

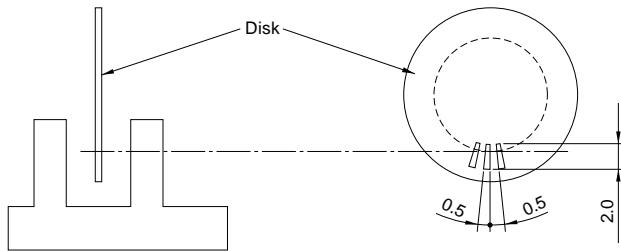
■ Electro-optical Characteristics

(Unless otherwise specified, $V_{CC}=5V$, $T_a=25^\circ C$)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Operating supply voltage	V_{CC}		4.5	–	5.5	V
Low level supply current	I_{CCL}	Light beam uninterrupted	–	–	30	mA
Low level output voltage	V_{OL}	Light beam uninterrupted, $I_{OL}=16mA$	–	–	0.35	V
High level supply current	I_{CCH}	Light beam interrupted	–	–	30	mA
High level output voltage	V_{OH}	Light beam interrupted, $R_L=47k\Omega$	$V_{CC}\times 0.9$	–	–	V
*4 Response frequency	f	No DC output is allowed, $R_L=47k\Omega$	–	–	3 000	Hz

*4 Refer to Fig.1

Fig.1 Response Frequency



Response frequency is measured with the disk shown below being rotated. (Unit : mm)

Fig.2 Low Level Output Current vs. Ambient Temperature

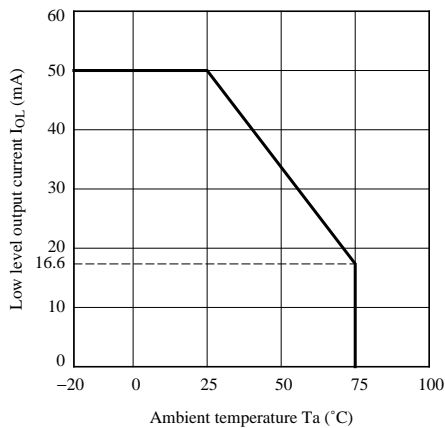


Fig.3 Low Level Output Voltage vs. Low Level Output Current

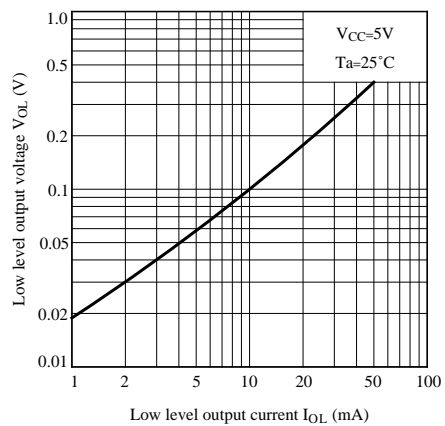


Fig.4 Low Level Output Voltage vs. Ambient Temperature

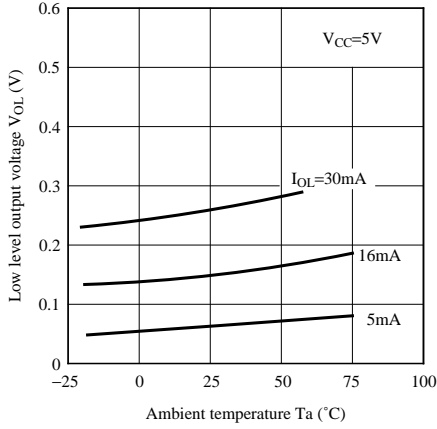


Fig.5 Supply Current vs. Supply Voltage

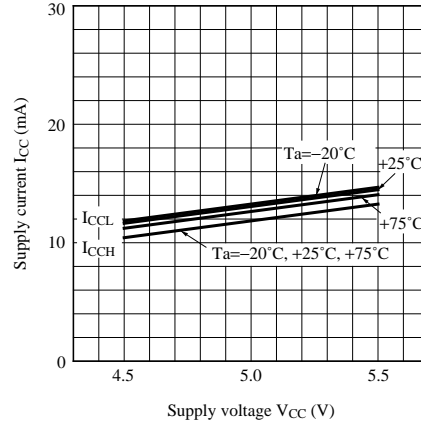


Fig.6 Detecting Position Characteristics (1)

