red			Orange	Yellow	Yellow Green	Green	Pure Green	Units
		EBR, BR	PR	EVR, VR	EAA, AA	EAY, AY	EPY, PY	EPG, PG	EBG, BG	
Power Dissipation	Pd	100	75	75	125	125	125	125	125	mW
Forward Current	IF	50	30	30	50	50	50	50	50	mA
Peak Forward Current	IFM	300	100	100	100	100	100	100	100	mA
Reverse Voltage	VR	4	4	4	4	4	4	4	4	V
Operating Temperature	Topr	-30 to +85								°C
Storage Temperature	Tstg	-30 to +100								°C
Derating (DC)*	ΔIF	0.67	0.33			0.67				mA/°C

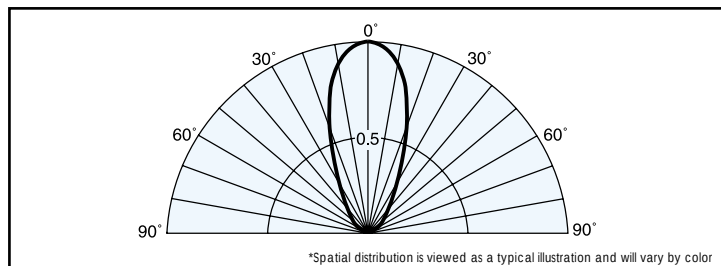
*Ta=25°C, I_M applies for the pulse width ≤ 1msec, and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

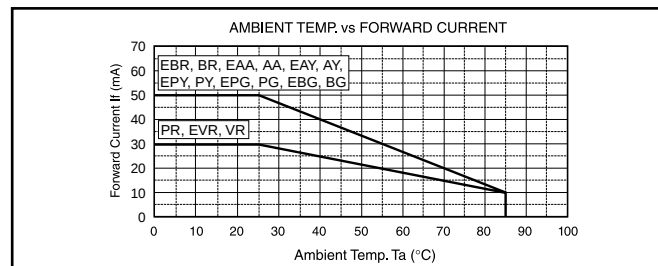
*The viewing angle is an average and will vary by color (Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _V			Wavelength Spectral Line Peak Dominant Δλ Half Width				Forward Voltage V _F			Reverse Current I _R		Viewing Angle (2 θ 1/2)
				MIN.	TYP.	I _F	λ _p TYP.	λ _d TYP.	Δλ TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R	
EBR/BR5335S	GaAlAs	Red	Diffused Red	12/6	18/12	20	660	647	30	20	1.7	2.0	20	100	4	45°
PR5335S	GaP			2.5	5	10	700	635	100	10	2.1	2.5	10	100	4	
EVR/VR5335S	GaAsP			12/6	18/12	20	630	624	30	20	2.0	2.5	20	100	4	
EAA/AA5335S	GaAsP	Orange	Diffused Orange	20/10	30/20	20	605	606	30	20	2.2	2.5	20	100	4	
EAY/AY5335S	GaAsP	Yellow	Diffused Yellow	20/10	30/20	20	580	590	30	20	2.2	2.5	20	100	4	
EPY/PY5335S	GaP	Yellow Green		30/15	45/30	20	570	572	30	20	2.1	2.5	20	100	4	
EPG/PG5335S	GaP	Green	Diffused Green	24/12	36/24	20	560	567	30	20	2.1	2.5	20	100	4	
EBG/BG5335S	GaP	Pure Green		8/4	12/8	20	555	558	30	20	2.1	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

