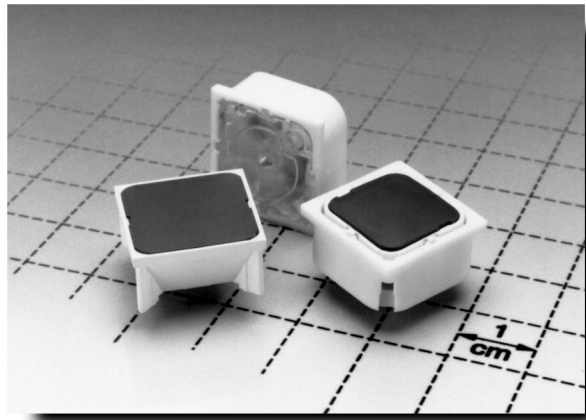


# RF 19 Series Short Travel Tactile Switches



## Features/Benefits

- Long life—1,000,000 cycles
- Illumination available
- Highly reliable contact design
- Fully illuminated with corner LED indicator

## Typical Applications

- Medical equipment
- Instrumentation equipment
- Machine process control

## How To Order

To order, select switch/housing part number. Other illumination options available, consult Customer Service Center.

## Specifications

CONTACT RATING: 0.01 - 100 mA @ 0.02 - 42 V AC/DC (Au).  
0.1 - 250 mA @ 3 - 50 V AC/DC (Ag).  
RATED POWER: 2 W AC/DC (Au), 12.5 W AC/DC (Ag)  
resistive load respectively.  
CONTACT RESISTANCE: ≤ 100 milliohms when new.  
BOUNCE: ≤ 5 ms.  
CONTACT SYSTEM: Snap-action contact.  
CONTACT ARRANGEMENT: SPST NO.  
FIXING: By soldering.  
SOLDERING TEMPERATURE: 250°C.  
SOLDERING TIME: 2.5 sec. max.  
SWITCHING TRAVEL: 0.5 + 0.2 mm.  
OPERATING LIFE: 1,000,000 cycles min.

OPERATING FORCE: 2 - 3 N max.  
AMBIENT OPERATING TEMPERATURE: - 25°C to + 70°C;  
- 13°F to + 158°F.  
AMBIENT STORAGE TEMPERATURE: - 40°C to + 80°C;  
- 40°F to + 176°F.  
PACKAGING: Tube packaging, 25 switches.

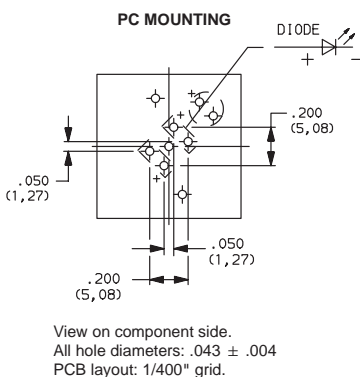
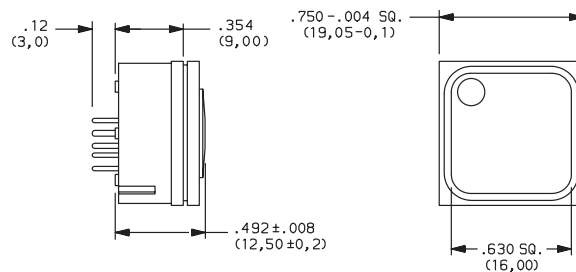
## Materials

SWITCH HOUSING: PBTB.  
TRANSPARENT ACTUATOR: PC.  
COLORED ACTUATOR: Plexiglass HW55.  
CONTACT MATERIAL: Au or Ag.  
TERMINALS: Contact spring: Tin-plated. Stationary contact:  
Au version tin-plated, Ag version silver-plated.  
FLAMMABILITY OF PLASTIC MATERIALS: UL 94 HB.

## RF 19 Illuminated Short Travel Tactile Switches



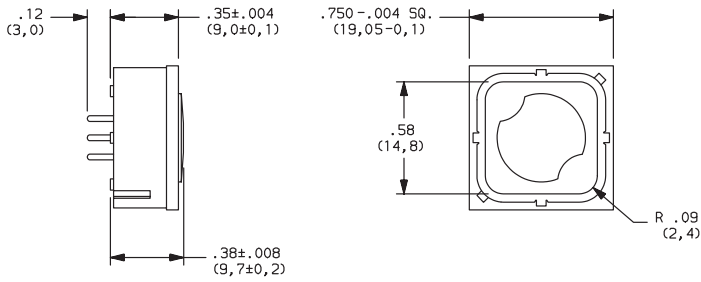
3.14002.5130000  
SPST N.O.



