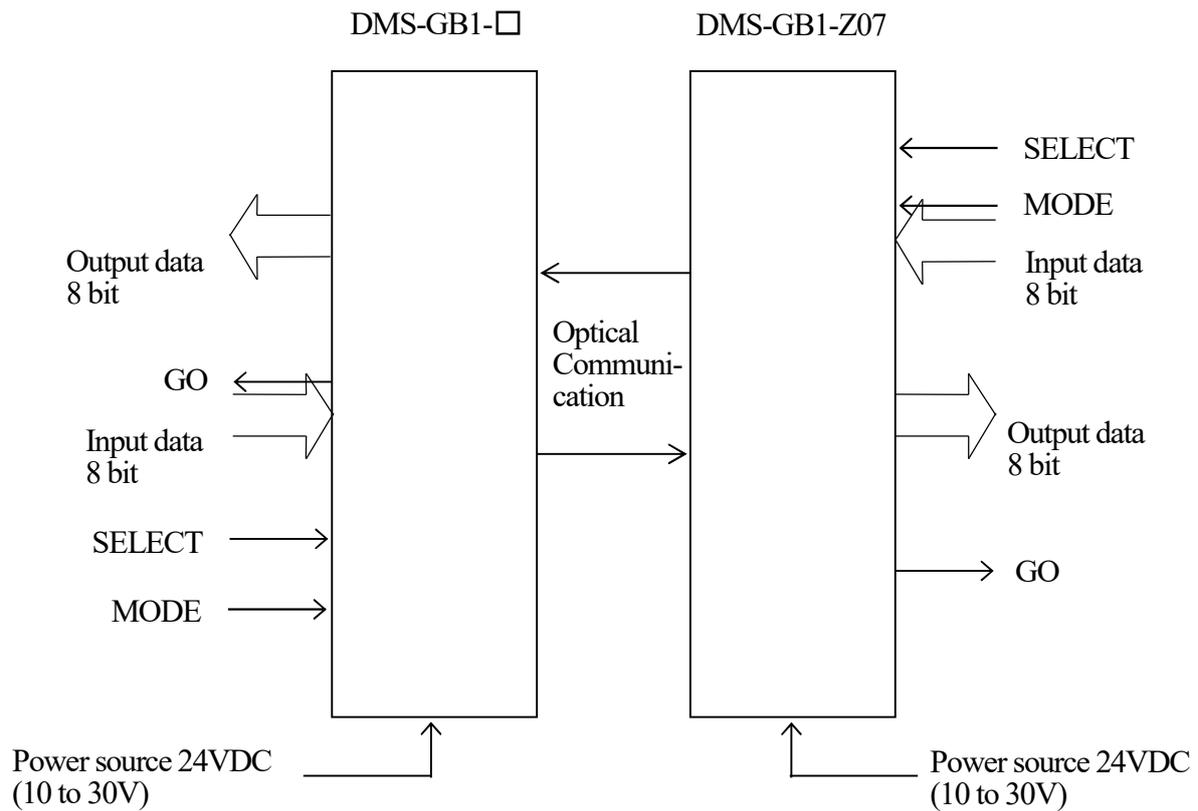


SPECIFICATIONS

DMS-GB1-Z07
 OPTICAL DATA TRANSMISSION DEVICE
 (WITH PROJECTION AMOUNT ADJUSTER,
 D-SUB CONNECTOR & CABLE 3M)