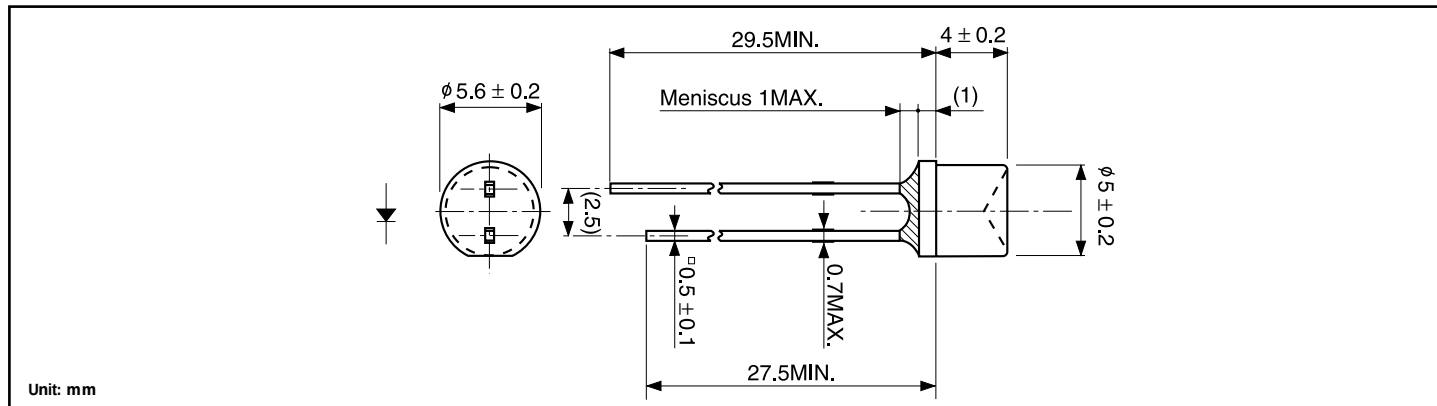
φ 5mm Round Shape



5362X Series

S T A N D A R D C O L O R

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red			Orange	Yellow	Yellow Green	Green	Pure Green	Units
		BR	PR	VR	AA	AY	PY	PG	BG	
Power Dissipation	Pd	100	75	75	125	125	125	125	125	mW
Forward Current	I _F	50	30	30	50	50	50	50	50	mA
Peak Forward Current	I _{FM}	300	100	100	100	100	100	100	100	mA
Reverse Voltage	V _R	4	4	4	4	4	4	4	4	V
Operating Temperature	Topr	-30 to +85								°C
Storage Temperature	Tstg	-30 to +100								°C
Derating (DC)*	ΔI _F	0.67	0.33			0.67				mA/°C

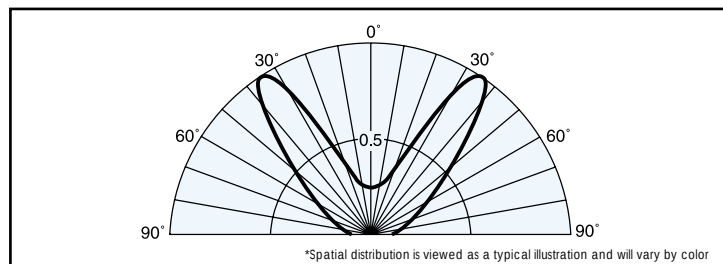
* Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

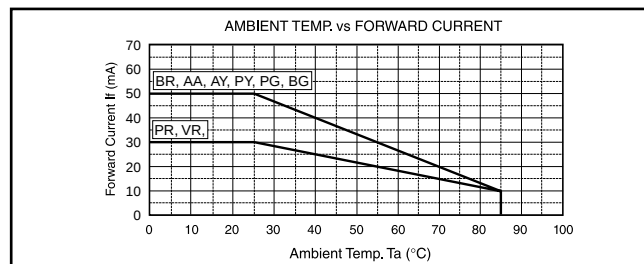
*The viewing angle is an average and will vary by color (Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _v			Wavelength Spectral Line Dominant 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	
BR5362X	GaAlAs	Red	Clear Pastel Red	2	4	20	660	647	30	20	1.7	2.0	20	100	4	110°
PR5362X	GaP			0.4	0.6	10	700	635	10	10	2.1	2.5	10	100	4	
VR5362X	GaAsP			2	4	20	630	624	30	20	2.0	2.5	20	100	4	
AA5362X	GaAsP	Orange	Clear Pastel Orange	2	4	20	605	606	30	20	2.2	2.5	20	100	4	
AY5362X	GaAsP	Yellow	Clear Pastel Yellow	2	4	20	580	590	30	20	2.2	2.5	20	100	4	
PY5362X	GaP	Yellow Green		3	6	20	570	572	30	20	2.1	2.5	20	100	4	
PG5362X	GaP	Green	Clear Pastel Green	2	4	20	560	567	30	20	2.1	2.5	20	100	4	
BG5362X	GaP	Pure Green		0.6	1.2	20	555	558	30	20	2.1	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

