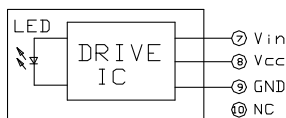
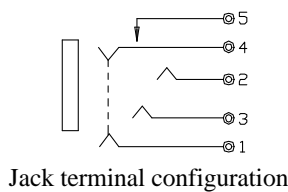
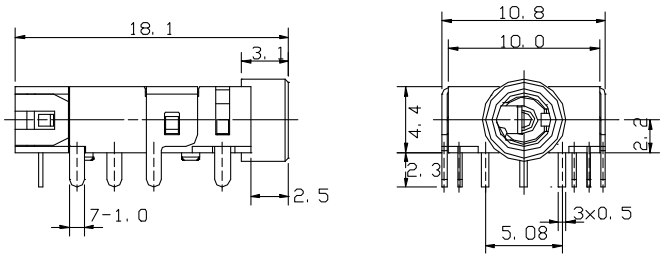


Features

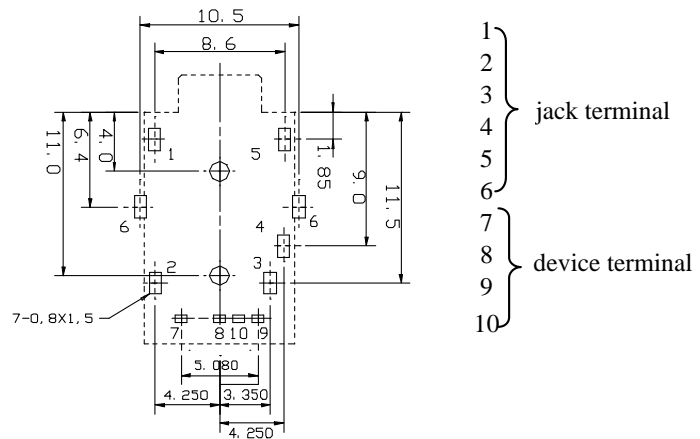
- 1.Compact
(adoption of small jack for mini plug JIS C6560)
- 2.Thin type (4.4mm) transmitter unit.
- 3.Both optical and electrical signal can be distinguished and transmitted.
- 4.Signal transmission speed :
MAX. 12.5 Mbps (NRZ signal)
- 5.Operating voltage : 4.75 to 5.25 V
- 6.L/F pitch : 2.54 mm



Outline Dimensions



Recommended Pads Layout
<BOTTOM VIEW>



NOTES:

Tolerance is $\pm 0.3\text{mm}$ unless otherwise noted.

Absolute Maximum Ratings

(Photoelectric conversion element)

@TA=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}	-30 to +80	°C
Soldering temperature ^{*1}	T_{sol}	260	°C

*1 For 5s (2 times or less)

Absolute Maximum Rating(Jack)

Parameter	Symbol	Rating	Unit
Total power dissipation	P_{tot}	D.C. 12V, 1A	-
Operating temperature	T_{opr}	-20 to +70	°C
Storage temperature	T_{stg}	-30 to +80	°C
Soldering temperature ^{*1}	T_{sol}	260	°C
Isolation voltage ^{*2}	V_{iso}	A.C. 500V rms	-

*1 For 5s (2 times or less)

*2 For 1 min

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	---	---	12.5	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 to High delay time	t _{pLH}	Refer to Fig. 3	---	---	180	ns
High to Low delay time	t _{pHL}	Refer to Fig. 3	---	---	180	ns
Pulse width distortion	Δ_{tw}	Refer to Fig. 3	-15	---	+15	ns

Fig. 1 Measuring Method of Optical Output Coupling with Fiber

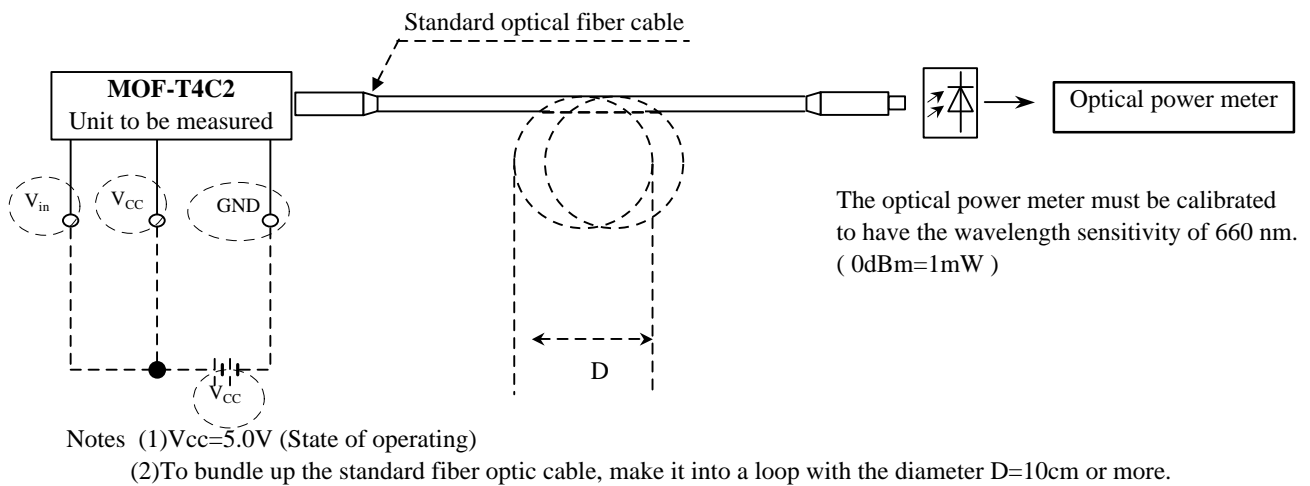
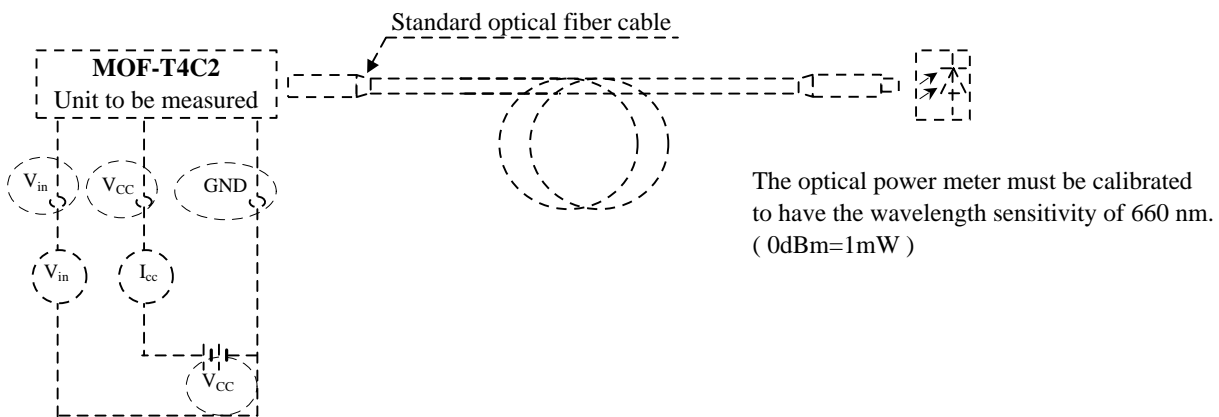


