



RoHS Compliant

Illuminated Pushbutton

## Specifications

Electrical Ratings	500mA @ 24VDC
Electrical Life	1,000,000 cycles typical
Contact Resistance	<50mΩ initial
Actuation Force	200 ±50gF
Actuation Travel	2.2 ± .1mm

Dielectric Strength	1000Vrms min
Insulation Resistance	>100MΩ min
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C

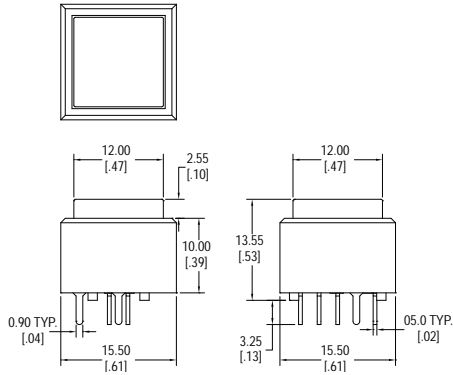
## Materials

Actuator Cap	Poly Carbonate (PC)
Actuator Body	Poly Carbonate (PC)
Housing	Polyamide (PA), UL94V-0
Terminal Base	Polyamide (PA), UL94V-0
Contacts	Brass Rivet, Silver or Gold Plated
Terminals	Brass, Silver or Gold Plated

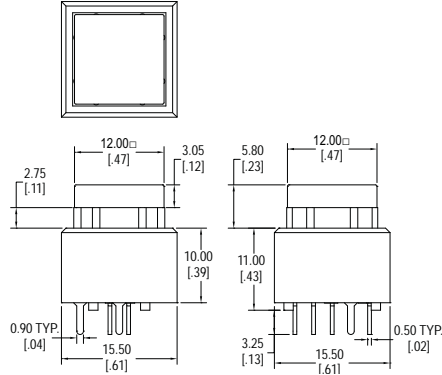
## Ordering Information

1. Series	JC	V	1	RR	R	33	MSJ
2. Actuator Options	<p>S = Square H = Extended Square R = Rectangle V = Square, concave Q = Square, concave PS = Square, panel mount PH = Extended Square, panel mount</p>						
3. Number of Poles	<p>1 = SPDT 2 = DPDT</p>						
4. Latching Option	<p>Blank = Momentary L = Latching **Not available with R actuator</p>						
5. LED Color	<p>BB = Blue      RB = Red/Blue      YW = Yellow/White RR = Red      WW = White      RW = Red/White      GB = Green/Blue GG = Green      RY = Red/Yellow      YG = Yellow/Green      GW = Green/White YY = Yellow      RG = Red/Green      YB = Yellow/Blue      BW = Blue/White RGB = Red/Green/Blue</p>						
6. Contact Material	<p>Q = Silver R = Gold</p>						
7. Diffuser Color Options	<p>Blank = White (standard) 3 = Red 4 = Yellow 5 = Green 7 = Blue</p>						
8. Actuator Color Options	<p>**available only with V &amp; Q actuators Blank = Clear (standard) 3 = Red 4 = Yellow 5 = Green 7 = Blue</p>						
9. Laser Etching Colors	<p>Blank = No laser etching color MS = Misty Silver B = Black</p>						
10. Laser Etching Styles	<p>Blank = No laser etching style A C E G I K B D F H J L</p>						

