

## Specifications

Electrical Ratings	100mA @ 30VDC	Dielectric Strength	500Vrms min
Electrical Life	10,000 cycles typical	Insulation Resistance	>100MΩ min
Contact Resistance	<50mΩ initial	Operating Temperature	-40°C to 85°C
Actuation Force	250 ± 100gF	Storage Temperature	-40°C to 85°C
Actuation Travel	Total travel : 1.5mm Travel to lock : 1.0mm		

## Materials

Actuator	6/6 Nylon
Frame	6/6 Nylon
Cover	6/6 Nylon
Base	9T Nylon
Caps	PC and PBT
Contacts	Phosphor Bronze, Silver Plated
Terminals	Brass, Silver Plated

## LED Characteristics

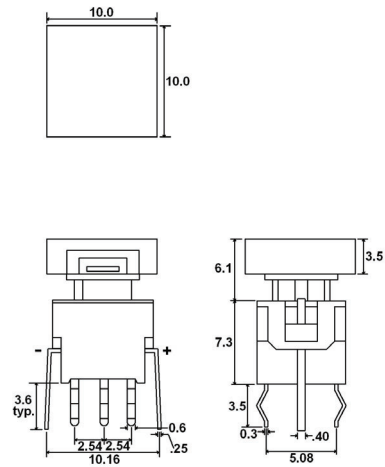
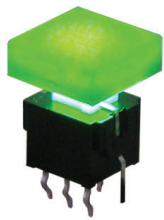
LED Ratings		Color						Units
		R	Y	G	B	PG	W	
Reverse Voltage	$V_R$	5	5	5	5	5	5	V
Forward Current (avg)	$I_F$	30	30	30	30	30	30	mA
Forward Current (peak)	$I_{FS}$	120	125	125	125	125	125	mA
Reverse Current $V_R = 5V$	$I_R$	10	10	10	10	10	10	μA
Power Dissipation	$P_T$	75	78	75	114	108	114	mW
Operating & Storage Temperature	$T_A$	-40 ~ +85						°C
Forward Voltage (typ) $I_F = 20mA$	$V_F$	2.1	2.1	2.0	3.3	3.1	3.3	V
Forward Voltage (max) $I_F = 20mA$	$V_F$	2.6	2.6	2.5	3.8	3.6	3.8	V
Wavelength at Peak Emmission, $I_F = 20mA$	$\lambda_P$	660	585	572	460	515	n/a	nm
Spectral Line Half-Width, $I_F = 20mA$	$\Delta\lambda$	25	37	20	30	33	n/a	nm
Luminous Intensity, $I_F = 20mA$	LI	50	10	60	120	700	800	mcd
Viewing Angle	$\Theta$	120	120	120	120	120	120	deg

Illuminated Miniature Pushbutton

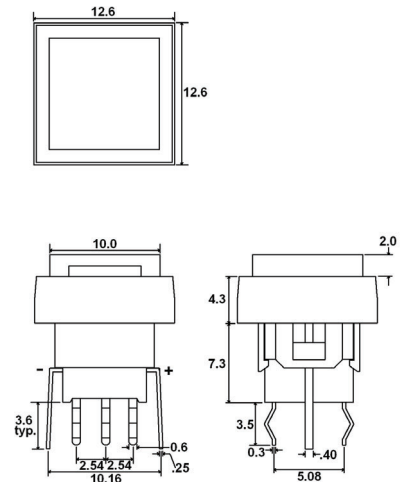
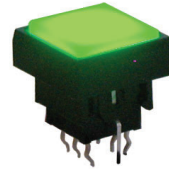
**Ordering Information**