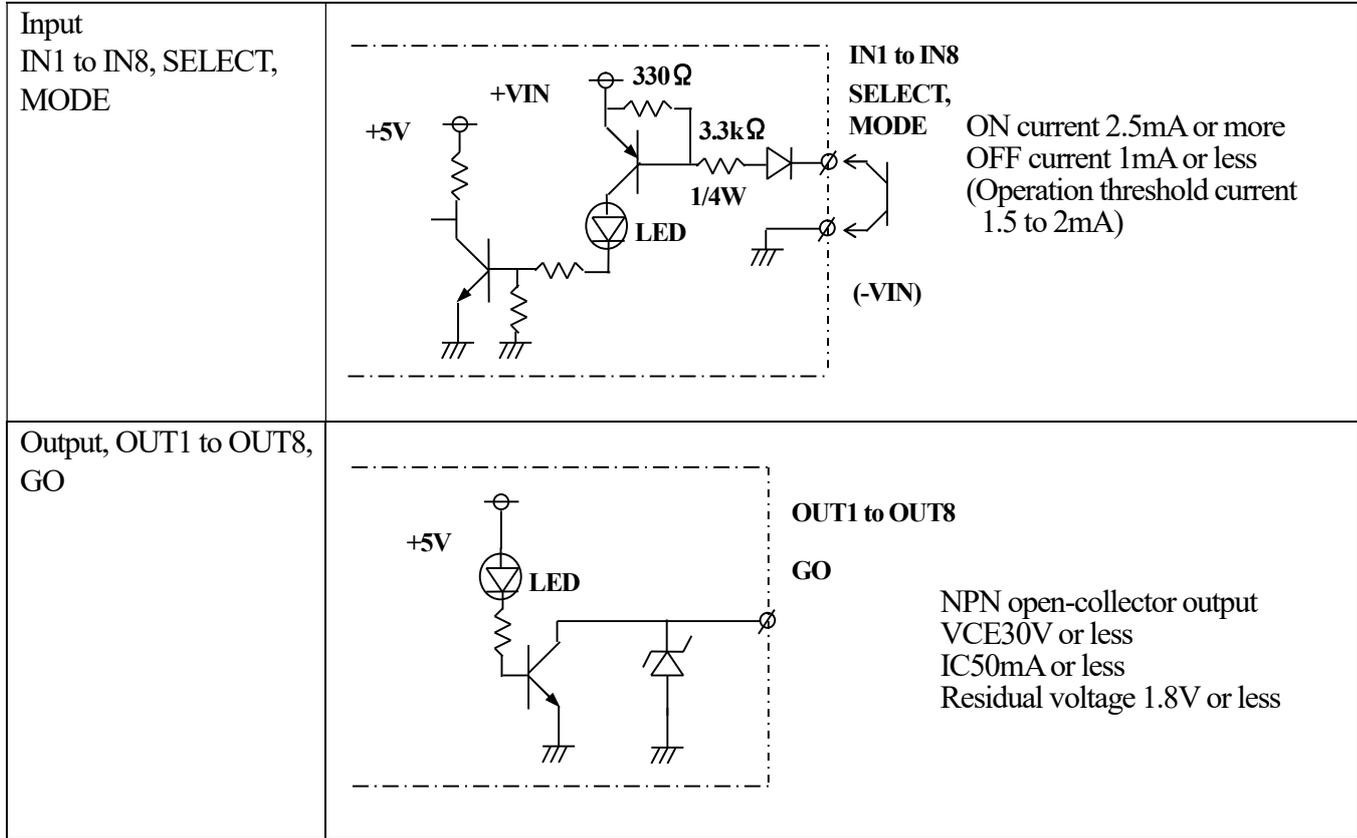
Symbol	Amended reason			Pages	Date	Corrector	Amended No.
Approved by	Checked by	Drawn by	Designed by	Title	Optical Data Transmission Device DMS-GB1-Z07 Specifications		
MAEJIMA	KITADA	HOSHINO	HOSHINO				

1. Configuration



2. Specifications

Model No.	DMS-GB1-Z07
Transmission distance	1.0m(Changeable by adjuster)
Directive angle	30 degrees(Full angle)
Transmission directions	HEAD-ON
Transmission capacity (Input/Output)	8-bit/8-bit
Transmission method	Half-duplex two-way transmission
Transmission time	40msec
Modulation method	Pulse modulation
Verification method	Parity check
Power source	24VDC(10 to 30V)
Current consumption	100mA Max.
Ambient illuminance	4,000lux or less
Ambient temperature/humidity	-10 to 50°C/ 85%RH or less
Vibration resistance	Double amplitude 1.5mm, 10 to 30Hz, Each 2 hour in X, Y and Z directions
Impact resistance	500m/s ² Each 10 times in X, Y and Z directions
Connection	D-sub connector with 25 pins
Protective structure	IP64 (excluding the connector)



3. Transmission characteristics

(1) Characteristics data

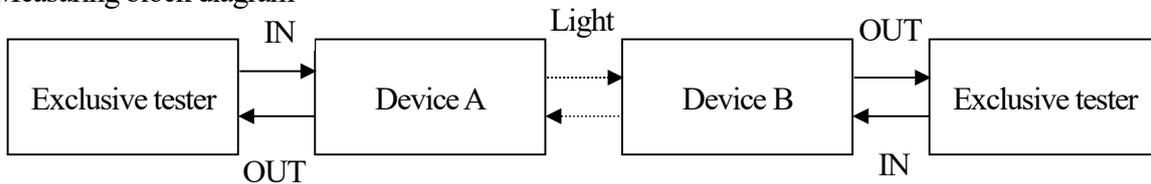
Items	Symbols	MIN	MAX
Input data holding time	tIH	30	-
Transmission time	tON, tOFF	13	40
Transmission starting delay time (Against optical axis coincidence)	tSD	30	110
Output holding time(Against SELECT A)	tOH1	50	90
Output holding time(Against SELECT B)	tOH2	-	5
Output holding time(Against light-interruption)	tOH3	50	90