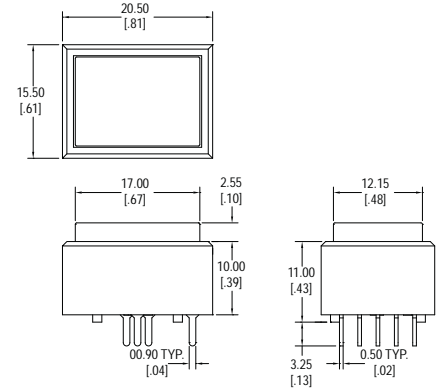
**Dimensions**



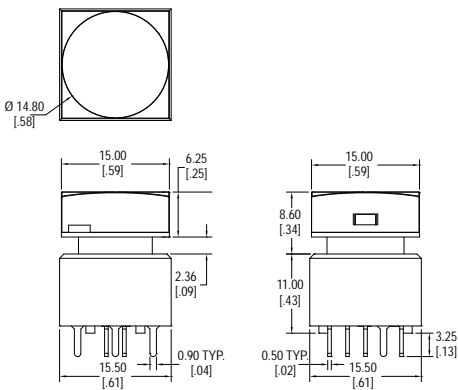
**S = Square**



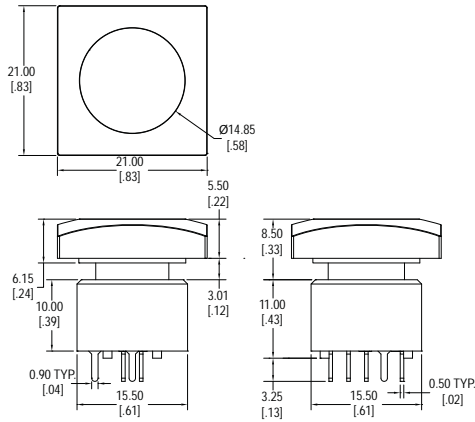
**H = Extended Square**



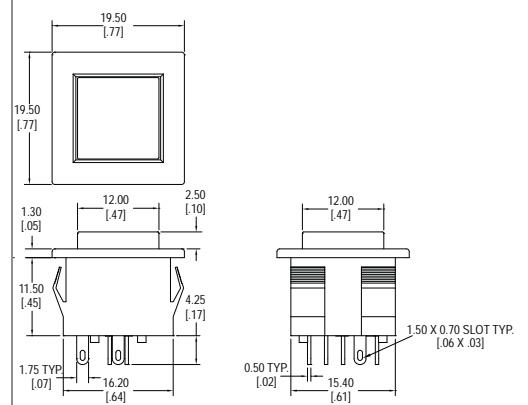
**R = Rectangle**



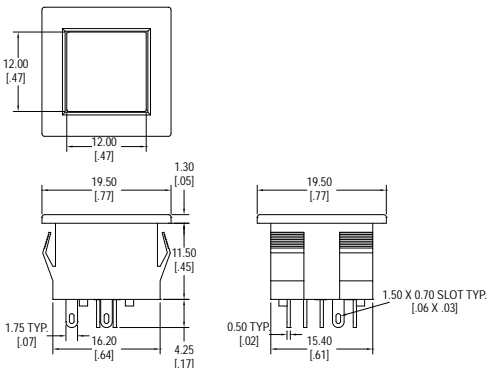
**V = Square, Concave**



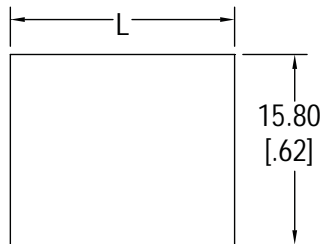
**Q = Square, Concave**



**PH = Square, Panel Mount**



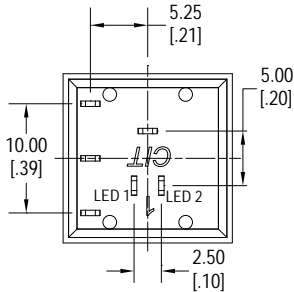
**PS = Square, Panel Mount**



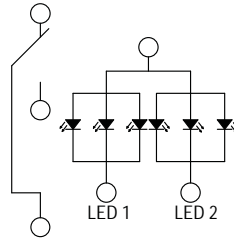
**Panel Cut-Out**

Panel Thickness	"L"
0.75 - 1.25mm	18.0 - 18.2mm
1.25 - 2.00mm	18.2 - 18.4mm
2.00 - 3.00mm	18.4 - 18.6mm

