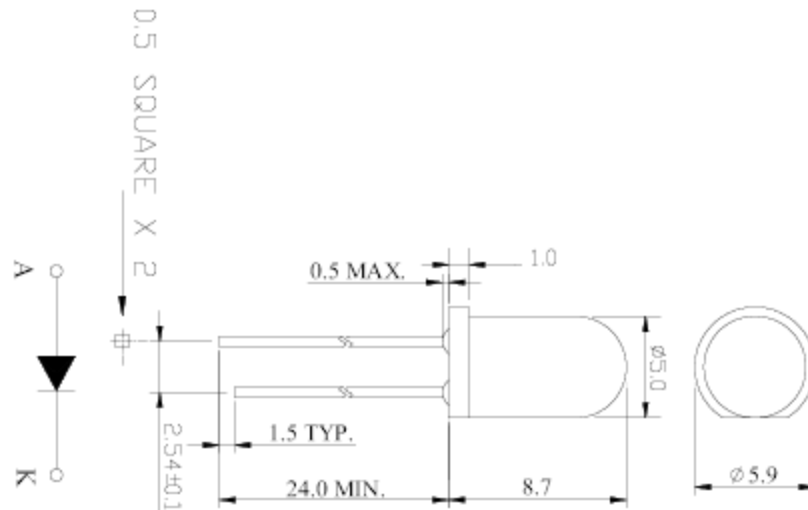




This white LED lamp is made with an Indium Gallium Nitride/Sapphire chip and a water clear epoxy resin.



**SELECTOR GUIDE**

| Part Number | Dice  | Lens Color / Type | Pack Size           | View Angle 2θ 1/2 |
|-------------|-------|-------------------|---------------------|-------------------|
| MT0318-WH-A | White | Water Clear       | 5mm Round 07° - 12° | 10 °              |

**ELECTRICAL / OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25°C**

| Parameter                | Symbol            | Device | Min. | Typ.         | Max. | Units | Test Conditions |
|--------------------------|-------------------|--------|------|--------------|------|-------|-----------------|
| Forward Voltage          | V <sub>F</sub>    | White  | -    | 3.2          | 4.0  | V     | 20mA            |
| Reverse Current          | I <sub>R</sub>    | White  | -    | -            | 50   | µA    | 5V              |
| Luminous Intensity       | I <sub>V</sub>    | White  | 4800 | 15000        | -    | mcd   | 20mA            |
| Peak Wavelength          | λ <sub>peak</sub> | White  | -    | 465          | -    | nm    | 20mA            |
| Dominant Wavelength      | λ <sub>D</sub>    | White  | -    | X=.31, Y=.32 | -    | nm    | 20mA            |
| Spectral Line Half-Width | Δλ 1/2            | White  | -    | 26           | -    | nm    | 20mA            |

**ABSOLUTE MAXIMUM RATINGS AT T<sub>A</sub>=25°C**

| Parameter                                    | Rating     | Units            |
|--|------------|------------------|
| Forward Current ( I <sub>F</sub> )           | 30         | mA               |
| Power Dissipation ( P <sub>D</sub> )         | 120        | mW               |
| Reverse Voltage ( V <sub>R</sub> )           | 5          | V                |
| Operating Temperature ( T <sub>OPR</sub> )   | -25 ~ +85  | °C               |
| Storage Temperature ( T <sub>STG</sub> )     | -40 ~ +100 | °C               |
| Lead Solder Temperature ( T <sub>SOL</sub> ) | 260        | @ for 5 sec. max |

1. All Dimensions Are In Millimeters (inches).
2. Tolerance Is +0.25(0.01") Unless Otherwise Noted.
3. Specifications Are Subject To Change Without Notice.

## Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS(IF=20Ma.Ta=25 )

| BiN | RANK |       |       |       |       | BiN | RANK |       |       |       |       |
|-----|------|-------|-------|-------|-------|-----|------|-------|-------|-------|-------|
| A1  | X    | 0.27  | 0.28  | 0.291 | 0.281 | B5  | X    | 0.296 | 0.304 | 0.315 | 0.307 |
|     | Y    | 0.265 | 0.282 | 0.273 | 0.256 |     | Y    | 0.307 | 0.319 | 0.311 | 0.298 |
| A2  | X    | 0.281 | 0.291 | 0.302 | 0.292 | B6  | X    | 0.307 | 0.315 | 0.326 | 0.318 |
|     | Y    | 0.256 | 0.273 | 0.265 | 0.248 |     | Y    | 0.298 | 0.311 | 0.303 | 0.29  |
| B1  | X    | 0.28  | 0.288 | 0.299 | 0.291 | B7  | X    | 0.304 | 0.312 | 0.323 | 0.315 |
|     | Y    | 0.282 | 0.294 | 0.286 | 0.273 |     | Y    | 0.319 | 0.331 | 0.323 | 0.311 |
| B2  | X    | 0.291 | 0.299 | 0.31  | 0.302 | B8  | X    | 0.315 | 0.323 | 0.334 | 0.326 |
|     | Y    | 0.273 | 0.286 | 0.277 | 0.265 |     | Y    | 0.311 | 0.323 | 0.315 | 0.303 |
| B3  | X    | 0.288 | 0.296 | 0.307 | 0.299 | C1  | X    | 0.312 | 0.322 | 0.333 | 0.323 |
|     | Y    | 0.294 | 0.307 | 0.298 | 0.286 |     | Y    | 0.331 | 0.348 | 0.34  | 0.323 |
| B4  | X    | 0.299 | 0.307 | 0.318 | 0.31  | C2  | X    | 0.323 | 0.333 | 0.344 | 0.334 |
|     | Y    | 0.286 | 0.298 | 0.29  | 0.277 |     | Y    | 0.323 | 0.34  | 0.332 | 0.315 |

Notes: X.Y Tolerance each Bin limit is  $\pm 0.01$ .

## Chromaticity Coordinates & Bin grading diagram:

