

Peak Emission Wavelength: 1040nm

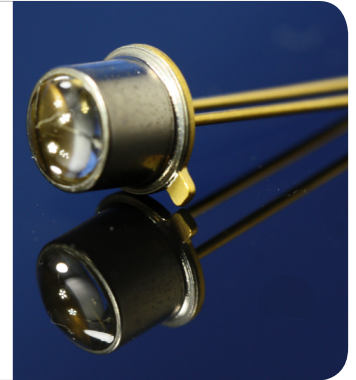
The 1040nm IR emitter series is designed for applications requiring precise optical / mechanical axis alignment and IR radiation in the SWIR range. Custom package solutions and sorting are available.

FEATURES

- > Metal Can Package
- > Narrow Beam Angle
- > High Reliability

APPLICATIONS

- > Bio Medical Applications
- > Optical Sensors
- > Optical Communications



Absolute Maximum Ratings (Ta=25°C)

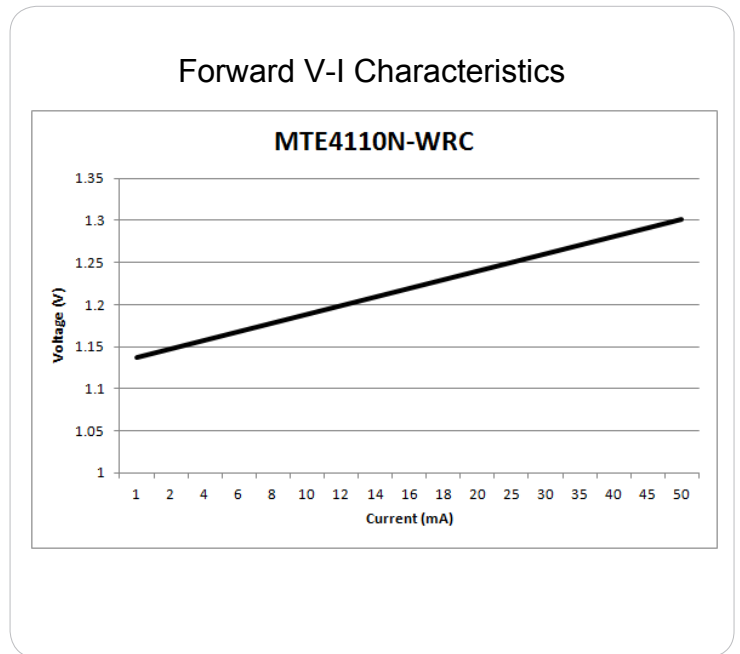
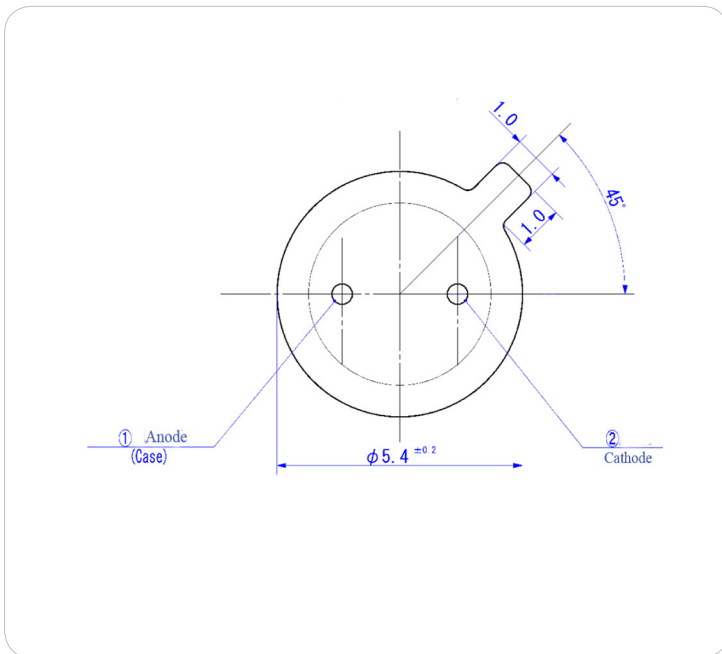
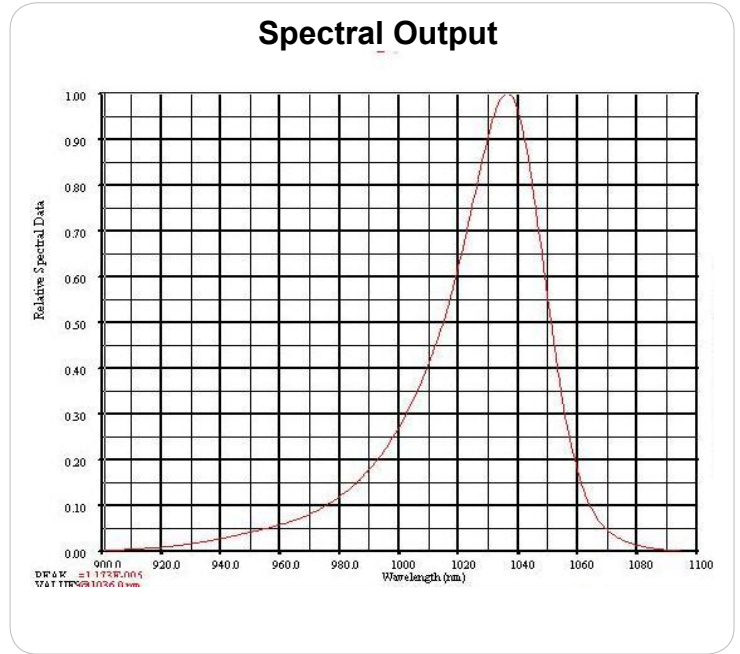
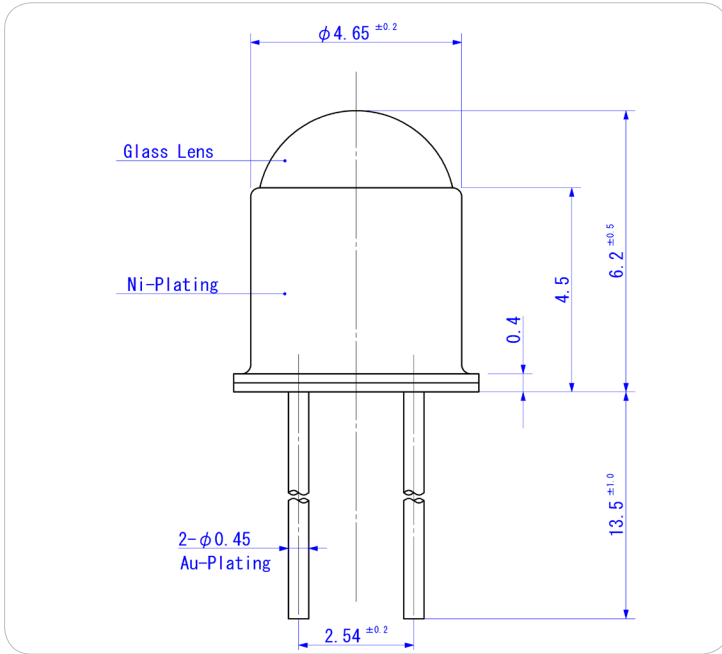


