

### Peak Emission Wavelength: 310nm, 325nm, 340nm

The MTE-F11 series UV emitter is a specifically designed for applications requiring high radiant power output and accuracy in a TO-18 hermetically sealed package with a special UV glass lens for optimum life time and device performance. Custom package solutions and sorting are available.



#### FEATURES

- > Hermetically Sealed TO-18
- > High Reliability
- > Wide Viewing Angle

#### APPLICATIONS

- > UV Curing / Light Therapy
- > Drug Discovery / Optical Sensor
- > DNA / Protein Analysis

### Absolute Maximum Ratings (Ta=25°C)



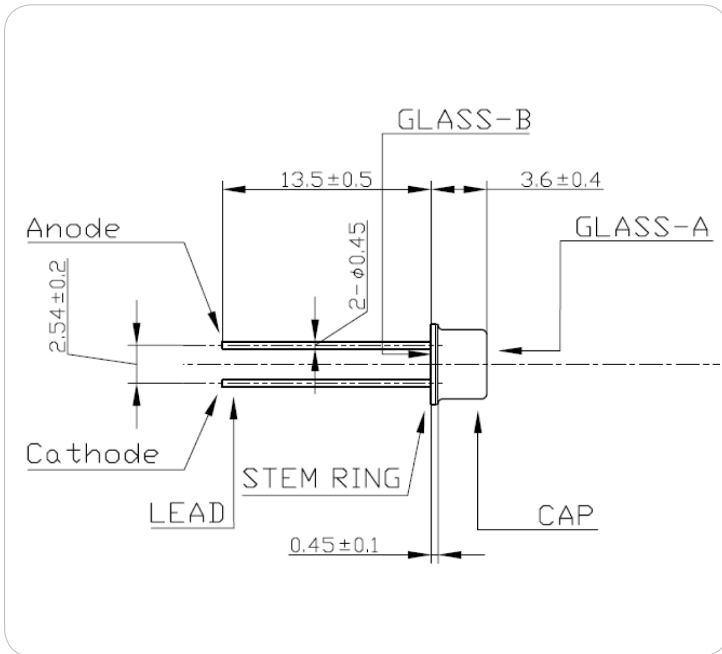
| ITEMS                   | SYMBOL | RATINGS    | UNIT |
|-------------------------|--------|------------|------|
| Forward Current         | IF     | 40         | mA   |
| Operating Temperature   | Topr   | -30 ~ +80  | °C   |
| Storage Temperature     | Tstg   | -40 ~ +100 | °C   |
| Soldering Temperature*1 | Tsol   | 300        | °C   |

\*1: Within 5 seconds.

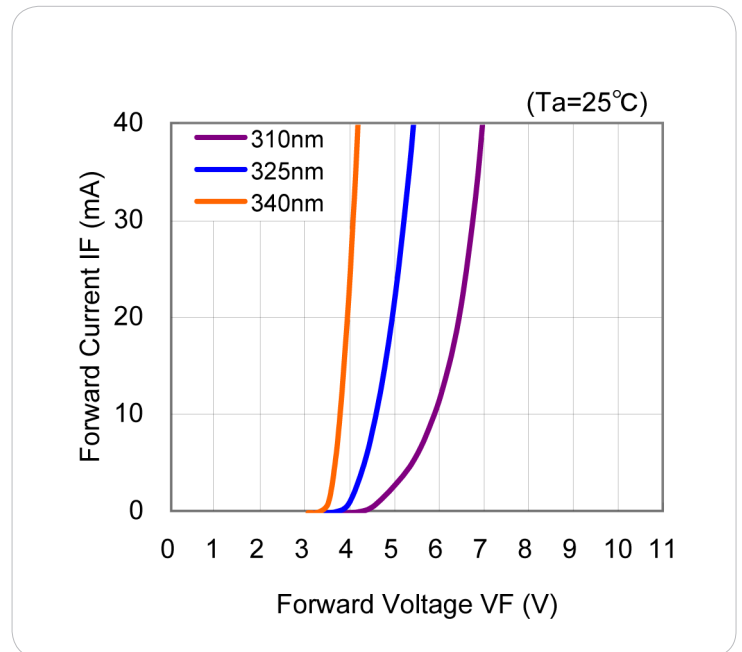
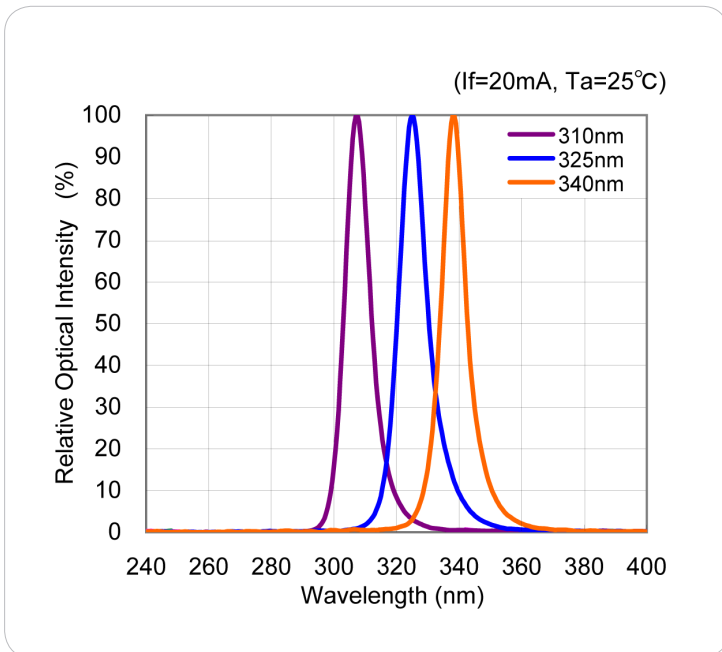
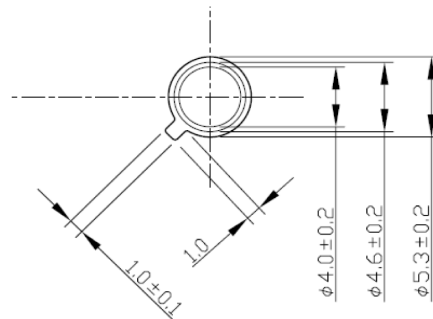
### Electrical & Optical Characteristics (Ta = 25°C)