Fig. 2 Measuring Method of Input Voltage and Supply Current

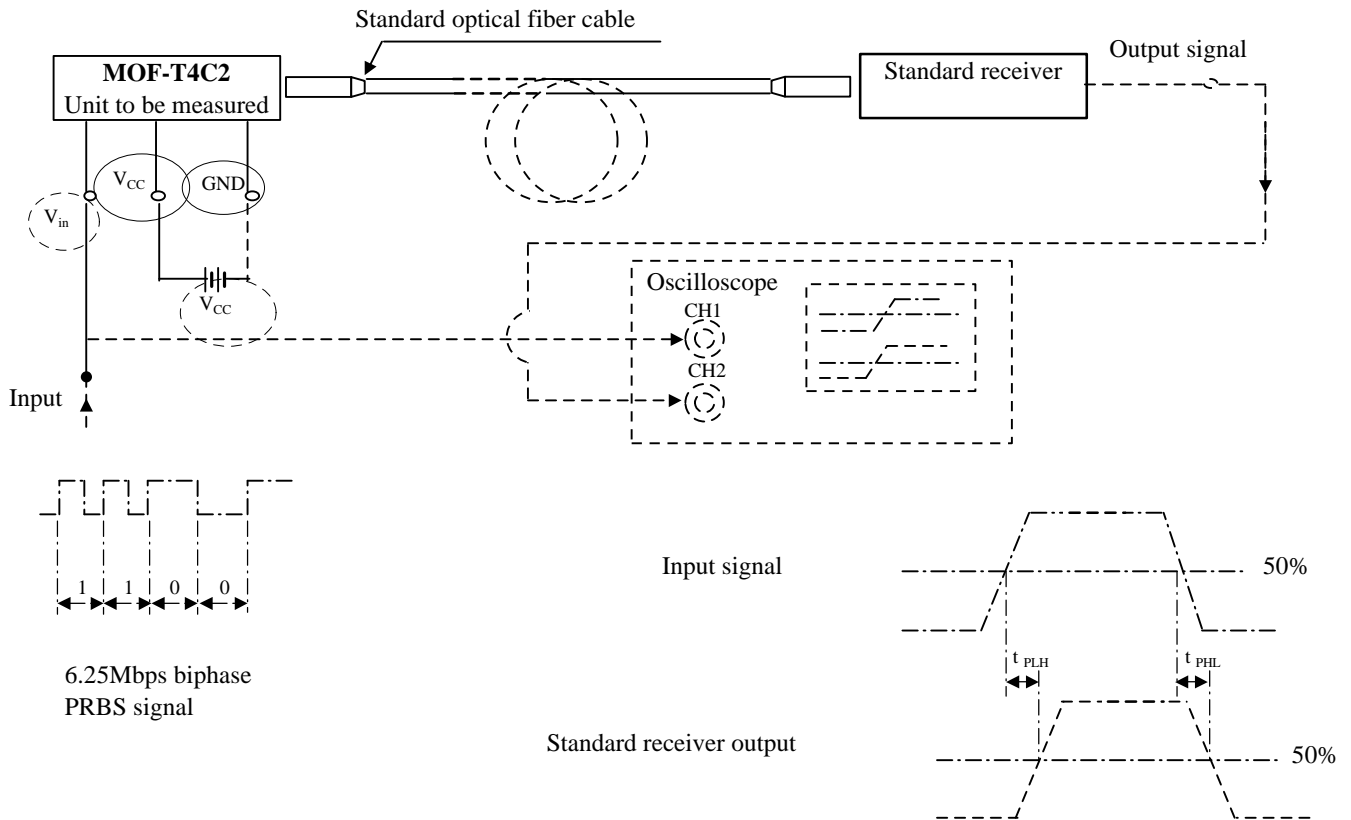


Input conditions and judgement method

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 to High pulse delay time	t_{PLH}	Refer to the above prescriptions
High to 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) $V_{cc} = 5.0\text{ V}$ (State of operating)

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