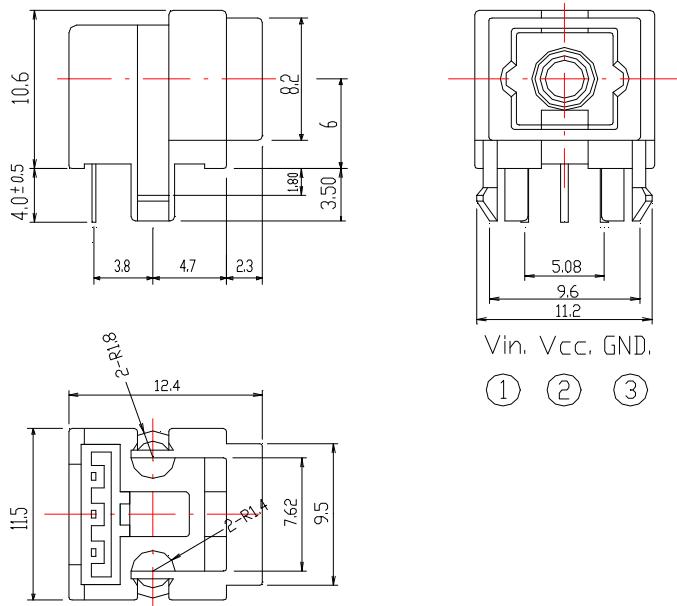


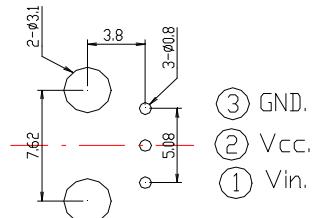
Features

- 1.Uni-directional data transmission using plastic fiber
- 2.Signal transmission speed
:MAX. 8 Mbps (NRZ signal)
- 3.Operating voltage :4.75 to 5.25 V
- 4.TTL and high speed C-MOS LOGIC IC compatible

Outline Dimensions



Recommended drilling as viewd from the soldering face



NOTES:

Tolerance is ±0.3mm unless otherwise noted.

Absolute Maximum Ratings

@ T_A=25°C

| Parameter | Symbol | Rating | Unit |
|-------------------------------------|------------------|-------------------------------|------|
| Supply voltage | V _{cc} | -0.5 to + 7.0 | V |
| Input voltage | V _{in} | -0.5 to V _{cc} + 0.5 | V |
| Operating temperature | T _{opr} | -20 to +70 | °C |
| Storage temperature | T _{stg} | -40 to +70 | °C |
| Soldering temperature ^{*1} | T _{sol} | 260 | °C |

^{*1} For 5s (2 times or less)

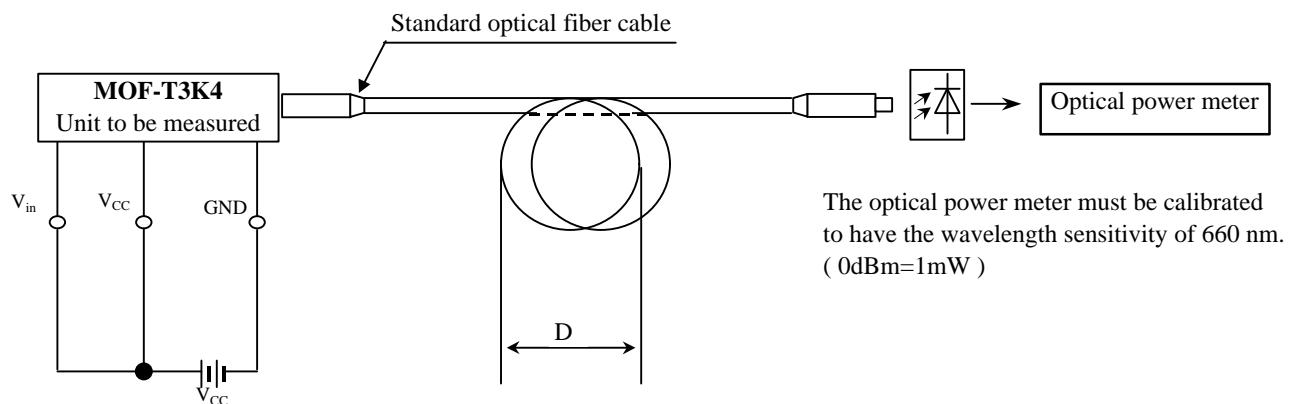
Recommended Operating Conditions

| Parameter | Symbol | MIN. | TYP. | MAX. | Unit |
|--------------------------|-----------------|------|------|------|------|
| Operating supply voltage | V _{cc} | 4.75 | 5.0 | 5.25 | V |
| Operating transfer rate | T | --- | --- | 8 | Mbps |