| ITEMS | SYMBOL | RATINGS | UNIT |
|------------------------------|--------|------------|------|
| Forward Current (DC) | IF | 100 | mA |
| Forward Current (Pulse)*1 | IFP | 1 | A |
| Reverse Voltage | VR | 5 | V |
| Power Dissipation | PD | 100 | mW |
| Operating Temperature Range | Topr | -25 ~ +85 | °C |
| Storage Temperature Range | Tstg | -30 ~ +100 | °C |
| Lead Soldering Temperature*2 | Tls | 260 | °C |

*1: Tw=10μsec, T=10msec; *2: Time 5 Sec max, Position: Up to 3mm from the body.

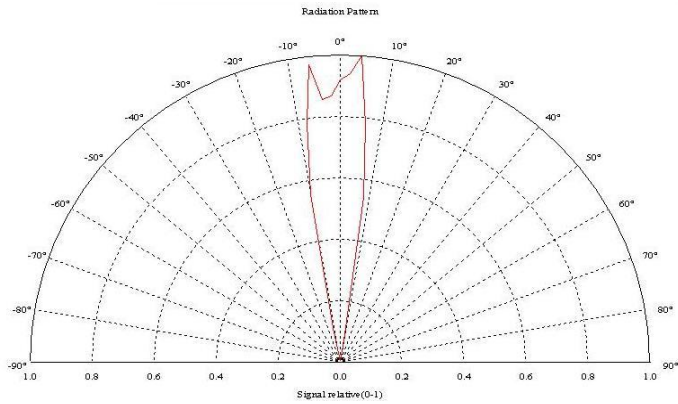
Electrical & Optical Characteristics (Ta = 25°C)

| ITEMS | SYMBOL | CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------------|--------|------------|-----|------|-----|------|
| Power Output | PO | IF=50mA | -- | 11.9 | -- | mW |
| Forward Voltage | VF | IF=50mA | -- | 1.33 | -- | V |
| Power Output | PO | IF=20mA | -- | 4.3 | -- | mW |
| Forward Voltage | VF | IF=20mA | -- | 1.24 | -- | V |
| Reverse Current | IR | VR=5V | -- | -- | 100 | μA |
| Peak Emission Wavelength | λp | IF=20mA | -- | 1040 | -- | nm |
| Spectral Line Half Width | Δλ | IF=20mA | -- | 34 | -- | nm |
| Half Intensity Beam Angle | Θ | IF=20mA | -- | 16 | -- | deg |



Unit: mm, Tolerance: ± 0.2

RADIATION PATTERN



Radiation Distribution