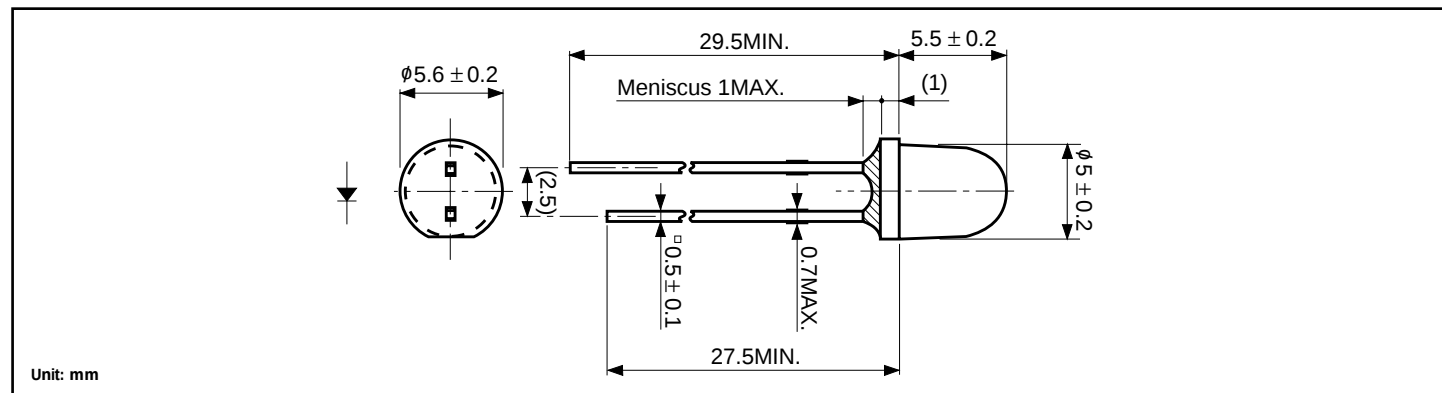
φ 5mm Round Shape



5363X / 5373X Series

S T A N D A R D C O L O R

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red			Orange	Yellow	Yellow Green	Green	Pure Green	Units
		BR	MPR	MVR	MAA	MAY	MPY	MPG	MBG	
Power Dissipation	Pd	100	75	75	70	85	85	70	70	mW
Forward Current	I _F	50	30	30	25	30	30	25	25	mA
Peak Forward Current	I _{FM}	300	75	75	60	75	75	60	60	mA
Reverse Voltage	V _R	4	4	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	0.40		0.33	0.40		0.33		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

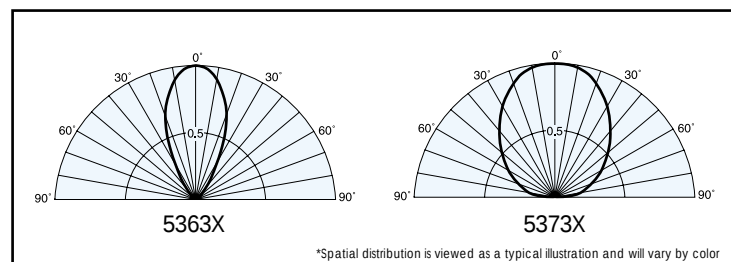
*5363X lens is clear and 5373X lens is diffused

**The viewing angle is an average and will vary by color

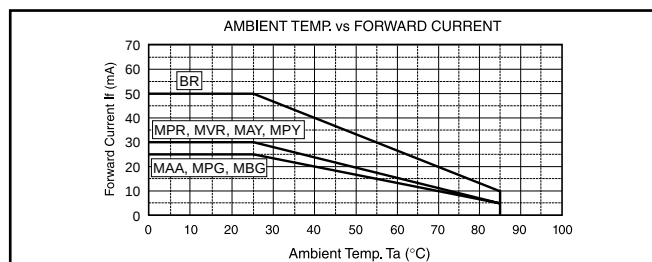
(Ta=25°C)

