

ROHM**OPTOELECTRONICS****RPI-1581****PHOTO INTERRUPTER****ABSOLUTE MAXIMUM RATINGS (TA=25°C)****Infrared Emitter**

Forward Current	I_F	50mA
Reverse Voltage	V_R	5V
Power Dissipation	P_d	80mW

Photo IC

Power Supply Voltage	V_{CC}	17V
Output Current	I_O	20mA
Power Dissipation	P_O	80mW

Operating Temperature T_{opr} -25°C~+85°C**Storage Temperature** T_{stg} -40°C~+100°C**Soldering Temperature*** T_{sol} 260°C

(*5 sec)

ELECTRICAL OPTICAL CHARACTERISTICS (TA=25°C)**1) ELECTRICAL-OPTICAL CHARACTERISTICS OF THE INFRARED LIGHT EMITTING DIODE**

Item	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage	V_F	-	1.1	1.3	V	$I_F=10mA$
Reverse Current	I_R	-	-	10	mA	$V_R=5V$

2) ELECTRICAL-OPTICAL CHARACTERISTICS OF THE PHOTO IC

Item	Symbol	Min.	Typ.	Max.	Unit	Condition
Power Supply Voltage	V_{CC}	4.5	-	17	V	
Output Low Level Voltage	V_{OL}	-	0.14	0.4	V	$V_{CC}=5V, I_{OL}=16mA$
Output High Level Voltage	V_{OH}	3.5	-	-	V	$V_{CC}=5V, I_F=10mA$
Power Supply Output Low	I_{CCL}	-	1.8	5.0	mA	$V_{CC}=5V, I_F=0mA$
Current Requirement Output High	I_{CCH}	-	1.7	3.0	mA	$V_{CC}=5V, I_F=10mA$

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APPROVED: _____ DATE: _____

RPI1581.PM5, OPTOELECTRONICS, O-44 01/16/93

2) ELECTRICAL-OPTICAL CHARACTERISTICS OF THE PHOTO IC (continued from page one)

Item	Symbol	Min.	Typ.	Max.	Unit	Condition
Low-High Threshold Input Current	I_{FLH}	-	2.0	6.0	mA	$V_{CC}=5V$
Hysteresis	I_{FHL}/I_{FLH}	-	0.7	-	-	$V_{CC}=5V$
L-H Propagation Delay Time	t_{PLH}	-	1.6	-	μS	$V_{CC}=5V$ $I_F=20mA$ $R_L=680\ \Omega$
H-L Propagation Delay Time	t_{PHL}	-	2.2	-		
Rise Time	t_r	-	0.28	-		
Fall Time	t_f	-	0.12	-		

SLOTTED OPTICAL SWITCH

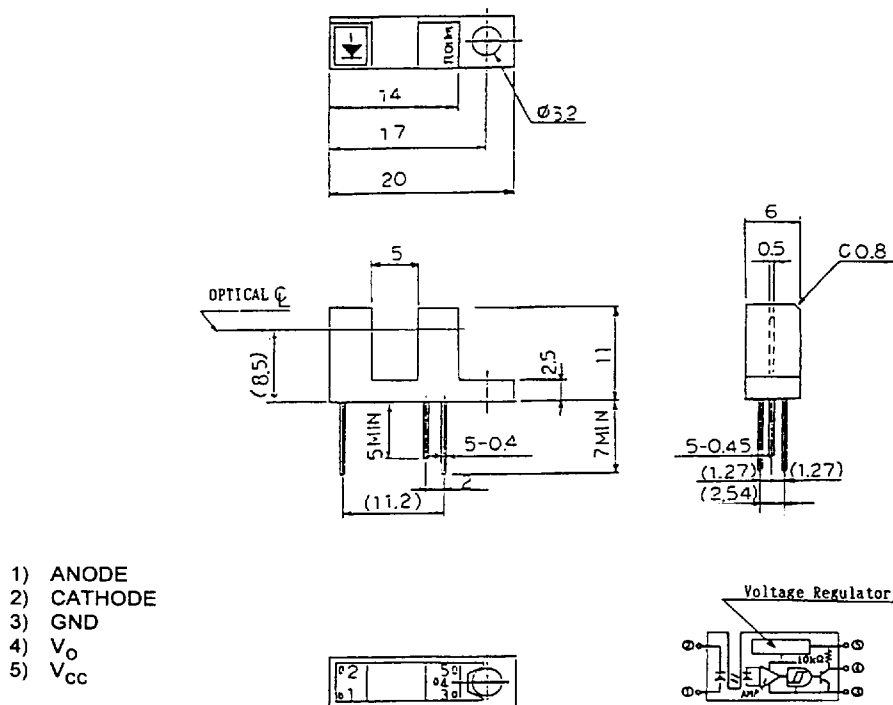


Fig. 1

- 1) Measurements in brackets are for lead pin spacing at base of mold.
2) Tolerance is ± 0.2 mm unless otherwise indicated.