



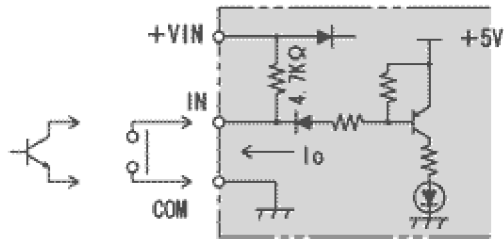
DMH-GB/HB Series Optical Transceivers

- High-speed Parallel type optical data transmission device
- 8 bit
- Bidirectional data transfer
- Transmission rates of 7 milliseconds
- 600mm to 3 meter transmission ranges
- Head-on and Side-on directional mounting
- 18-30 VDC

Type	Parallel			
	8-bit			
Model No.	DMH-GB1	DMH-GB2	DMH-HB1	DMH-HB2
Direction	Head on		Side on	
Transmission distance	0.6m	3m	0.6m	3m
Directional angle	15°	5°	15°	5°
Transmission method	Half-duplex two-way transmission			
Transmission time	7msec			
Modulation method	FSK modulation			
Detection method	Bit-reverse comparison			
Power source	18 to 30VDC			
Current consumption	100mA Max.			
Ambient illuminance	10,000lux or less(Incandescent lamp)			
Ambient temperature/humidity	-10 to +50° C, 85%RH or less			
Connection	26 conductor lead wire 2m long			
Protective structure	IP64(IEC standard)			

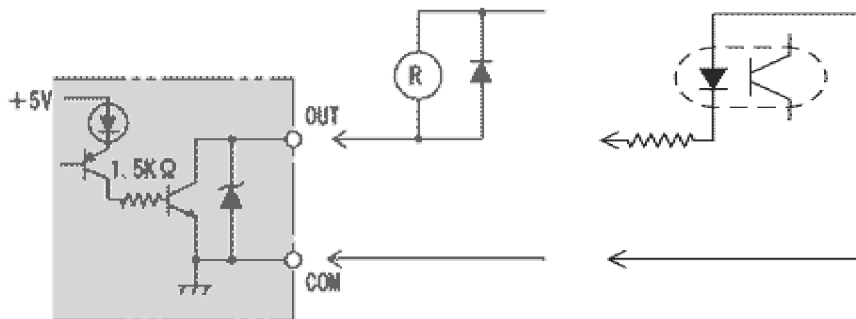
Input/output circuits

Input



Flow current when ON(I_O) : approx. 5mA(when 24VDC)
Allowable residual voltage when ON : use with 1.8V or less

Output



NPN open-collector output
35DC 50mA residual voltage 1.5V or less

Connection

Connector (1)		
Colors	Pin No.	Functions
Pale blue	1	Power 0V
Pink	2	Power +V
White	3	IN1
White / black	4	IN2
Brown	5	IN3
Brown / black	6	IN4
Red	7	IN5
Red / black	8	IN6
Orange	9	IN7
Orange / black	10	IN8
Yellow	11	MODE ^{*1}
Yellow / black	12	COM(0V)
Green	13	SELECT ^{*2}

Connector (2)		
Colors	Pin No.	Functions
Green / black	1	GO ^{*3}
Blue	2	STROBE
Blue / black	3	(BSY)
Purple	4	OUT8
Purple / black	5	OUT7
Gray	6	OUT6
Gray / black	7	OUT5
Pink / black	8	OUT4
Pale blue / black	9	OUT3
Pink / red	10	OUT2
Yellow / red	11	OUT1
Pale blue / red	12	(M/S)
White / red	13	(RDY)
Shield		Shield

*1 MODE input

Used for selecting transmission or reception mode when standing by

*Transmission stand-by mode: open circuit between mode and I/O COM

*Reception stand-by mode: closed circuit between mode and I/O COM

*2 SELECT input

Used for stopping transmission and reception to prevent signal interference with other devices in close proximity

*Activated by open circuit between select and I/O COM

*Deactivated by closed circuit between select and I/O COM

*3 GO output

This is used to verify correct optical signal

*ON when signal reception is possible

*OFF when signal reception is not possible

Note) Cable connections for unused input/output, GO output, SELECT input, MODE input, should be individually isolated and not allowed to contact any other conductors. Incorrect operation may result.

Note) Do not use the connector attached to the cables as connecting terminal. It is for factory testing only.

Note) If one side is set to transmission stand-by mode, the other should be set to reception standby mode.

Note) Do not use BSY, M/S, and RDY.



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