Part No.	Material	Emitted Color	Lens Color*	Luminous Intensity I _V			Wavelength Spectral Line Dominant Half Width				Forward Voltage V _F			Reverse Current I _R		Viewing Angle** (2 θ 1/2)
				MIN.	TYP.	If	Peak λ _p TYP.	Dominant λ _d TYP.	Δλ TYP.	If	TYP.	MAX.	If	MAX.	V _R	
BR5363X/5373X	GaAlAs	Red	Pastel Red	15/6	30/12	20	660	647	30	20	1.7	2.0	20	100	4	50/100°
MPR5363X/5373X	GaP			2/1	4/2	10	700	635	100	10	2.1	2.8	10	20	4	
MVR5363X/5373X	GaAsP			10/5	20/10	20	630	624	30	20	2.0	2.8	20	20	4	
MAA5363X/5373X	GaAsP	Orange	Pastel Orange	10/5	20/10	20	605	606	30	20	2.2	2.8	20	20	4	
MAY5363X/5373X	GaAsP	Yellow	Pastel Yellow	10/5	20/10	20	580	590	30	20	2.2	2.8	20	20	4	
MPY5363X/5373X	GaP	Yellow Green		15/6	30/12	20	570	572	30	20	2.1	2.8	20	20	4	
MPG5363X/5373X	GaP	Green	Pastel Green	10/5	20/10	20	560	567	30	20	2.1	2.8	20	20	4	
MBG5363X/5373X	GaP	Pure Green		5/1.5	10/3	20	555	558	30	20	2.1	2.8	20	20	4	
Units				mcd		mA	nm			mA	V		mA	μA	V	Deg.

Spatial Distribution (x)



Operation Current Derating Chart





Ø 5mm Round Shape



STANDARD COLOR

Technical drawing of a probe tip. The side view shows a cylindrical body with a hemispherical tip. Dimensions include a total length of 28.5 MIN., a tip diameter of $\phi 5 \pm 0.2$, and a base diameter of $\phi 5.6 \pm 0.2$. A feature labeled "Meniscus 1MAX." is indicated with a dimension of 7.6 $\pm$ 0.3. A distance of 26.5 MIN. is shown from the base to the start of the tip. The end view shows a circular cross-section with a diameter of $\phi 5.6 \pm 0.2$ and two square features. A dimension of 0.7 MAX. is shown for the width of the tip, and 0.5 $\pm$ 0.1 is shown for the width of the base. A dimension of (2.5) is shown for the thickness of the base. A dimension of 0.5 $\pm$ 0.1 is shown for the width of the base. A dimension of 26.5 MIN. is shown from the base to the start of the tip. A dimension of 7.6 $\pm$ 0.3 is shown for the distance from the base to the tip. A dimension of 28.5 MIN. is shown for the total length. A feature labeled "Meniscus 1MAX." is indicated. A dimension of $\phi 5 \pm 0.2$ is shown for the tip diameter. A dimension of $\phi 5.6 \pm 0.2$ is shown for the base diameter. A dimension of 0.7 MAX. is shown for the width of the tip. A dimension of 0.5 $\pm$ 0.1 is shown for the width of the base. A dimension of (2.5) is shown for the thickness of the base. A dimension of 26.5 MIN. is shown from the base to the start of the tip. A dimension of 7.6 $\pm$ 0.3 is shown for the distance from the base to the tip. A dimension of 28.5 MIN. is shown for the total length. A feature labeled "Meniscus 1MAX." is indicated.

($T_a=25^{\circ}\text{C}$)

Item		Red			Orange	Yellow	Yellow Green	Green	Pure Green	Units
	Symbol	BR	MPR	MVR	MAA	MAY	MPY	MPG	MBG	
Power Dissipation	Pd	100	75	75	70	85	85	70	70	mW
Forward Current	I _F	50	30	30	25	30	30	25	25	mA
Peak Forward Current	I _{FM}	300	75	75	60	75	75	60	60	mA
Reverse Voltage	V _R	4	4	4	4	4	4	4	4	V
Operating Temperature	Topr	-30 to +85								°C
Storage Temperature	Tstg	-30 to +100								°C
Derating (DC)*	ΔI _F	0.67	0.40		0.33	0.40		0.33		mA/°C