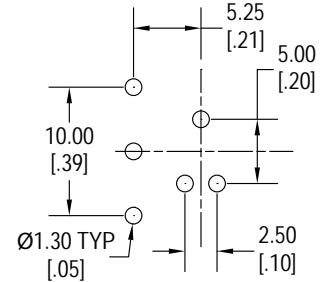
**Bottom Views, Schematics & PC Layouts**



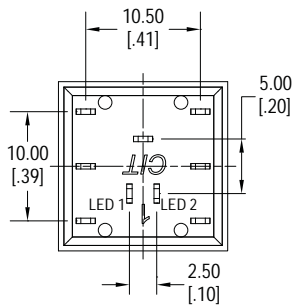
**JC S, H, V & Q (SPDT)  
 Bottom View**



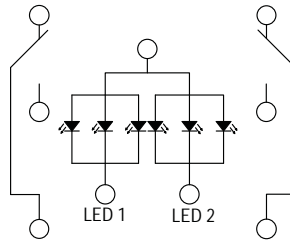
**JC S, H, V & Q (SPDT)  
 Schematic**



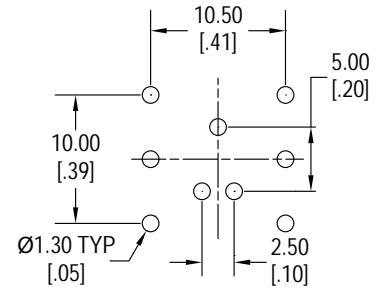
**JC S, H, V & Q (SPDT)  
 PC Layout**



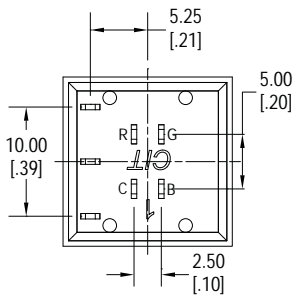
**JC S, H, V & Q (DPDT)  
 Bottom View**



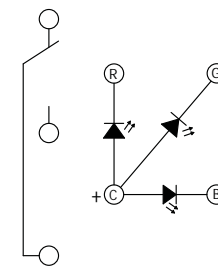
**JC S, H, V & Q (DPDT)  
 Schematic**



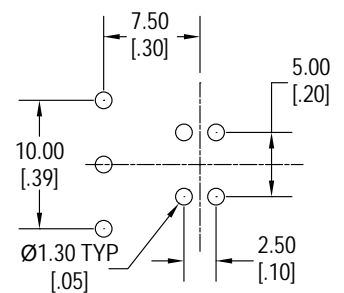
**JC S, H, V & Q (DPDT)  
 PC Layout**



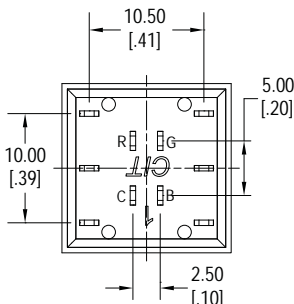
**JC S, H, V & Q (SPDT)  
 RGB Bottom View**



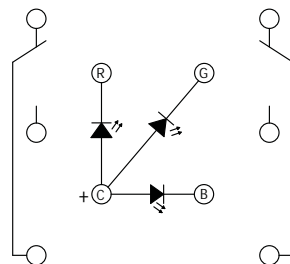
**JC S, H, V & Q (SPDT)  
 RGB Schematic**



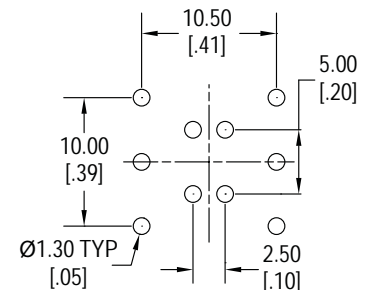
**JC S, H, V & Q (SPDT)  
 RGB PC Layout**