Electro-Optical Characteristics

| Parameter | Symbol | Conditions | MIN. | TYP. | MAX. | Unit |
|--|------------------|-----------------|------|------|-----------------|------|
| Peak emission wavelength | λ _p | | 630 | 660 | 690 | nm |
| Optical power output coupling with fiber | P _c | Refer to Fig. 1 | -21 | -18 | -15 | dBm |
| Dissipation current | I _{cc} | Refer to Fig. 2 | --- | 8 | 13 | mA |
| High level input voltage | V _{iH} | Refer to Fig. 2 | 2.1 | --- | V _{cc} | V |
| Low level input voltage | V _{iL} | Refer to Fig. 2 | --- | --- | 0.8 | V |
| Low High delay time | t _{pLH} | Refer to Fig. 3 | --- | 120 | --- | ns |
| High Low delay time | t _{pHL} | Refer to Fig. 3 | --- | 120 | --- | ns |
| Pulse width distortion | Δ _{tw} | Refer to Fig. 3 | -25 | --- | +25 | ns |

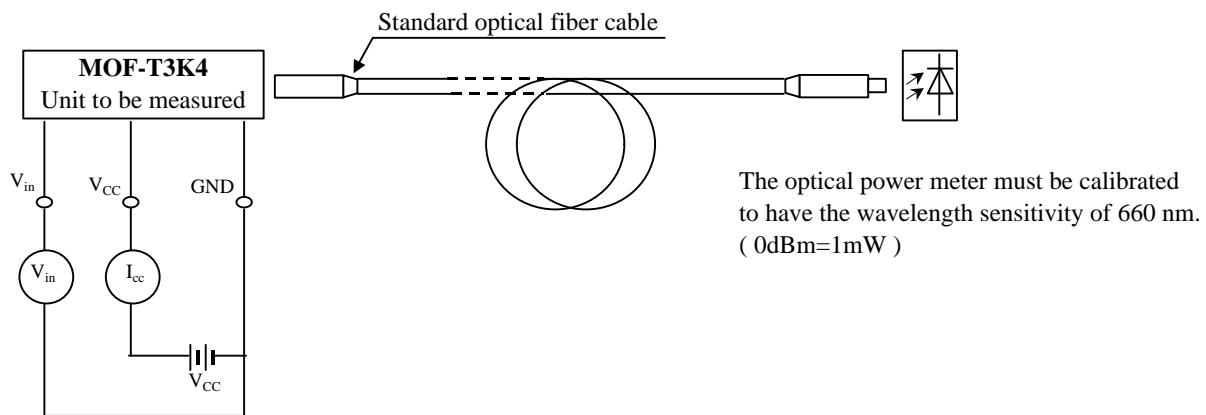
Fig. 1 Measuring Method of Optical Output Coupling with Fiber



Notes (1) $V_{cc}=5.0V$ (State of operating)

(2)To bundle up the standard fiber optic cable, make it into a loop with the diameter $D=10cm$ or more.