■ Electro-Optical Characteristics

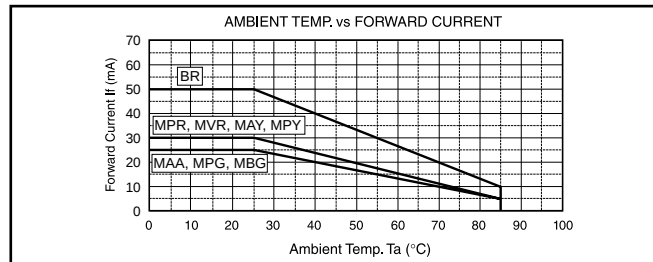
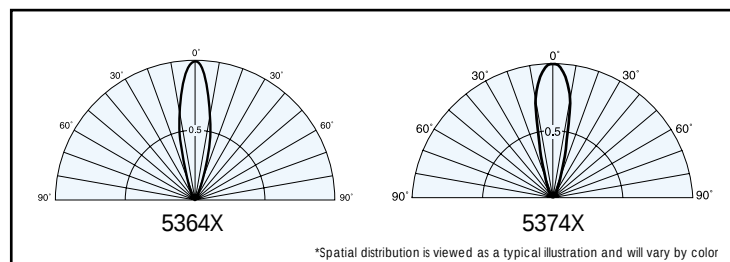
***5364X lens is clear and 5374X lens is diffused**

**The viewing angle is an average and will vary by color

($T_a=25^{\circ}\text{C}$)

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.	IF	Peak λ _P TYP.	Dominant λ _D TYP.	Spectral Line Δλ _{1/2} TYP.	IF	TYP.	MAX.	IF	MAX.	V _R	
BR5364X/5374X	GaAlAs	Red	Pastel Red	60/30	120/60	20	660	647	30	20	1.7	2.0	20	100	4	25/30°
MPR5364X/5374X	GaP			5/3	10/6	10	700	635	100	10	2.1	2.8	10	20	4	
MVR5364X/5374X	GaAsP			50/30	100/60	20	630	624	30	20	2.0	2.8	20	20	4	
MAA5364X/5374X	GaAsP	Orange	Pastel Orange	50/25	100/50	20	605	606	30	20	2.2	2.8	20	20	4	
MAY5364X/5374X	GaAsP	Yellow	Pastel Yellow	40/20	80/40	20	580	590	30	20	2.2	2.8	20	20	4	
MPY5364X/5374X	GaP	Yellow Green		60/30	120/60	20	570	572	30	20	2.1	2.8	20	20	4	
MPG5364X/5374X	GaP	Green	Pastel Green	50/20	100/40	20	560	567	30	20	2.1	2.8	20	20	4	
MBG5364X/5374X	GaP	Pure Green		20/8	40/16	20	555	558	30	20	2.1	2.8	20	20	4	
Units				mcd		mA	nm		mA	V		mA	μA	V	Deg.	

