

Peak Emission Wavelength: 310nm

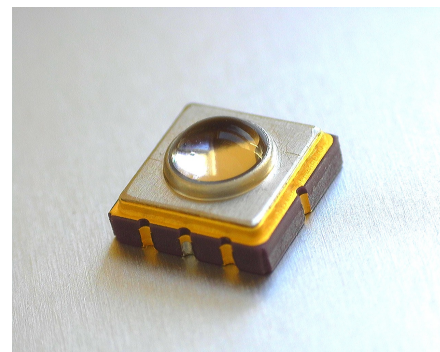
The MTSM3080HSD-UV is a powerful, small-footprint UV-B emitting device. A peak wavelength of 310nm LED creates new feasibility for a variety of applications. This UV Emitter is in a Seam Welded Surface Mount package for applications requiring high output power and efficiency.

FEATURES

- > 5mm x 5mm Seam Welded Surface Mount Package
- > High Reliability
- > High Output Power
- > Hermetically Sealed Package

APPLICATIONS

- > Medical Phototherapy
- > Protein Analysis
- > Drug Discovery
- > Forensic Analysis



Absolute Maximum Ratings (Ta=25°C)

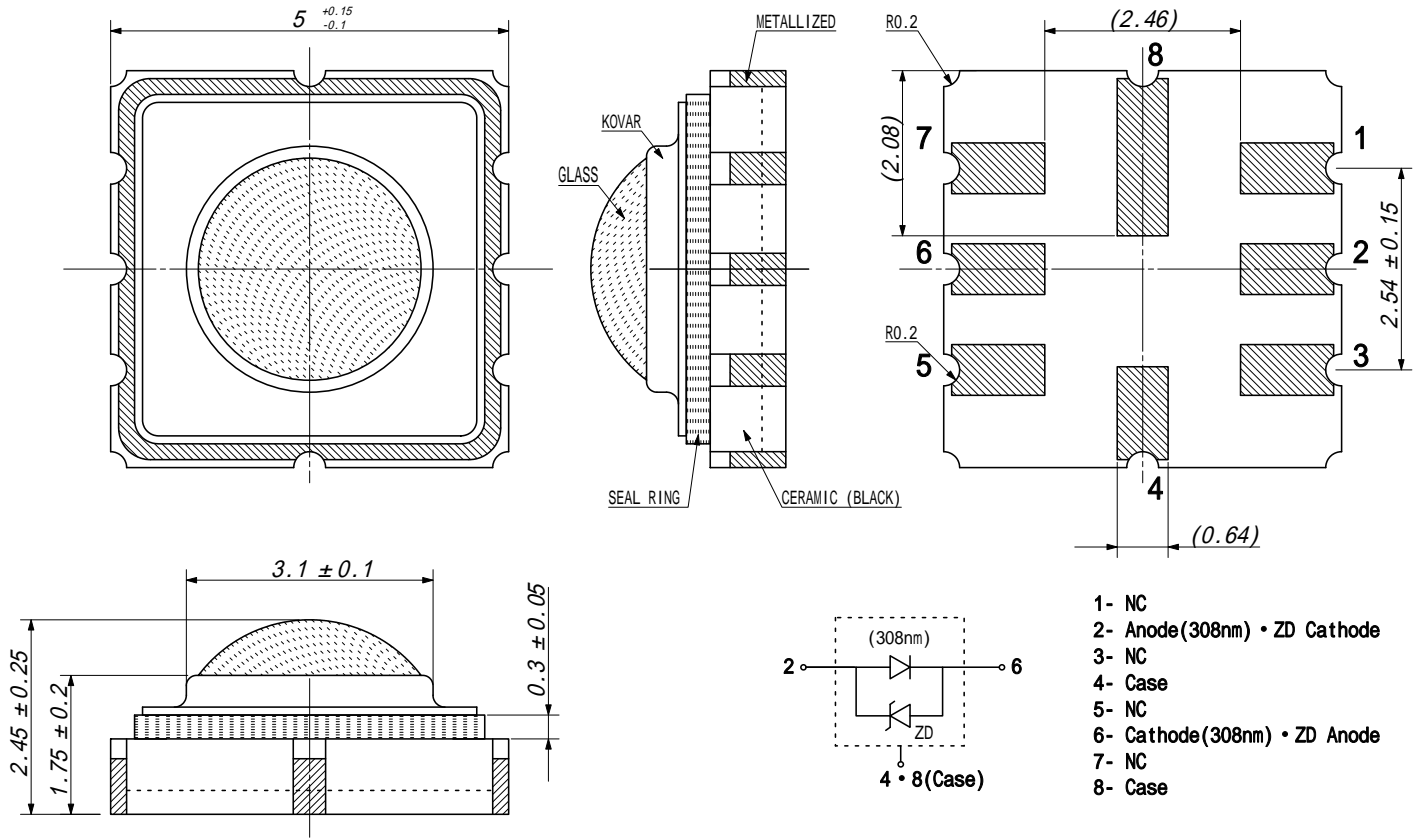


| ITEMS | SYMBOL | RATINGS | UNIT |
|-----------------------|--------|------------|------|
