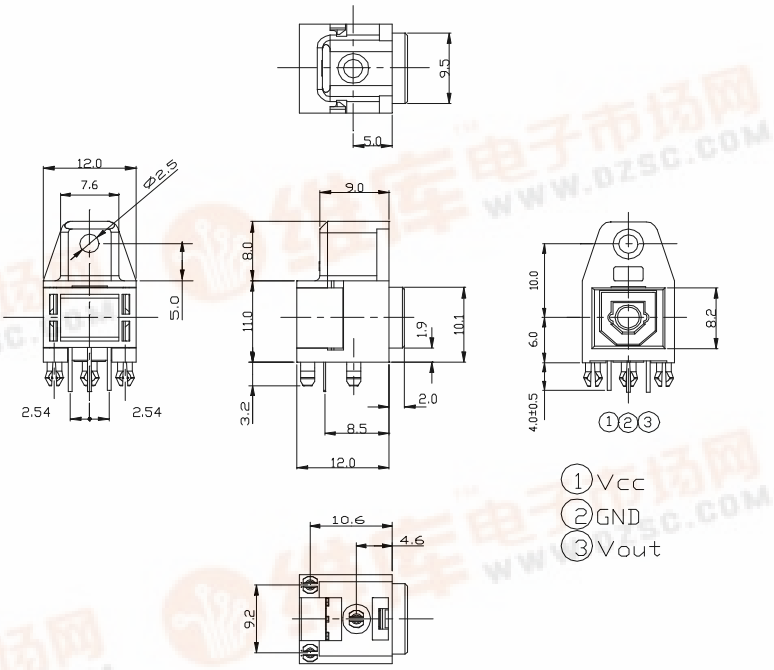
Fiber Optic Receiver MOF-R3K2

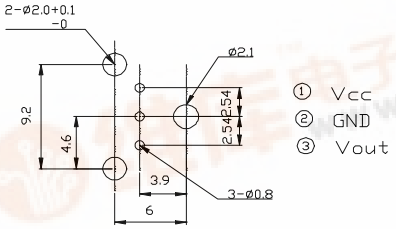
Features

1.Uni-directional data transmission using plastic fiber
2.Signal transmission speed
:MAX. 6 Mbps (NRZ signal)
3.Operating voltage :4.75 to 5.25 V
4.TTL compatible
5.Suitable for MOF-T3K2 Transmitter

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

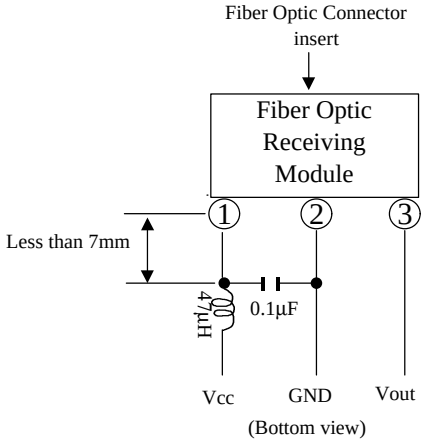
Parameter	Symbol	Rating	Unit
Supply voltage	V_{cc}	-0.5 to + 7	V
High Level Output Current	I_{OH}	-1	mA
Low Level Output Current	I_{OL}	5	mA
Operating temperature	T_{opr}	-20 to +70	°C
Storage temperature	T_{stg}	-30 to +80	°C
Soldering Temperature	T_{SOL}	260*	°C

* For 5s (1 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	0.1	---	6	Mbps
receiver input optical power level	Pc	-22	---	-14.5	dBm