■ Operation Current Derating Chart





SINGLE COLOR LED

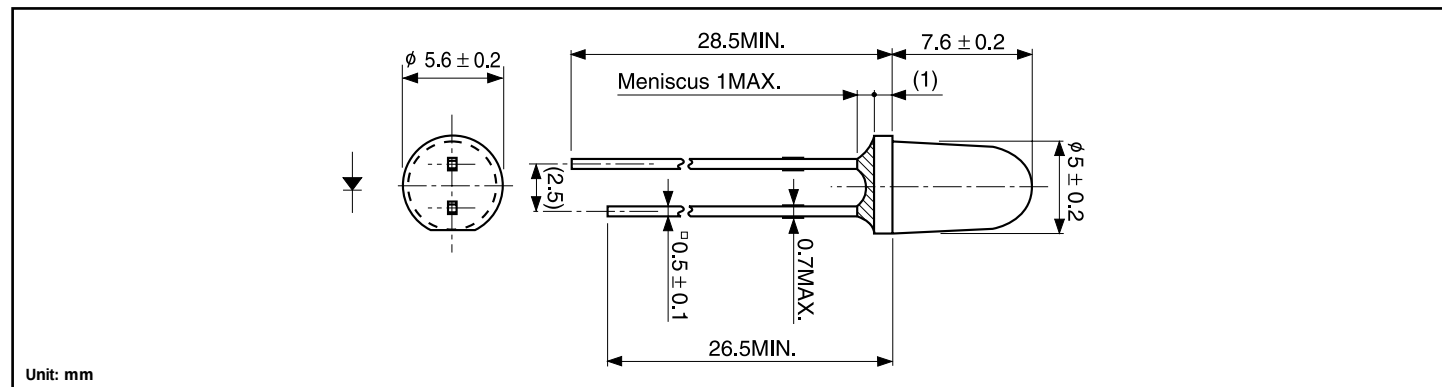
φ 5mm Round Shape



D_5304X / F_5364X Series

HIGH BRIGHTNESS COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Blue	Blue Green	Green	Yellow		Orange		Red		Units
		DB	DC	DG	EFY	FY	EFA	FA	EFR	FR	
Power Dissipation	Pd	100	100	100	125	125	125	125	125	125	mW
Forward Current	I _F	25	25	25	50	50	50	50	50	50	mA
Peak Forward Current	I _{FM}	60	60	60	200	200	200	200	200	200	mA
Reverse Voltage	V _R	5	5	5	5	5	5	5	5	5	V
Operating Temperature	Topr	-40 to +85									°C
Storage Temperature	Tstg	-40 to +100									°C
Derating (DC)*	ΔI _F	0.33				0.67					mA/°C

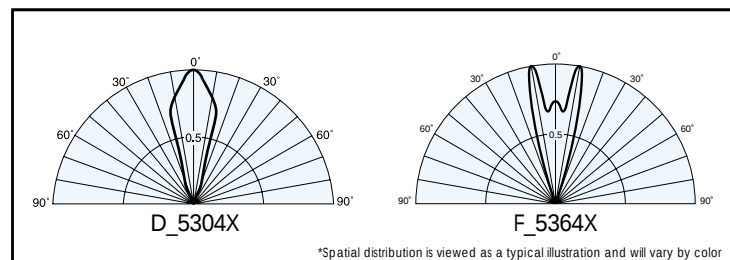
* Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

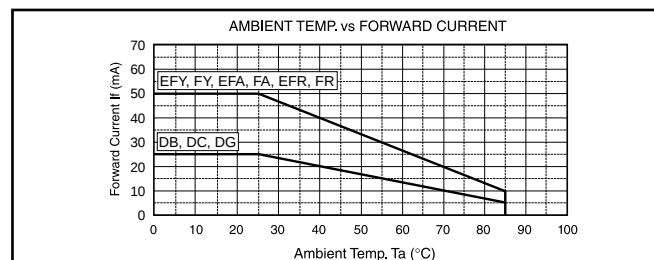
*The viewing angle is an average and will vary by color (Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I _V			Wavelength Spectral Line				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.	Half Width Δλ TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R		
DB5304X	InGaP/SiC	Blue	Water Clear	150	300	20	467	470	26	20	3.5	4.0	20	100	5	25°	
DC5304X	InGaP/SiC	Blue Green		500	1,000	20	502	505	30	20	3.5	4.0	20	100	5		
DG5304X	InGaP/SiC	Green		500	1,000	20	522	525	30	20	3.5	4.0	20	100	5		
EFY5364X	AlInGaP	Yellow	Clear Pastel Yellow	900	1,280	20	592	590	15	20	1.9	2.4	20	100	5	35°	
FY5364X				320	640	20											
EFA5364X	AlInGaP	Orange	Clear Pastel Orange	1,100	1,560	20	609	605	15	20	1.9	2.4	20	100	5		
FA5364X				390	780	20											
EFR5364X	AlInGaP	Red	Clear Pastel Red	820	1,160	20	635	626	15	20	1.9	2.4	20	100	5		
FR5364X				290	580	20											
Units				mcd		mA	nm		mA		V		mA		μA	V	Deg.