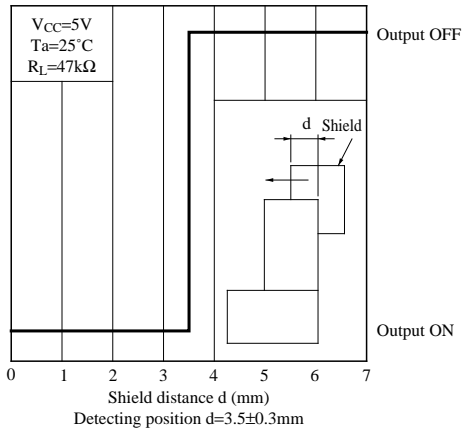
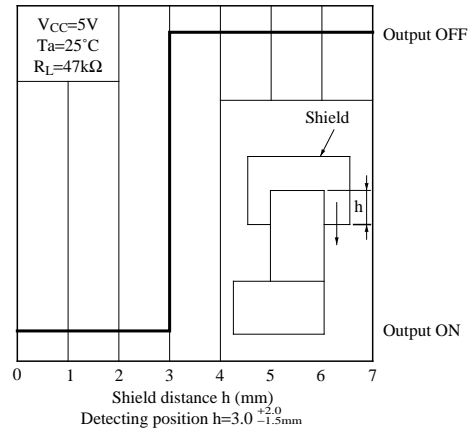


Fig.7 Detecting Position Characteristics (2)



■ Recommended Connectors on the Inserted Side

◆ JAPAN AMP made EI series connectors (standard type)

Housing color	Natural color	Black	Blue	Green	Red
Housing Model No.	171822-3	2-171822-3	4-171822-3	6-171822-3	8-171822-3
Special terminal Model. No.	AWG size	Product shape	Material	Model No.	
			Brass	170204-1	
	26 to 20	Bulk	Copper phosphide	170204-2	
			Brass	170262-1	
	Chain	Copper phosphide	170262-2		
		30 to 26	Bulk	Brass	170205-1
	Copper phosphide			170205-2	
	Chain	Brass	170263-1		
		Copper phosphide	170263-2		

◆ JAPAN AMP made EI series connectors (low profile type)

Housing color	Natural color	Black	Blue	Green	Red
Housing Model No.	172142-3	2-172142-3	4-172142-3	6-172142-3	8-172142-3
Special terminal Model. No. (Material : Copper phosphide)	AWG size	Product shape	Model No.		
			Bulk	170369-1	
	26 to 22	Chain	170354-1		
			Bulk	170370-1	
	30 to 26	Chain	170355-1		

◆ JAPAN AMP made EI series connectors (amp mass termination)

Housing-terminal united type connector	AWG28 (Green)	AWG26 (Natural color)	AWG24 (Black)	AWG22 (Red)
	172054-3	172053-3	172052-3	172051-3

* Terminal Material : Copper phosphide

■ Precautions for Use

1. It is recommended that a by-pass capacitor of more than 0.01μF be added between Vcc and GND near the device in order to stabilize power supply line.
2. Please don't carry out immersion cleaning or ultrasonic cleaning to avoid keeping solvent inside case of this device.
3. Remove dust or stains, using an air blower or a soft cloth moistened in cleaning solvent.
 However, do not perform the above cleaning using a soft cloth with cleaning solvent in the marking portion.
 In this case, use only the following type of cleaning solvent used for wiping off :
 Ethyl alcohol, Methyl alcohol, Isopropyl alcohol,
 When the cleaning solvents except for specified materials are used, please consult us.
4. As for other general cautions, refer to the chapter "Precautions for Use."

Application Circuits

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 - Alarm equipment
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