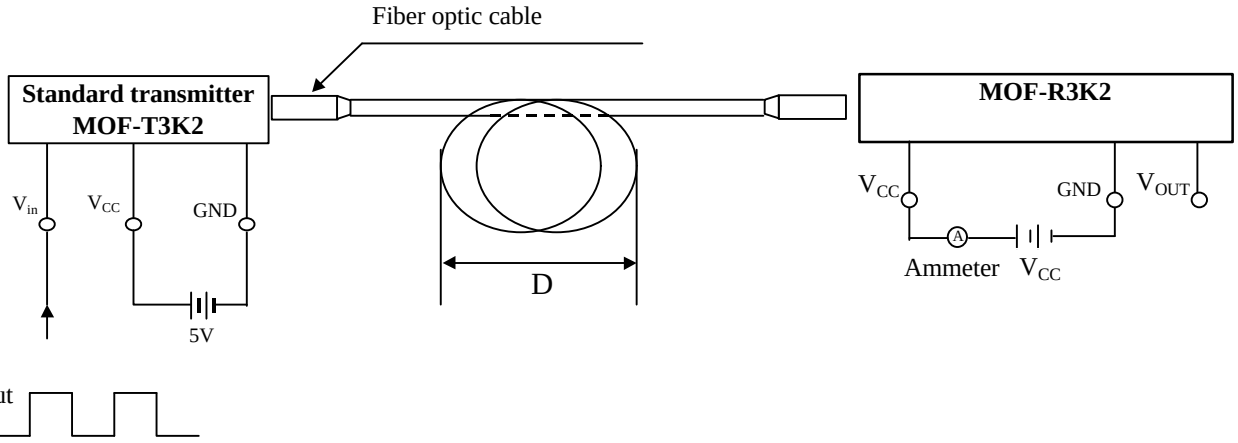
Recommended Connection Method



Electro-Optical Characteristics

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Dissipation current	I_{cc}	Refer to Fig. 1	---	20	40	mA
High level output voltage	V_{OH}	Refer to Fig. 2	2.7	4.4	---	V
Low level output voltage	V_{OL}	Refer to Fig. 2	---	0.2	0.4	V
Rise time	t_r	Refer to Fig. 2	---	20	40	ns
Fall time	t_f	Refer to Fig. 2	---	20	40	ns
Low →High delay time	t_{pLH}	Refer to Fig. 2	---	---	180	ns
High →Low delay time	t_{pHL}	Refer to Fig. 2	---	---	180	ns
Pulse width distortion	Δ_{tw}	Refer to Fig. 2	-30	---	+30	ns

Fig. 1 Measuring Method of Optical Output Coupling with Fiber



6 Mbps NRZ, Duty 50% or 3 Mbps biphase mark PRBS signal

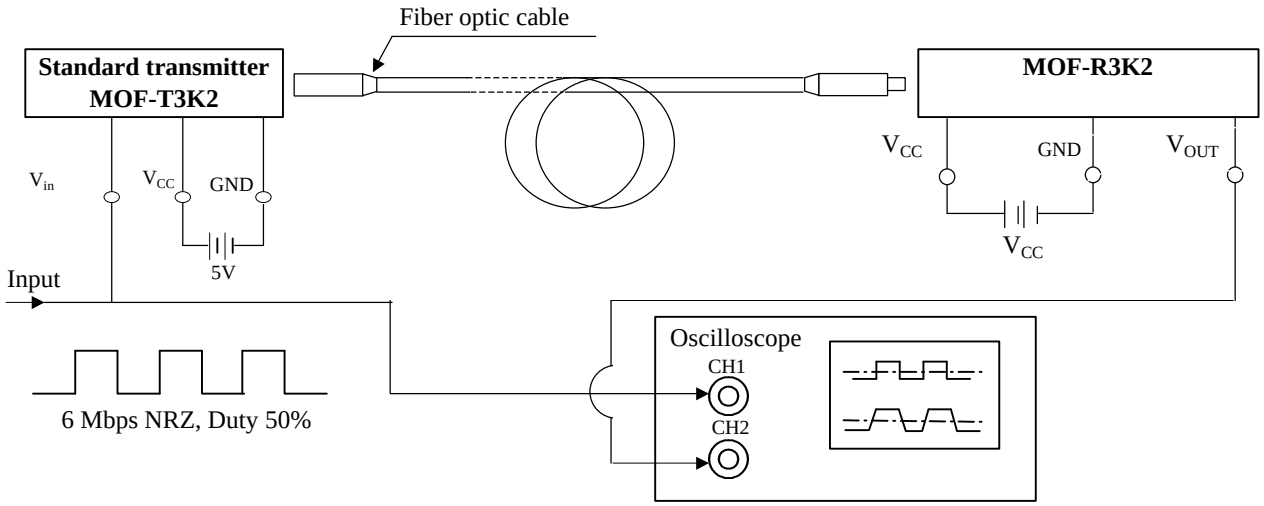
Notes (1)Vcc=5.0V (State of operating)

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

(3)P_c = -14.5 dBm

(4)Measured on an ammeter.

Fig. 2 Measuring Method of Output Voltage and Pulse Response



Test item

Test item	Symbol
Low →High pulse delay time	t_{PLH}
High → Low pulse delay time	t_{PHL}
Rise time	t_r
Fall time	t_f
Pulse width distortion $\Delta tw = t_{PHL} - t_{PLH}$	Δtw
High level output voltage	V_{OH}
Low level output voltage	V_{OL}