| Forward Current | IF | 100 | mA |
| Reverse Voltage | VR | TBD | V |
| Power Dissipation | PD | TBD | mW |
| Operating Temperature | Topr | -20 ~ +85 | °C |
| Storage Temperature | Tstg | -30 ~ +100 | °C |

Electrical & Optical Characteristics (Ta = 25°C)

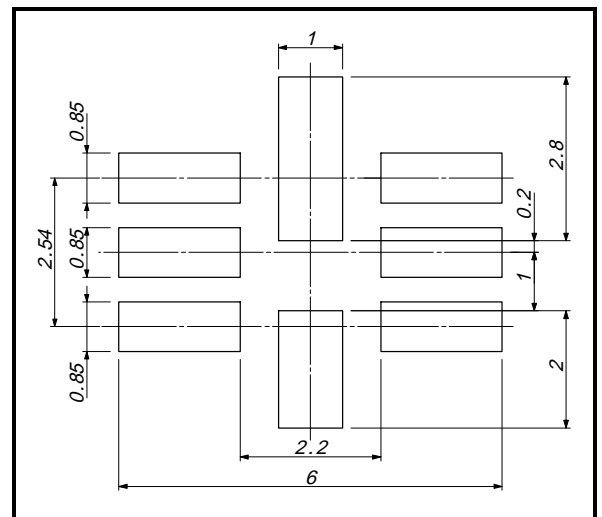
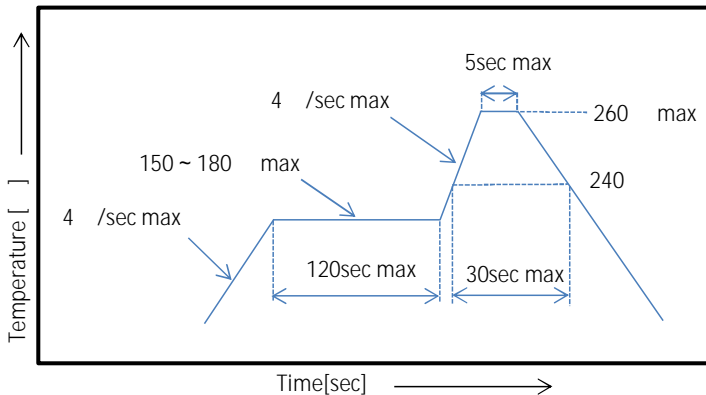
| ITEMS | SYMBOL | CONDITIONS | MIN. | TYP | MAX. | UNIT |
|-----------------|-----------------|------------|------|------|------|------|
| Forward Voltage | VF | IF=20mA | -- | 4.65 | -- | V |
| Peak Wavelength | λ_p | IF=20mA | -- | 310 | -- | nm |
| Radiant Flux | PO | IF=20mA | -- | 1.95 | -- | mW |
| FWHM | $\Delta\lambda$ | IF=20mA | -- | 18 | -- | nm |
| View Angle | Θ | IF=20mA | -- | 40 | -- | deg |

