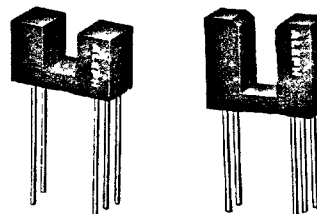


Interrupter Opto Sensor

OJ-1201/OJ-1301

T-41-73



- Photo IC output, Internal Schmitt trigger circuit
- Sensing slot width 5mm (0.20")
- Directly compatible with TTL, LSTTL, CMOS
- Wide supply voltage range (4.5V to 16VDC)
- Reverse output models available

ELECTRICAL CHARACTERISTICS (Ta=25°C)

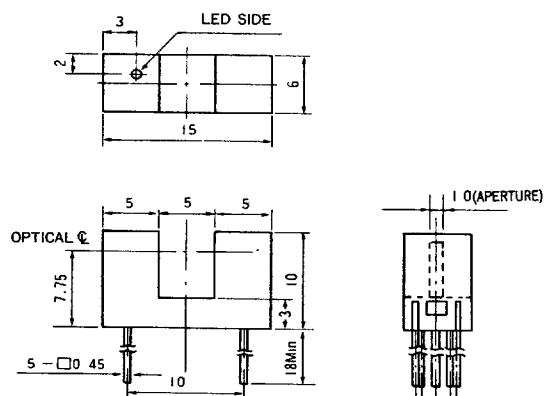
Item	Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward Voltage	V _F I _F =10mA	1.0	1.15	1.3	V
	Reverse Current	I _R V _R =5V	—	—	10	μA
Output	Operating Supply Voltage	V _{CC}	4.5	—	16	V
	Low Level Output Voltage	V _{OL} I _{OL} =16mA V _{CC} =5V I _F =0	—	0.15	0.4	V
	High Level Output Voltage	V _{OH} I _F =15mA V _{CC} =5V	4.0	—	—	V
	Low Level Supply Current	I _{CC} I _F =0 V _{CC} =5V	—	6	15	mA
	High Level Supply Current	I _{CC} I _F =15mA V _{CC} =5V	—	4	10	mA
Switching Speed	L-H Threshold Input Current	I _{FLH} V _{CC} =5V	—	3.5	11	mA
	Hysteresis	I _{FHL} /I _{FLH} V _{CC} =5V	—	0.9	—	—
	L-H Propagation Time	t _{PLH} V _{CC} =5V I _F =0 → 15mA R _L =280Ω	—	3	—	μs
	H-L Propagation Time	t _{PHL}	—	5	—	μs
	Rise Time	t _r	—	0.1	—	μs
	Fall Time	t _f	—	0.05	—	μs

MAXIMUM RATINGS (Ta=25°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°~+85°C
Storage Temp.	T _{stg}	-30°~+90°C

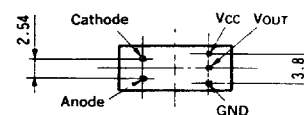
OJ-1201

Dimensions

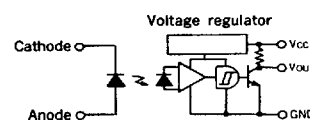


Dimensions in mm
(1mm=0.0394inches)

Pinout (Bottom view)

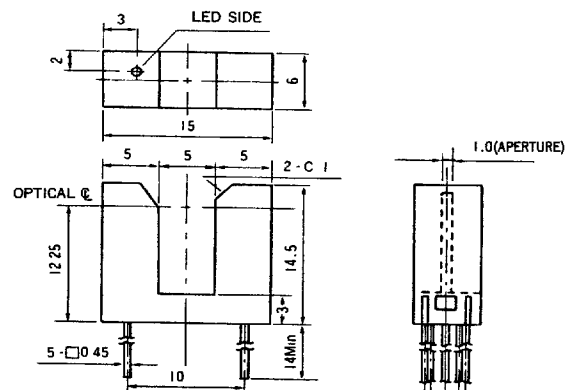


Schematic



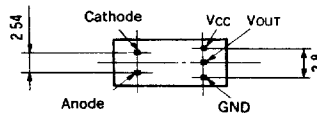
OJ-1301

Dimensions

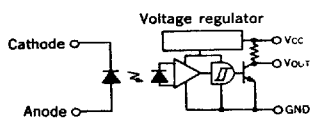


Dimensions in mm
(1mm=0.0394inches)

Pinout (Bottom view)



Schematic



► See page 31 for typical performance curves.