

SINGLE COLOR LED

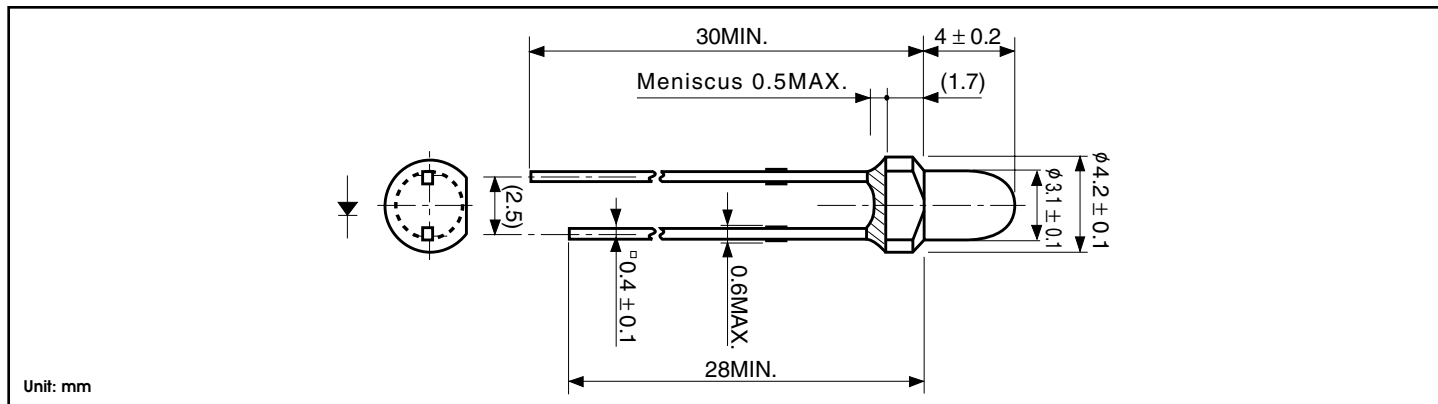
3mm Flush Mount Round Shape



D_3803X / F_3863X 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)* | I _F | 0.33 | | | | 0.67 | | | | | mA/°C |

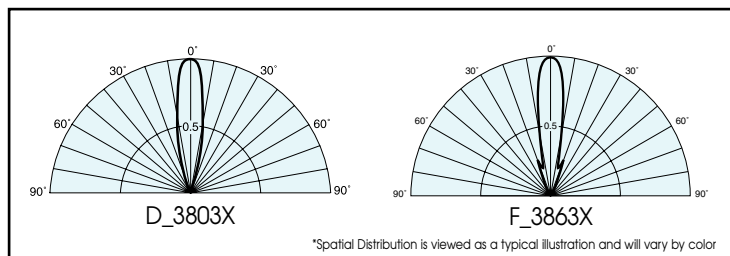
* Ta=25°C, I_{FM} applies for the pulse width 1 msec. and duty cycle 1/20. The current derating for operation applies when the temperature is above 25°C

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 / 2) | |
|----------|-----------|---------------|---------------------|-----------------------------------|-------|----------------|--------------------------|------------|------|------------|--------------------------------|------|------|--------------------------------|------|-----------------------|----------------|
| | | | | MIN. | TYP. | I _f | Peak P TYP. | Dominant d | | Half Width | | TYP. | MAX. | I _f | MAX. | | V _r |
| | | | | | | | | TYP. | TYP. | TYP. | I _f | | | | | | |
| DB3803X | InGaN/Sic | Blue | Water Clear | 250 | 500 | 20 | 467 | 470 | 26 | 20 | 3.5 | 4.0 | 20 | 100 | 5 | 20° | |
| DC3803X | InGaN/Sic | Blue Green | | 600 | 1,200 | 20 | 502 | 505 | 30 | 20 | 3.5 | 4.0 | 20 | 100 | 5 | | |
| DG3803X | InGaN/Sic | Green | | 600 | 1,200 | 20 | 522 | 525 | 30 | 20 | 3.5 | 4.0 | 20 | 100 | 5 | | |
| EFY3863X | AllnGaP | Yellow | Clear Pastel Yellow | 1,000 | 1,440 | 20 | 592 | 590 | 15 | 20 | 1.9 | 2.4 | 20 | 100 | 5 | 20° | |
| FY3863X | | | | 360 | 720 | 20 | | | | | | | | | | | |
| EFA3863X | AllnGaP | Orange | Clear Pastel Orange | 1,120 | 1,600 | 20 | 609 | 605 | 15 | 20 | 1.9 | 2.4 | 20 | 100 | 5 | 20° | |
| FA3863X | | | | 400 | 800 | 20 | | | | | | | | | | | |
| EFR3863X | AllnGaP | Red | Clear Pastel Red | 900 | 1,280 | 20 | 635 | 626 | 15 | 20 | 1.9 | 2.4 | 20 | 100 | 5 | 20° | |
| FR3863X | | | | 320 | 640 | 20 | | | | | | | | | | | |
| Units | | | | mcd | | mA | nm | | | mA | V | | mA | µA | V | Deg. | |

Spatial Distribution (x)



Operation Current Derating Chart

