



**THE DATASHEET OF
FY3863X**



SINGLE COLOR LED

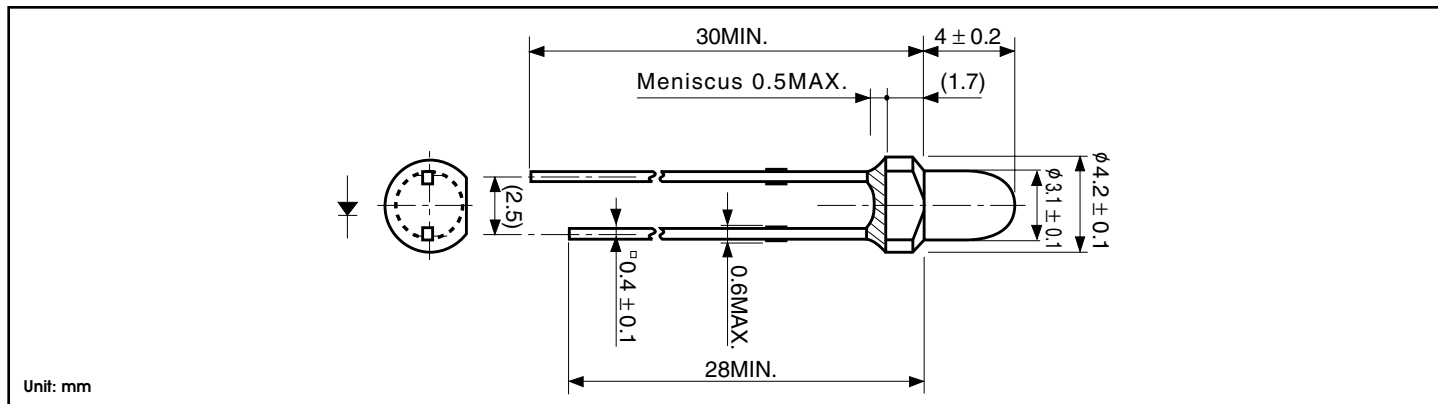
3mm Flush Mount Round Shape



D_3803X / F_3863X Series

HIGH BRIGHTNESS COLOR

Outline Dimensions



Unit: mm

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 |

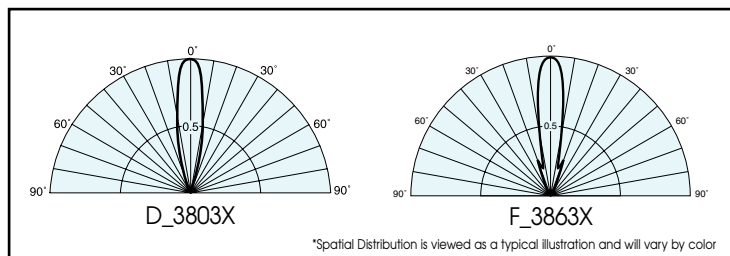
* Ta=25°C, I_{FM} applies for the pulse width 1 msec. and duty cycle 1/20. The current derating for operation applies when the temperature is above 25°C

Electro-Optical Characteristics

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

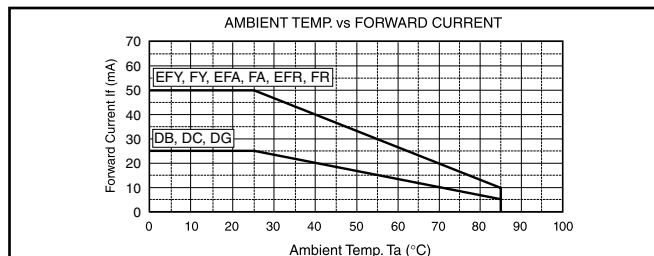
| Part No. | Material | Emitted Color | Lens Color | Luminous Intensity I _v | | | Wavelength Spectral Line | | | | Forward Voltage V _f | | | Reverse Current I _R | | Viewing Angle (2 / 2) |
|----------|-----------|---------------|---------------------|-----------------------------------|-------|----------------|--------------------------|-----------------|-----------------|----------------|--------------------------------|------|----------------|--------------------------------|----------------|-----------------------|
| | | | | MIN. | TYP. | I _f | Peak λ TYP. | Dominant λ TYP. | Half Width TYP. | I _f | TYP. | MAX. | I _f | MAX. | V _R | |
| 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 | AlInGaP | 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 | AlInGaP | 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 | AlInGaP | 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 | | nm | V | mA | μA | V | | Deg. | |

Spatial Distribution (x)




*Spatial Distribution is viewed as a typical illustration and will vary by color

Operation Current Derating Chart



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

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 [Stanley Electric Co Information](#)

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