

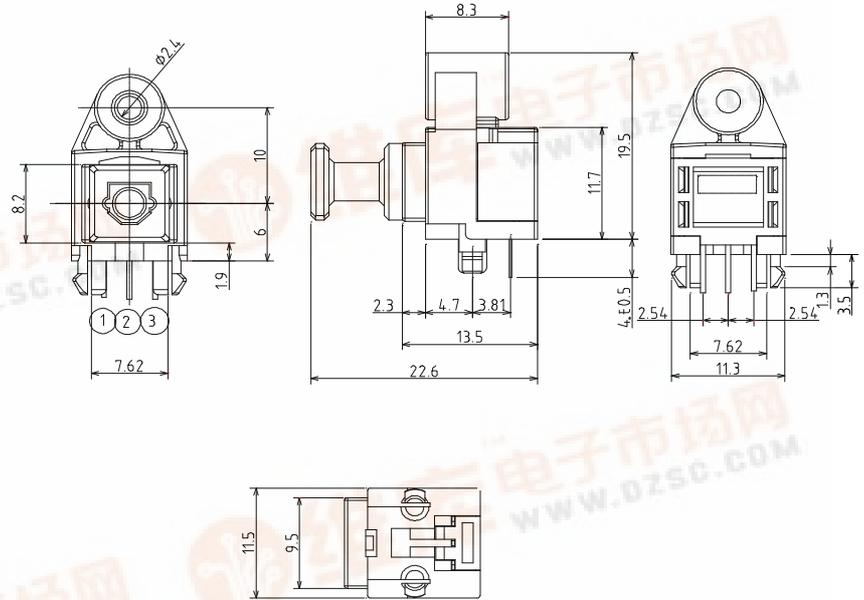
# Fiber Optic Receiver

# MOF-R3C3

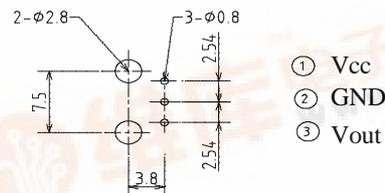
## Features

- 1.Uni-directional data transmission using plastic fiber
- 2.Signal transmission speed :MAX. 13.2 Mbps (NRZ signal)
- 3.Operating voltage :4.75 to 5.25 V
- 4.TTL compatible
- 5.Suitable for MOF-T3C3 Transmitter

## Outline Dimensions



Recommended drilling as viewed from the soldering face



NOTES:

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

## Absolute Maximum Ratings

@  $T_A = 25^\circ\text{C}$

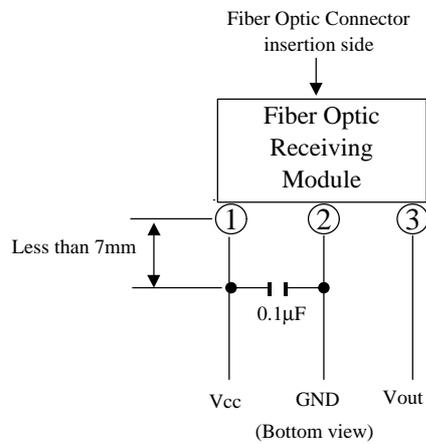
Parameter	Symbol	Rating	Unit
Supply voltage	$V_{cc}$	-0.5 to +6	V
High Level Output Current	$I_{OH}$	-1	mA
Low Level Output Current	$I_{OL}$	5	mA
Operating temperature	$T_{opr}$	-20 to +70	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-30 to +80	$^\circ\text{C}$
Soldering Temperature	$T_{SOL}$	260*	$^\circ\text{C}$

\* 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	---	13.2	Mbps
receiver input optical power level	$P_c$	-24	---	-14.5	dBm