(2) Characteristics measuring condition

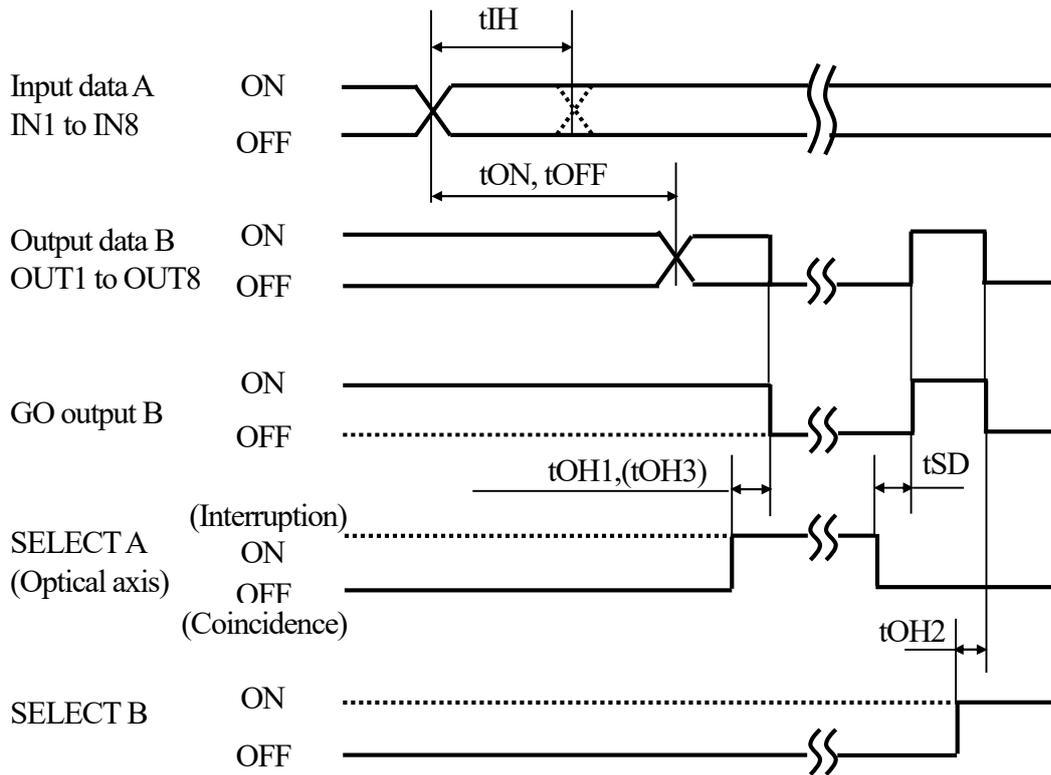
*Mode : Side A – Reception stand-by mode, Side B – Transmission stand-by mode

*It was measured under input (side A) and output (side B).

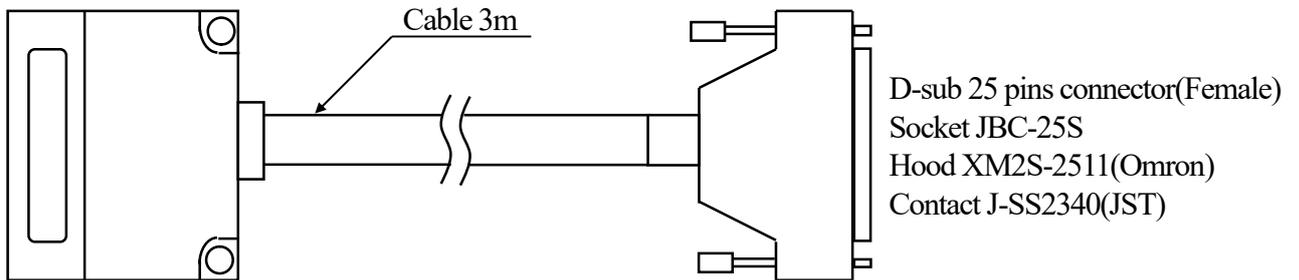
(3) Measuring block diagram



(4) Transmission timing



4. External wiring



Colors	Pin No.	Functions
Brown/black	1	OUT1
Red/black	2	OUT2
Orange/black	3	OUT3
Yellow/black	4	OUT4
Green/black	5	OUT5
Blue/black	6	OUT6
Purple/black	7	OUT7
Gray/black	8	OUT8
White	9	SELECT
White/black	13	GO
Shield	Hood	SHIELD

Colors	Pin No.	Functions
Brown	14	IN1
Red	15	IN2
Orange	16	IN3
Yellow	17	IN4
Green	18	IN5
Blue	19	IN6
Purple	20	IN7
Gray	21	IN8
Pink/Black	22	+VIN
Pale blue	24	COM
Pink	25	MODE
Pale blue/black		-VIN

5.Function for each terminal

Terminals	Functions	
IN1 to IN 8	Input data	
OUT1 to OUT8	Output data	
SELECT	It is shorted to COM : Transmission/reception is stopped It is opened : Transmission/reception is operated	
MODE	It is opened : Transmission standby mode It is shorted to COM : Reception standby mode	
GO	It is ON when normal data was received and OFF when light was interrupted	
COM	Common for input/output	
+VIN	+24V(10 to 30V)	Power source
-VIN	0V	

Note) This device is set to reception standby mode. Make sure to set other one to transmission standby mode.

Title	Optical Data Transmission Device DMS-GB1-Z07 Specifications	Drawing No.	C-42-3053	5/5
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