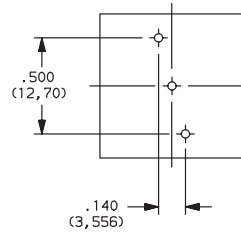
SWITCH & HOUSING				ILLUMINATION		SCHEMATIC
PART NUMBER	FUNCTION	CONTACT MATERIAL	KEY PAD COLOR	STANDARD LED	SPOT LED COLOR	
3.14002.5130000	SPST N.O.	Au	Red	Fully illuminated (2 LEDs) & spot illuminated (1 LED)	Green	
3.14002.5320000			Green		Red	
3.14002.5530000			Yellow		Green	
3.14002.5830000			Blue		Green	
3.14002.5230000		Ag	Red		Green	
3.14002.5420000			Green		Red	
3.14002.5630000			Yellow		Green	
3.14002.5880000			Blue		Green	

Tactile

## RF 19 Non-Illuminated Short Travel Tactile Switches



### PC MOUNTING

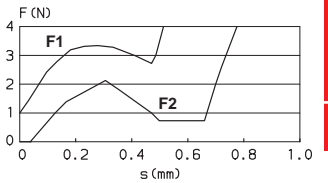


View on component side.  
All hole diameters:  $.043 \pm .004$   
PCB layout: 1/400" grid.



3.14001.0010000  
**SPST N.O.**

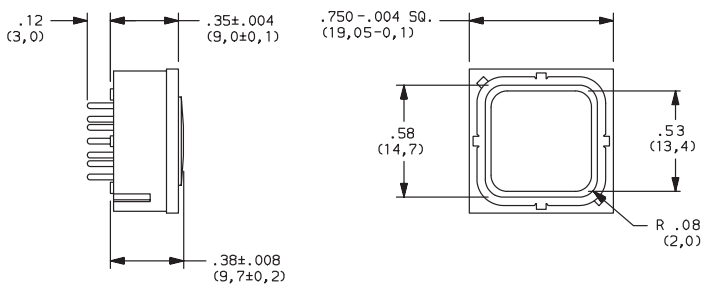
### FORCE/TRAVEL DIAGRAM



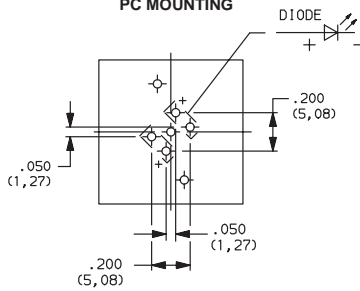
F1 = Max. operating force  
F2 = Force at contact  
F2 is max. 55% of F1.

SWITCH & HOUSING				SCHEMATIC
PART NUMBER	FUNCTION	CONTACT MATERIAL	ACTUATOR COLOR	
3.14001.0010000	SPST N.O.	Au	Opaque White	
3.14001.0060000		Ag		

## RF 19 Illuminated Short Travel Tactile Switches



### PC MOUNTING



View on component side.  
All hole diameters:  $.043 \pm .004$   
PCB layout: 1/400" grid.



3.14002.0110000  
**SPST N.O.**

SWITCH & HOUSING				ILLUMINATION		SCHEMATIC
PART NUMBER	FUNCTION	CONTACT MATERIAL	ACTUATOR COLOR	STANDARD LED	LED COLOR	
3.14002.0110000	SPST N.O.	Au	Red	2 LEDs Fully illuminated	Red	
3.14002.0120000			Green		Green	
3.14002.0130000			Yellow		Yellow	
3.14002.0210000		Ag	Red		Red	
3.14002.0220000			Green		Green	
3.14002.0230000			Yellow		Yellow	



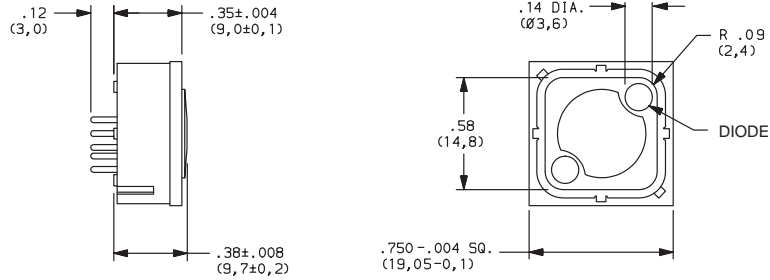
# RF 19 Series Short Travel Tactile Switches



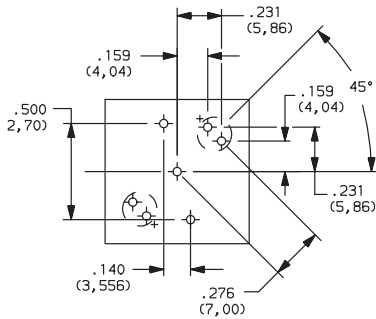
## RF 19 Illuminated Short Travel Tactile Switches



3.14001.0300000  
SPST N.O.

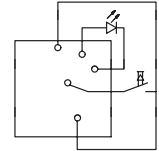


### PC MOUNTING



View on component side.  
All hole diameters: .043 ± .004  
PCB layout: 1/400" grid.  
The LED may be positioned on either  
the left-hand (std.) or right-hand side.

SWITCH & HOUSING				ILLUMINATION		SCHEMATIC
PART NUMBER	FUNCTION	CONTACT MATERIAL	ACTUATOR COLOR	STANDARD LED	SPOT LED COLOR	
3.14001.0300000	SPST N.O.	Au	Opaque White	1 LED spot illuminated	Blue	
3.14001.0310000					Red	
3.14001.0320000					Green	
3.14001.0330000					Yellow	
3.14001.0400000		Blue				
3.14001.0410000		Red				
3.14001.0420000		Green				
3.14001.0430000		Yellow				



Tactile