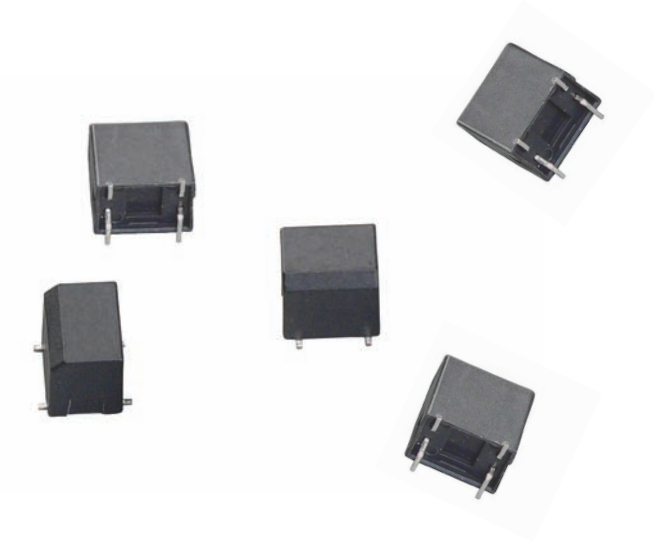
Optical Tilt Switch SMT

Tilt Angle: 15˚, 30˚ & 45˚ for SMT Vertical Mount PCB



RP-SUB-45-000-NR= 45˚ Tilt Angle
RP-SUB-30-000-NR= 30˚ Tilt Angle
RP-SUB-15-000-NR= 15˚ Tilt Angle

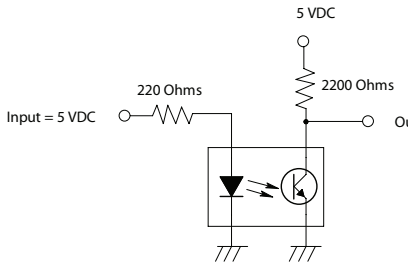
Materials & Specifications

1. Housing: Glass-filled Polyamide, UL94-V0
2. Photo Trans: Silicon Photo Transistor
3. Base: Glass-filled Polyamide, UL94-V0
4. Tilt Angle Housing: Copper alloy, Nickel plated
5. Ball: Stainless Steel
6. IR Diode: Infrared LED
7. Terminals: Tinned
8. Temperature range: -25¡C to +85¡C (operating)
   -40¡C to +85¡C (storage)
9. Life: 100,000 hours typ.
10. SMT reflow soldering: 260 –5¡C for 20 seconds max.
11. Packaging: Carrier tape & reel, 350 switches per reel
12. Tilt Angle Character: Tilt angle 0¡ to 35¡, Output current = Iceo (off)
    Tilt angle 35¡ to 55¡, Output current =Undeterminant
    Tilt angle > 55¡, Output curent = Coupled Ic (on)
13. Patent: pending

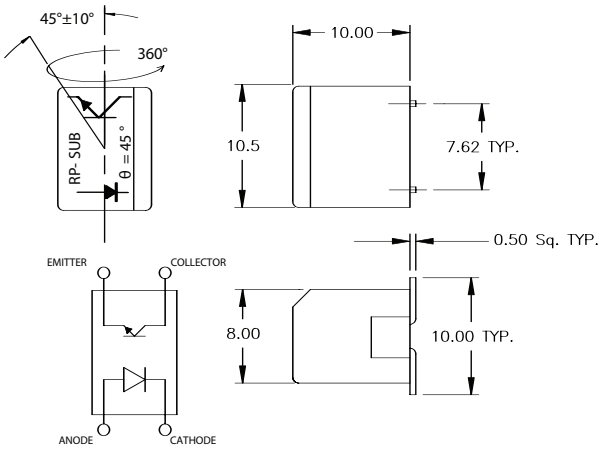
**** Mercury Switch Alternative***

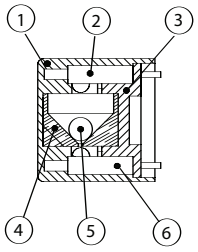
Applications

Alarm Devices	Appliances
Meters	Games
Heating Equipment	Medical Equipment
Vending Machines	Handheld Devices
Seismic Equipment	

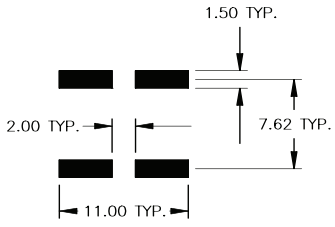


Typical Circuit





CROSS SECTION



PC BOARD LAYOUT

ELECTRICAL CHARACTERICS (Ta = 25°C)

Items	Symbols	Min.	Typ.	Max.	Unit	Conditions
INPUT						
Forward Voltage	Vf	–	1.2	1.2	V	If = 20mA
Reverse Current	Ir	–	–	10.0	µA	Vr = 5V
OUTPUT						
Dark Current	Iceo	–	–	2	µA	Vcc = 10V
COUPLED						
Output Current	Ic	0.5	5.0	–	mA	Vce = 5V
Rise/Fall Time	Tr/Tf	–	5.0	–	µs	Ic = 0.8mA, Vcc = 30V, RL = 1K Ω

RoHS