| ITEMS                    | SYMBOL          | CONDITIONS | MTE310F11-UV | MTE325F11-UV | MTE340F11-UV | UNIT |
|--------------------------|-----------------|------------|--------------|--------------|--------------|------|
| Peak Wavelength          | $\lambda_p$     | IF=20mA    | 310±5        | 325±5        | 340±5        | nm   |
| Power Output             | PO              | IF=20mA    | 0.7          | 0.8          | 0.8          | mW   |
| Spectral Line Half Width | $\Delta\lambda$ | IF=20mA    | 10           | 9            | 9            | nm   |
| Forward Voltage          | VF              | IF=20mA    | 6.5          | 5            | 4            | V    |
| Viewing Angle            | $2\theta_{1/2}$ | IF=20mA    | 113          | 113          | 113          | deg  |
| Rise Time*1              | Tr              | --         | 16           | 20           | 12           | ns   |
| Fall Time*1              | Tf              | --         | 8            | 9            | 8            | ns   |

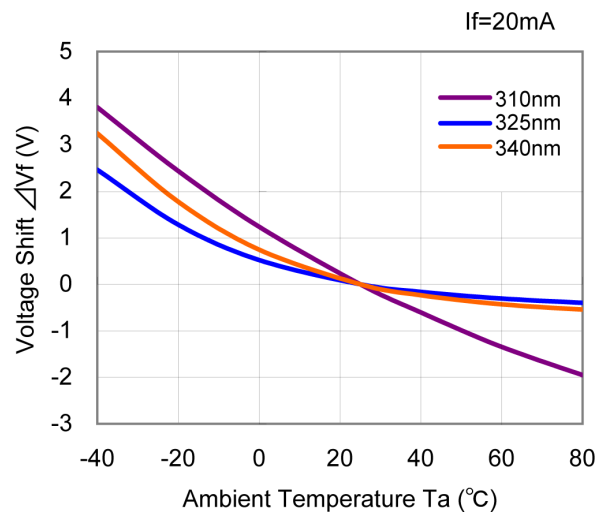
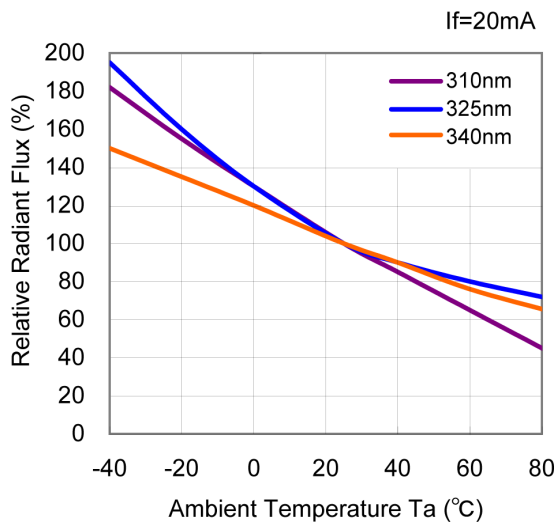
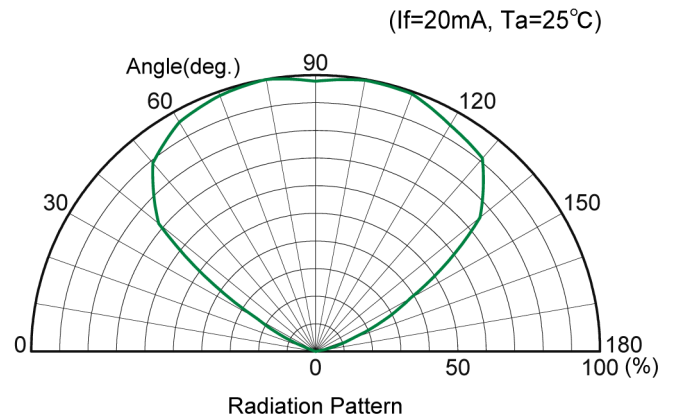
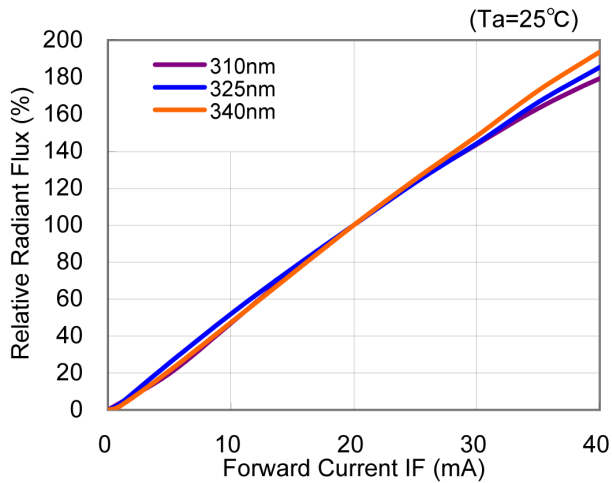
\*1: Test Condition: Frequency=100KHz, duty=1%, Ifp=200mA

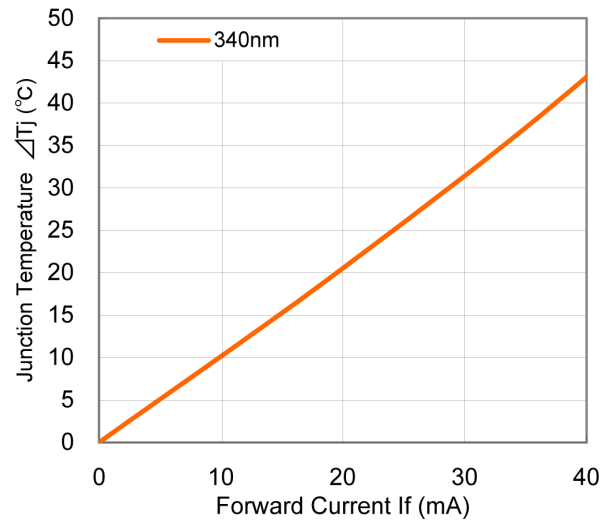
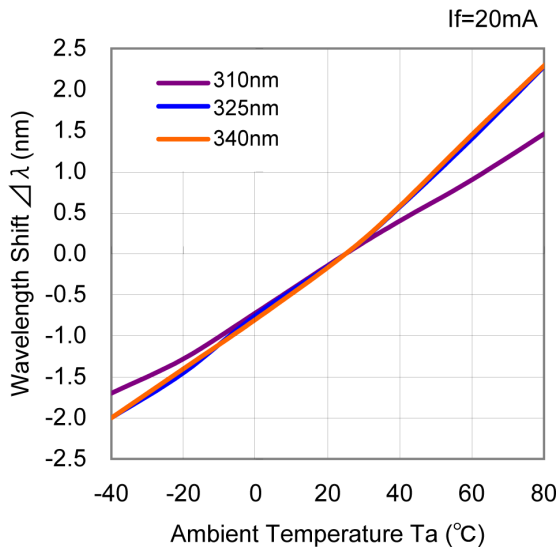


| ITEM | MATERIALS                   |
|------|-----------------------------|
| 1    | GLASS-A UV-GLASS            |
| 2    | CAP KOVAR, Ni Plating       |
| 3    | STEM RING KOVAR, Au Plating |
| 4    | GLASS-B Hard Glass (Black)  |
| 5    | LEAD KOVAR, Au Plating      |



Unit: mm, Tolerance:  $\pm 0.2$





## 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.