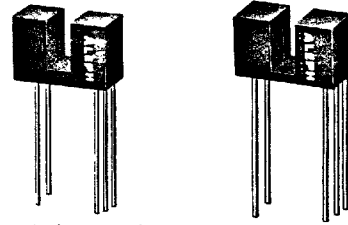


Interrupter Opto Sensor**OJ-1001/OJ-1101**

T-41-73



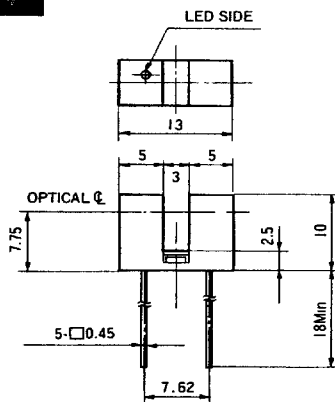
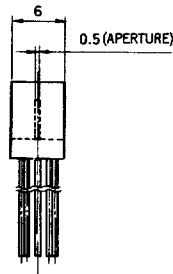
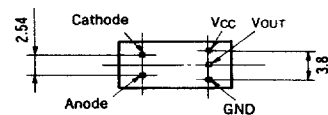
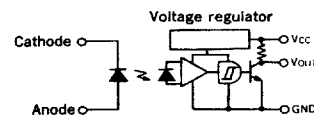
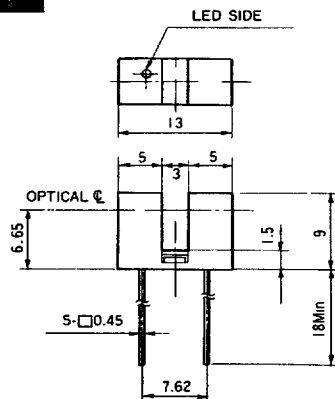
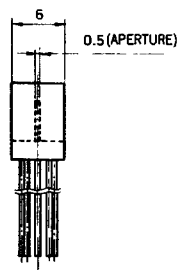
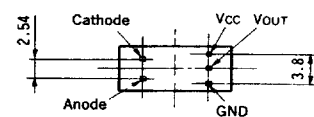
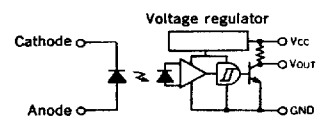
- Photo IC output, Internal Schmitt trigger circuit
- Sensing slot width 3mm (0.12")
- Directly compatible with TTL, LSTTL, CMOS
- Wide supply voltage range (4.5V to 16VDC)
- Reverse output models available

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

	Item	Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward Voltage	V_F	$I_F = 10\text{mA}$	1.0	1.15	1.3	V
	Reverse Current	I_R	$V_R = 5\text{V}$	—	—	10	μA
Output	Operating Supply Voltage	V_{CC}		4.5	—	16	V
	Low Level Output Voltage	V_{OL}	$I_{OL} = 16\text{mA}$ $V_{CC} = 5\text{V}$ $I_F = 0$	—	0.15	0.4	V
	High Level Output Voltage	V_{OH}	$I_F = 21\text{mA}$ $V_{CC} = 5\text{V}$	4.0	—	—	V
	Low Level Supply Current	I_{CCL}	$I_F = 0$ $V_{CC} = 5\text{V}$	—	6	15	mA
	High Level Supply Current	I_{CCH}	$I_F = 21\text{mA}$ $V_{CC} = 5\text{V}$	—	4	10	mA
Switching Speed	L-H Threshold Input Current	I_{FLH}	$V_{CC} = 5\text{V}$	—	6	15	mA
	Hysteresis	I_{FHL}/I_{FLH}	$V_{CC} = 5\text{V}$	—	0.9	—	
	L-H Propagation Time	t_{PLH}	$V_{CC} = 5\text{V}$ $I_F = 0 \rightarrow 21\text{mA}$ $R_L = 280\Omega$	—	3	—	μs
	H-L Propagation Time	t_{PHL}		—	5	—	
	Rise Time	t_r		—	0.1	—	
	Fall Time	t_f		—	0.05	—	

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

	Item	Symbol	Value
Input	Forward Current	I_F	50mA
	Reverse Voltage	V_R	5V
Output	Supply Voltage	V_{CC}	16V
	Output Current	I_O	50mA
	Allowable power dissipation	P_O	250mW
Operating Temp.		T_{opr}	$-25^\circ \sim +85^\circ\text{C}$
Storage Temp.		T_{stg}	$-30^\circ \sim +90^\circ\text{C}$

OJ-1001**Dimensions**Dimensions in mm
(1mm = 0.0394inches)**Pinout (Bottom view)****Schematic****OJ-1101****Dimensions**Dimensions in mm
(1mm = 0.0394inches)**Pinout (Bottom view)****Schematic**

See page 31 for typical performance curves.