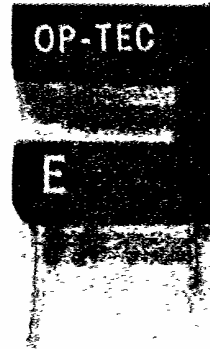




OPTO TECHNOLOGY

TYPE OTS271 OTS281

PHOTO IC SIDE MOUNT OPTICAL SWITCH W/.010" APERTURE



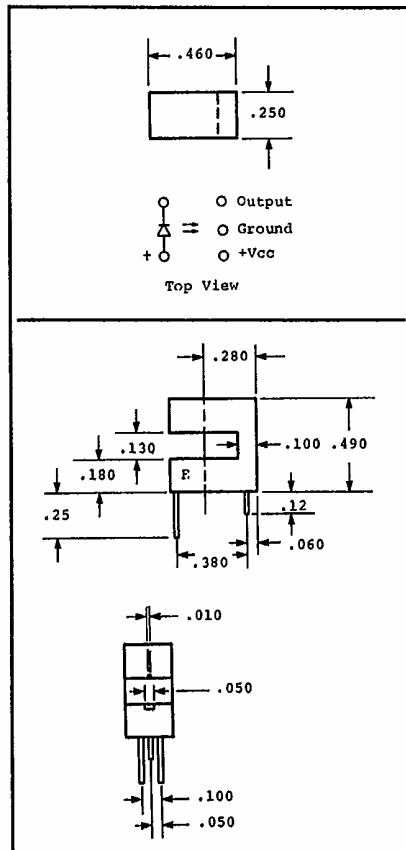
NOT ACTUAL SIZE

DESCRIPTION

A PC Board Mountable, side looking Optical Switch is accomplished with Opto Technology's OTS 271/281 Interrupters. Each device features a GaAs infrared emitting diode and a photo IC sensor mounted in a molded plastic

housing. The sensor consists of a photodiode with low level amplifier, Schmitt trigger, voltage regulator and open collector driver output. The housing features a .130 interrupter gap with a .010 inch aperture over the sensor.

The OTS 271 open collector output switches "ON" when the device is interrupted with an opaque material. The OTS 281 output switches "OFF" when the device is interrupted with an opaque material.



ELECTRICAL CHARACTERISTICS: (25°C)

INFRARED EMITTING DIODE	SYMBOL	MAX.	UNITS
Forward Current (Continuous)	I_F	60	mA
Forward Current (Peak) (Pulse Width=1 μ s PRR=300pps)	I_F	3	A
Reverse Voltage	V_R	6	V
Power Dissipation	P_E	100	mW

PHOTO I.C.	SYMBOL	MIN.	TYP.	MAX.	UNITS
Supply Voltage	V_{CC}	4.0	5.0	15.0	V
Supply Current	I_{CC}	—	4.0	10.0	mA
Collector Emitter Saturation Voltage ($I_C = 10mA$)	$V_{CE(Sat)}$	—	.3	.5	V
($I_C = 25mA$)		—	.5	.8	V
Low Level Output Current	I_C	—	—	50	mA
Hysteresis	—	—	12	—	%

COUPLED ELECTRICAL CHARACTERISTICS @ $T_A = 25^\circ C$

	SYMBOL	MIN.	TYP.	MAX.	UNITS
LED Forward Current	I_F	10	—	60	mA
LED Forward Voltage ($I_F = 60mA$)	V_F	—	—	1.7	V
Rise Time	t_{on}	—	200	500	ns
Fall Time	t_{off}	—	200	500	ns

Operating Temperature, T_a 0°C to 70°C
Storage Temperature, T_s -55°C to 100°C