**JC S, H, V & Q (DPDT)  
 RGB Bottom View**

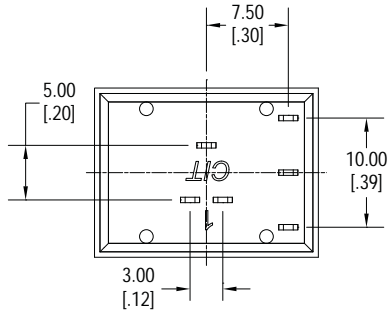


**JC S, H, V & Q (DPDT)  
 RGB Schematic**

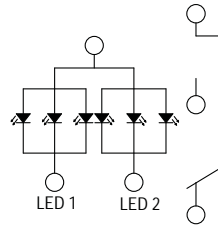


**JC S, H, V & Q (DPDT)  
 RGB PC Layout**

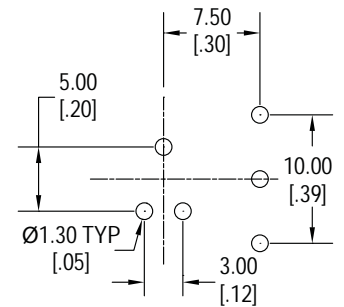
**Bottom Views, Schematics & PC Layouts**



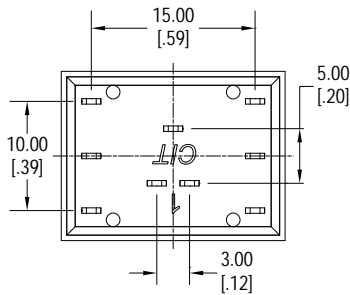
**JC R (SPDT)  
Bottom View**



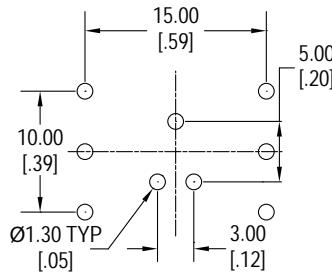
**JC R (SPDT)  
Schematic**



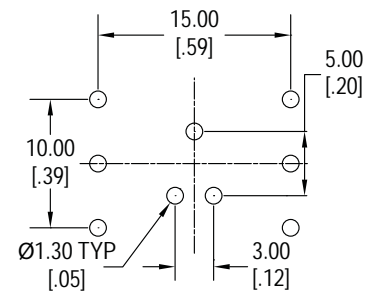
**JC R (SPDT)  
PC Layout**



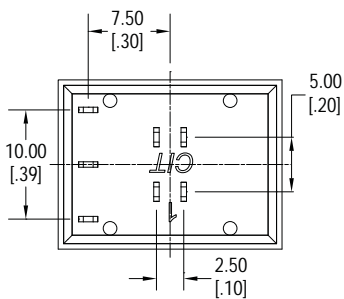
**JC R (DPDT)  
Bottom View**



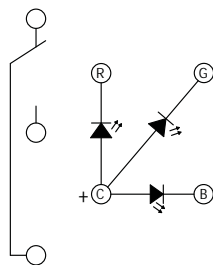
**JC R (DPDT)  
Schematic**



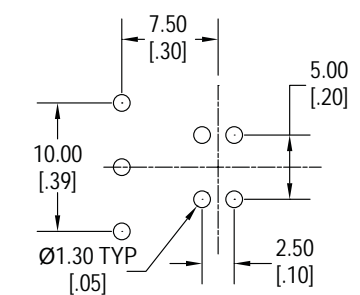
**JC R (DPDT)  
PC Layout**



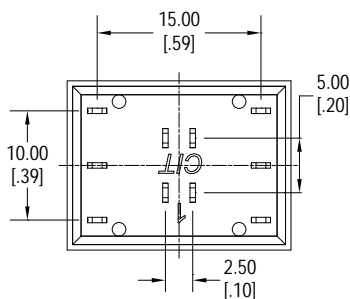
**JC R (SPDT)  
RGB Bottom View**



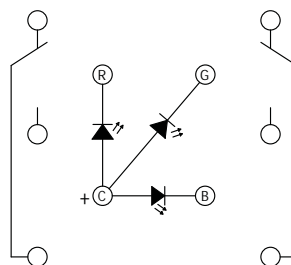
**JC R (SPDT)  
RGB Schematic**



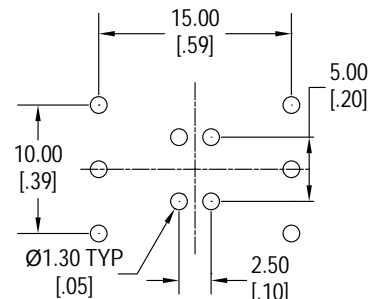
**JC R (SPDT)  
RGB PC Layout**



**JC R (DPDT)  
RGB Bottom View**



**JC R (DPDT)  
RGB Schematic**



**JC R (DPDT)  
RGB PC Layout**

### Actuators & Diffuser Styles



3 = Red Diffuser



4 = Yellow Diffuser



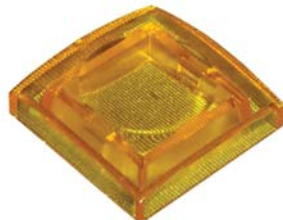
5 = Green Diffuser



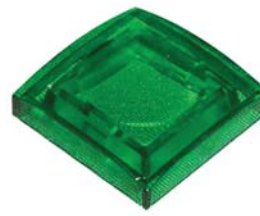
7 = Blue Diffuser



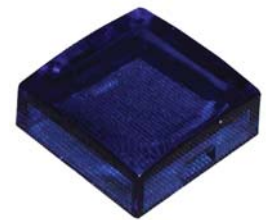