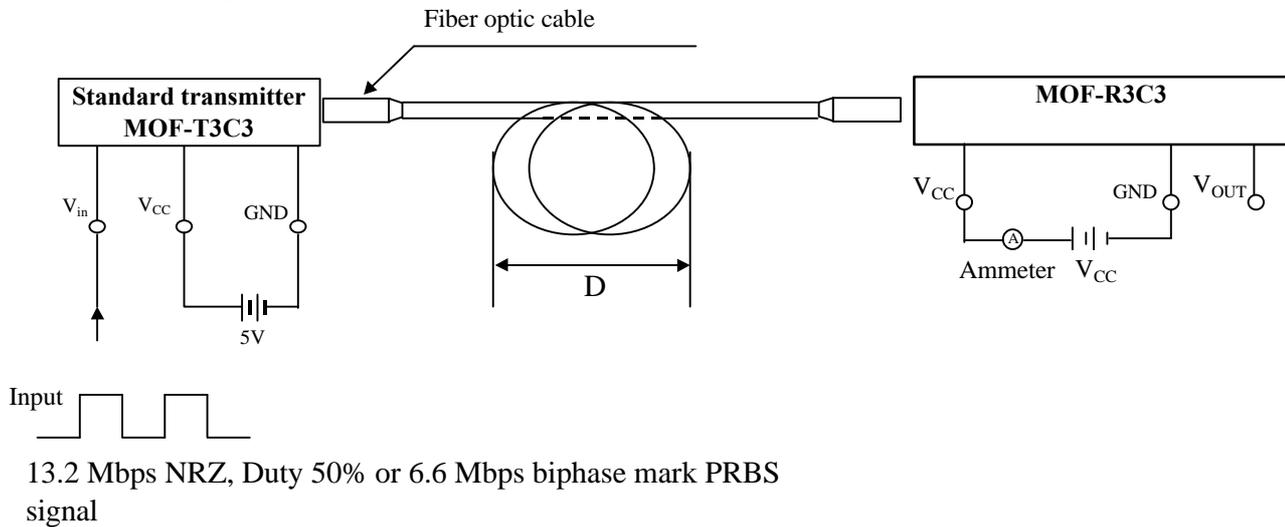
## Recommended Connection Method



## Electro-Optical Characteristics

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Dissipation current	$I_{cc}$	Refer to Fig. 1	---	15	40	mA
High level output voltage	$V_{OH}$	Refer to Fig. 2	2.4	4.8	---	V
Low level output voltage	$V_{OL}$	Refer to Fig. 2	---	0.2	0.4	V
Rise time	$t_r$	Refer to Fig. 2	---	10	20	ns
Fall time	$t_f$	Refer to Fig. 2	---	10	20	ns
Low High delay time	$t_{pLH}$	Refer to Fig. 2	---	100	180	ns
High Low delay time	$t_{pHL}$	Refer to Fig. 2	---	100	180	ns
Pulse width distortion	$\Delta_{tw}$	Refer to Fig. 2	-15	---	+15	ns

**Fig. 1 Measuring Method of Supply Current.**



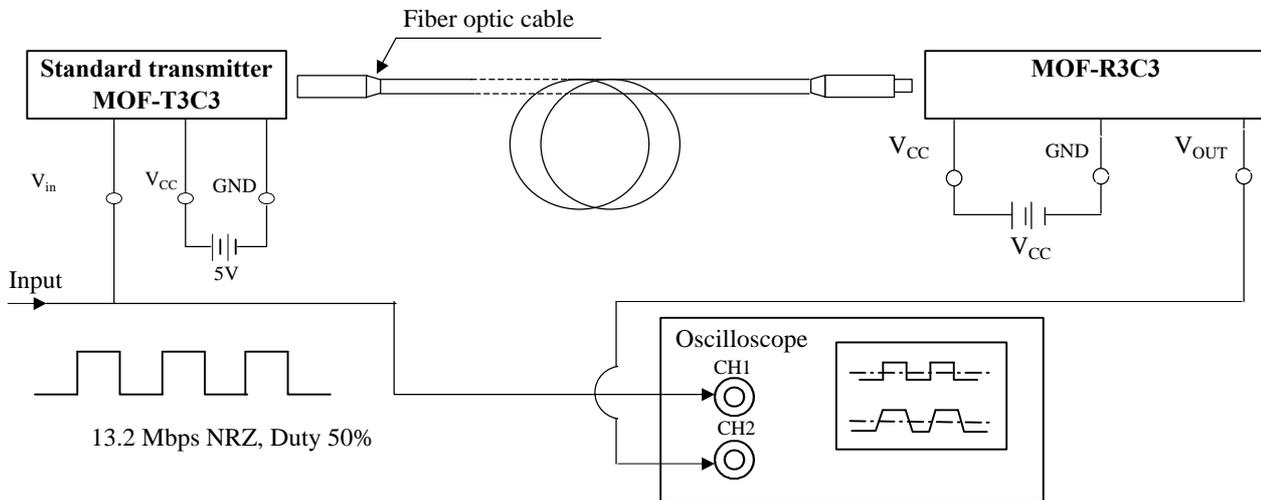
Notes (1)  $V_{cc}=5.0V$  (State of operating)

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

(3)  $P_c = -14.5 \text{ dBm}$

(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 $t_w = t_{PHL} - t_{PLH}$	$t_w$
High level output voltage	$V_{OH}$
Low level output voltage	$V_{OL}$