Spatial Distribution (x)



Operation Current Derating Chart





SINGLE COLOR LED

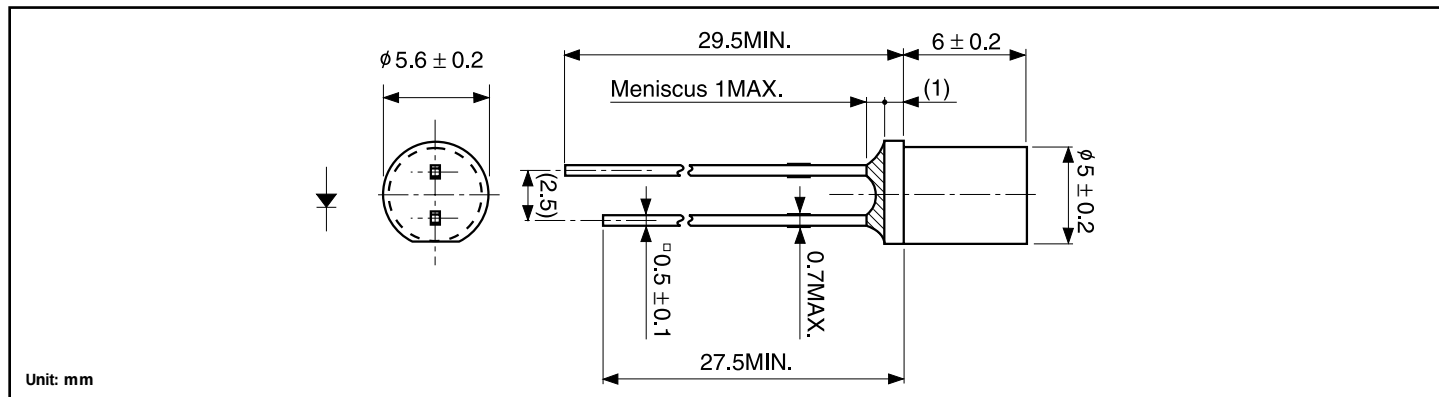
φ 5mm Round Shape



5385X Series

STANDARD COLOR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Red			Orange	Yellow	Yellow Green	Green	Pure Green	Units
		BR	PR	VR	AA	AY	PY	PG	BG	
Power Dissipation	Pd	100	75	75	125	125	125	125	125	mW
Forward Current	I _F	50	30	30	50	50	50	50	50	mA
Peak Forward Current	I _{FM}	300	100	100	100	100	100	100	100	mA
Reverse Voltage	V _R	4	4	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	0.33			0.67				mA/°C

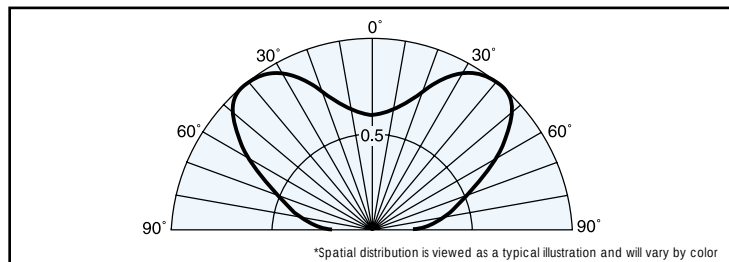
* Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20
The current derating for operation applies when the temperature is above 25°C

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 Dominant 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		
BR5385X	GaAlAs	Red	Diffused Pastel Red	3	6	20	660	647	30	20	1.7	2.0	20	100	4	150°	
PR5385X	GaP			0.6	0.9	10	700	635	100	10	2.1	2.5	10	100	4		
VR5385X	GaAsP			3	6	20	630	624	30	20	2.0	2.5	20	100	4		
AA5385X	GaAsP	Orange	Diffused Pastel Orange	3	6	20	605	606	30	20	2.2	2.5	20	100	4		
AY5385X	GaAsP	Yellow	Diffused Pastel Yellow	2.5	5	20	580	590	30	20	2.2	2.5	20	100	4		
PY5385X	GaP	Yellow Green		3	6	20	570	572	30	20	2.1	2.5	20	100	4		
PG5385X	GaP	Green	Diffused Pastel Green	2.5	5	20	560	567	30	20	2.1	2.5	20	100	4		
BG5385X	GaP	Pure Green		0.8	1.6	20	555	558	30	20	2.1	2.5	20	100	4		
Units				mcd		mA	nm		mA		V		mA		μA	V	Deg.

Spatial Distribution (x)



Operation Current Derating Chart

