

## MTRS6660

### Features

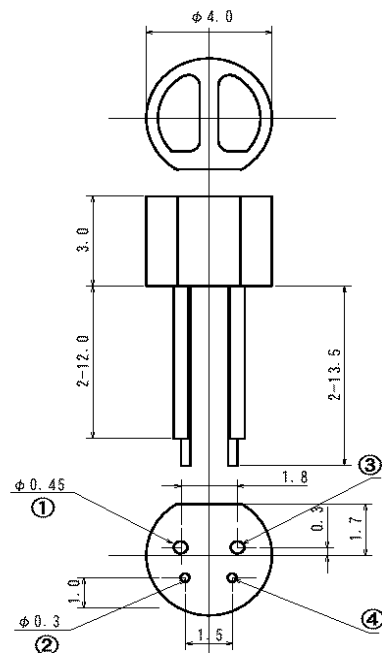
High Reliability  
Compact Package

### Applications

Card Reader  
Bar Code Reader  
Edge Sensing  
Money/Bill Reader

### Maximum Ratings (Ta=25°C)

| Characteristic         | Symbol           | Max.         | Test Condition     | Unit |
|------------------------|------------------|--------------|--------------------|------|
| Forward Current        | I <sub>F</sub>   | 40           | —                  | mA   |
| Pulsed Forward Current | I <sub>FP</sub>  | .50          | tw=10μs,<br>T=10mS | A    |
| Reverse Voltage        | V <sub>R</sub>   | 4            | —                  | V    |
| Power Dissipation      | P <sub>D</sub>   | 100.00       | —                  | mW   |
| Operating Temperature  | T <sub>opr</sub> | -20 ~ +80    | —                  | °C   |
| Storage Temperature    | T <sub>stg</sub> | -30<br>~+100 | —                  | °C   |
| Soldering Temperature  | T <sub>sol</sub> | 260          | for 5 sec. max     | °C   |



- ① LED Anode      ③ PD Cathode  
② LED Cathode    ④ PD Anode

### Opto-Electrical Characteristics (Ta=25°C)

| Characteristic              | Symbol         | Test Condition                                                 | Min | Typ     | Max  | Unit |
|-----------------------------|----------------|----------------------------------------------------------------|-----|---------|------|------|
| Forward Voltage             | V <sub>F</sub> | I <sub>F</sub> =20mA                                           | —   | 1.80    | 2.20 | V    |
| Reverse Current             | I <sub>R</sub> | V <sub>R</sub> =4V                                             | —   | —       | 10   | μA   |
| Light Current               | I <sub>L</sub> | I <sub>F</sub> =20mA, V <sub>R</sub> =10V, d=1mm*              | .70 | 1.50    | —    | μA   |
| Dark Current                | I <sub>D</sub> | V <sub>R</sub> =10V                                            | —   | —       | 10   | μA   |
| Peak Sensitivity Wavelength | λ <sub>p</sub> | I <sub>F</sub> =20mA                                           | —   | 660     | —    | nm   |
| Spectral Line Half Width    | Δλ             | I <sub>F</sub> =20mA                                           | —   | 25      | —    | nm   |
| Cross-Talk                  | I <sub>X</sub> | I <sub>F</sub> =20mA, V <sub>R</sub> =10V                      | —   | —       | 1    | %    |
| Rise Time                   | T <sub>r</sub> | V <sub>R</sub> =10V, I <sub>F</sub> =20mA, R <sub>L</sub> =1KΩ | —   | 1000.00 | —    | ns   |
| Fall Time                   | T <sub>f</sub> | V <sub>R</sub> =10V, I <sub>F</sub> =20mA, R <sub>L</sub> =1KΩ | —   | 1000.00 | —    | ns   |

\* Measured by Reflecting with Aluminum evaporated mirror (d=1.00mm)

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## MTRS6660 Graphs