3 = Red Actuator



4 = Yellow Actuator



5 = Green Actuator



7 = Blue Actuator

### Laser Etching Styles



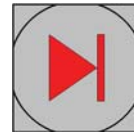
A



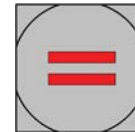
B



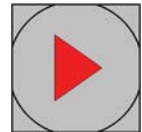
C



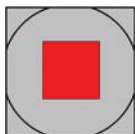
D



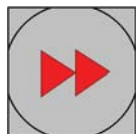
E



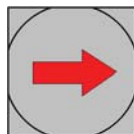
F



G



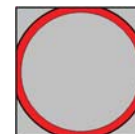
H



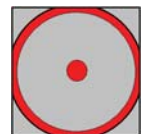
I



J



K



L

### LED Characteristics

LED Ratings		Color					Units
		R	G	Y	B	W	
Reverse Voltage	$V_R$	5	5	5	5	5	V
Forward Current (avg)	$I_F$	30	30	30	30	30	mA
Forward Current (peak)	$I_{FS}$	100	120	100	100	100	mA
Reverse Current $V_R = 5V$	$I_R$	10	10	10	10	10	$\mu A$
Power Dissipation	$P_T$	100	100	100	120	120	mW
Operating & Storage Temperature	$T_A$	-40 ~ +85					$^{\circ}C$
Forward Voltage (typ) $I_F = 20mA$	$V_F$	1.7	1.7	1.7	3.5	3.5	V
Forward Voltage (max) $I_F = 20mA$	$V_F$	2.6	2.6	2.6	4.0	4.0	V
Wavelength at Peak Emmission, $I_F = 20mA$	$\lambda_P$	697	565	585	470	n/a	nm
Spectral Line Half-Width, $I_F = 20mA$	$\Delta\lambda$	20	20	20	25	n/a	nm
Luminous Intensity, $I_F = 20mA$	LI	171	171	171	450	400	mcd
Viewing Angle	$\Theta$	50	50	50	50	50	deg

Illuminated Pushbutton

**Switch Guard**

*With Spring Loaded Clear Cover*