Package Dimensions

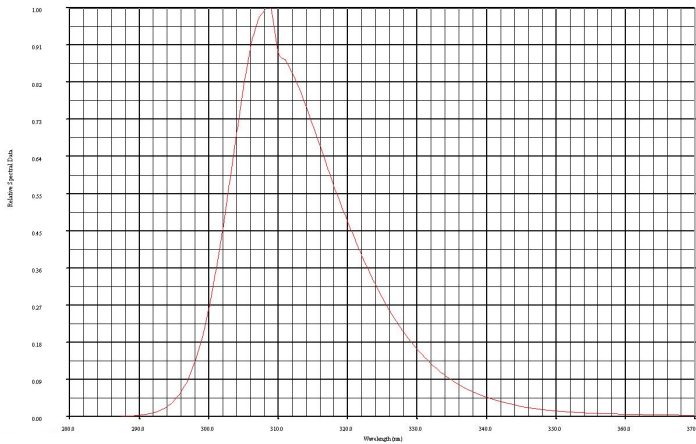


Recommended Soldering Pattern [mm]

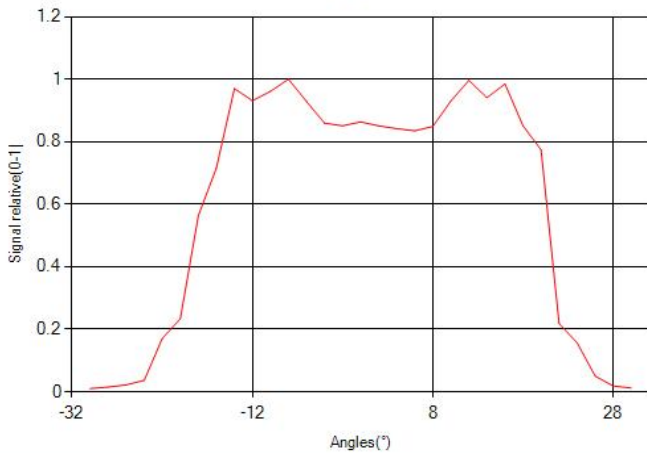
Reflow Soldering Temperature-Profile [Pb free Soldering] (Recommend condition)



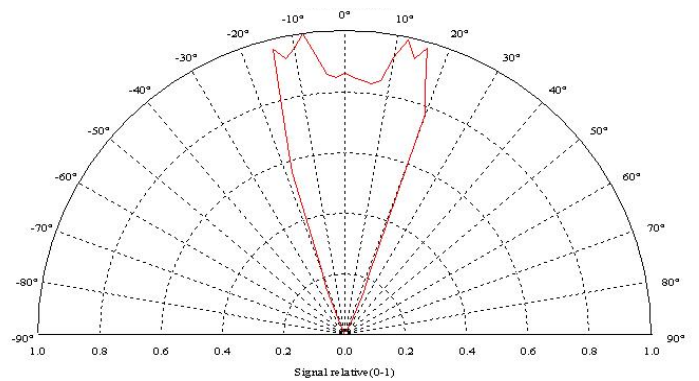
Spectral Response





Radiation Distribution



View Angle





 **CAUTION**

1. LEDs emit very strong UV radiation during operation.
2. Don't look directly into the LED light when in operation as UV radiation can harm your eyes.
3. To prevent even inadequate exposure, wear protective eyewear.
4. If LEDs are embedded in devices, please indicate warning labels against the UV LED used.
5. Avoid prolonged exposure to skin or other tissue during operation.
6. Keep out of reach of children.
7. Take appropriate precautions around pets and other living organisms to avoid UV exposure.
8. Specification and dimension are subject to change without notice.

The information contained herein is subject to change without notice.

2023-12-05