Fig. 2 Measuring Method of Input Voltage and Supply Current

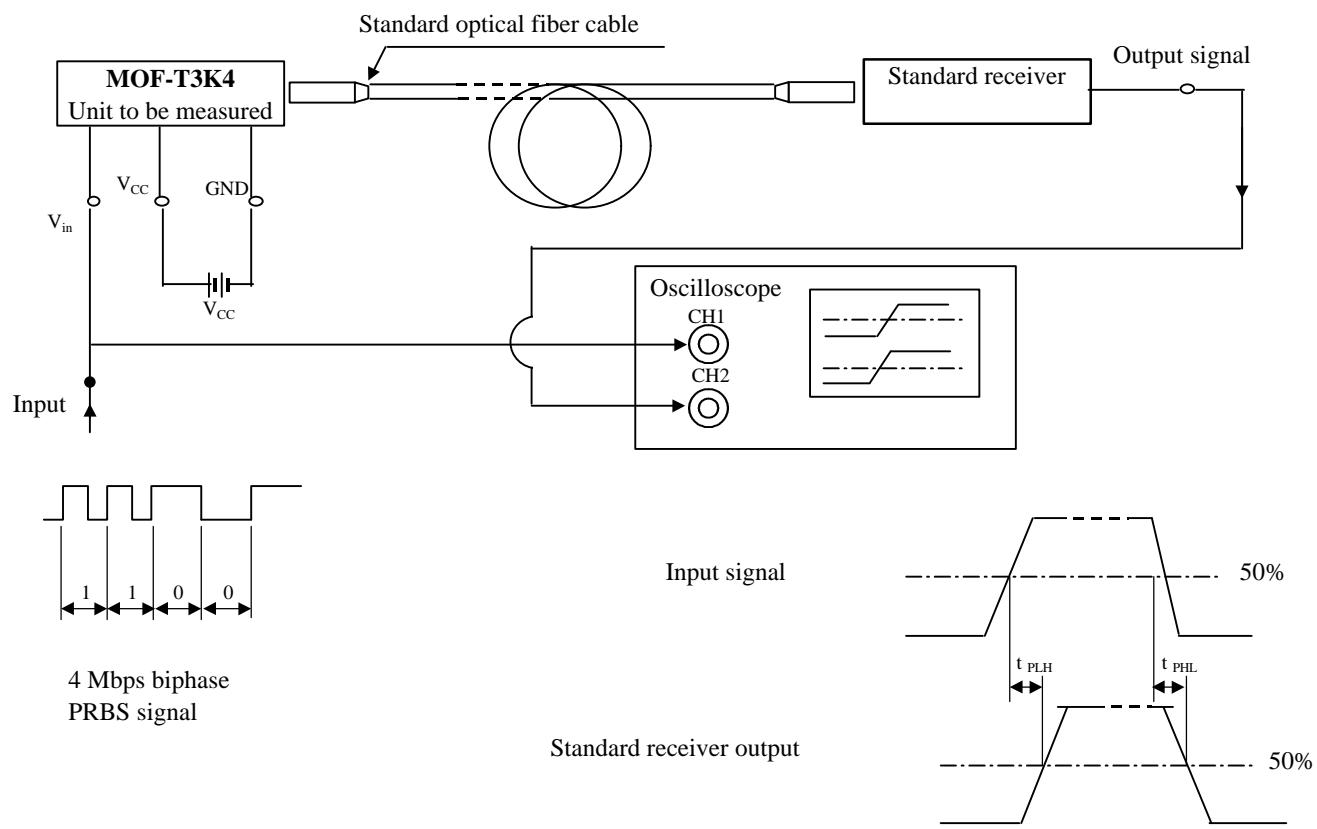


Input conditions and judgement method

| Conditions | Judgement method |
|-----------------------|---|
| $V_{in}=2.1V$ or more | $-21dBm \leq P_c \leq -15dBm$, $I_{cc}=13mA$ or less |
| $V_{in}=0.8V$ or less | $P_c \leq -36dBm$, $I_{cc}=13mA$ or less |

Note: $V_{cc}=5.0V$ (State of operating)

Fig.3 Measuring Method of Pulse Response



Test item

| Test item | Symbol | Test condition |
|---------------------------|-------------|----------------------------------|
| Low High pulse delay time | t_{PLH} | Refer to the above prescriptions |
| High Low pulse delay time | t_{PHL} | Refer to the above prescriptions |
| Pulse width distortion | Δtw | $\Delta tw = t_{PHL} - t_{PLH}$ |

Notes (1) The waveform write time shall be 4 seconds. But do not allow the waveform to be distorted by increasing the brightness too much.

(2) $V_{CC}=5.0$ (State of operating)

(3) The probe for the oscilloscope must be more than 1M and less than 10pF.