1. Series	BT	N	R	C	X	N												
BT																		
2. Switch Function	<p>N = Momentary L = Latching</p>																	
3. LED Colors	<p>X = No LED R = Red Y = Yellow G = Green PG = Pure Green B = Blue W = White</p> <p>RX = Red/Yellow Dual LED RG = Red/Green Dual LED RB = Red/Blue Dual LED YG = Yellow/Green Dual LED LED YB = Yellow/Blue Dual LED GB = Green/Blue Dual LED</p>																	
4. Frame Options	<p>C = No Frame R1 = Round frame for use with D &amp; E cap styles R2 = Round frame for use with F &amp; H cap styles S1 = Square frame for use with A, B &amp; G cap styles S2 = Square frame for use with C cap style</p>																	
5. Frame Color	<p>X = No Frame K = Black</p>																	
6. Cap Style	<p>N = No Cap A = Available in colors 1, 1T, 1O, 2O, 3, 3T, 4, 4T, 5, 5T, 7, 7T, 0, MS B = Available in color 2O C = Available in colors 1, 1T, 1O, 2O, 3, 3T, 4, 4T, 5, 5T, 7, 7T, 0, MS D = Available in colors 1, 1T, 1O, 2O, 3, 3T, 4, 4T, 5, 5T, 7, 7T, 0, MS E = Available in color 2O F = Available in colors 1, 1t, 1O, 2O, 3, 3T, 4, 4T, 5, 5T, 7, 7T, 0, MS G = Available in colors 1O, 2O, 3T, 4T, 5T, 7T, 0, MS H = Available in colors 3T, 4T, 5T, 7T, 0</p>																	
7. Cap Colors	<p>1 = White semi-transparent 1T = White transparent 1O = White opaque for use with laser etching 2O = Black opaque for use with laser etching or B &amp; E style caps 3 = Red semi-transparent 3T = Red transparent 4 = Yellow semi-transparent 4T = Yellow transparent 5 = Green semi-transparent 5T = Green transparent 7 = Blue semi-transparent 7T = Blue transparent 0 = Clear semi-transparent MS = Misty Silver, opaque, for use with laser etching</p>																	
8. Laser Etching Styles	<p>Blank = No etching</p> <table border="0"> <tr><td>A</td><td>F</td></tr> <tr><td>B</td><td>G</td></tr> <tr><td>C</td><td>H</td></tr> <tr><td>D</td><td>I</td></tr> <tr><td>E</td><td>J</td></tr> </table>								A	F	B	G	C	H	D	I	E	J
A	F																	
B	G																	
C	H																	
D	I																	
E	J																	

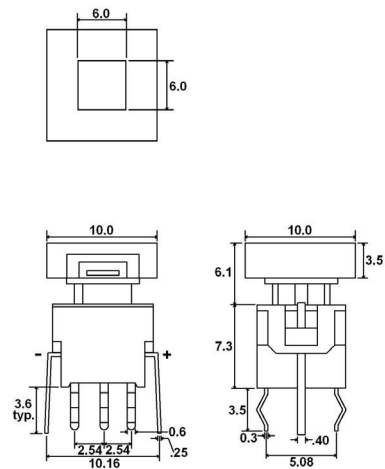
**Dimensions**



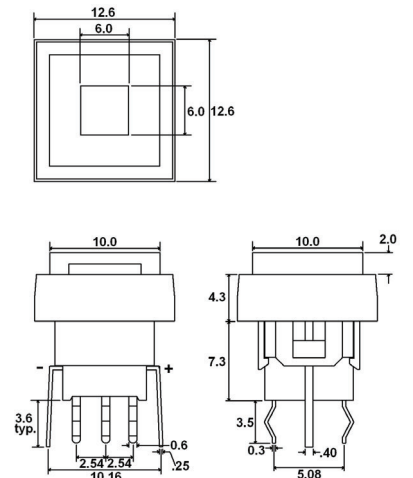
**A Style Cap without Frame**



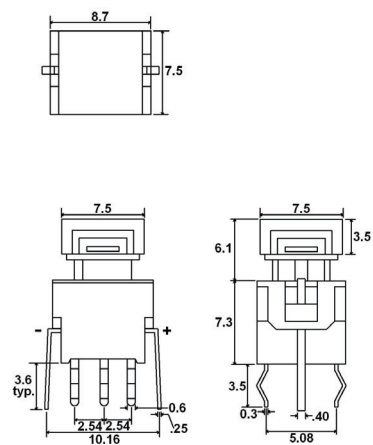
**A Style Cap with S1 Frame**



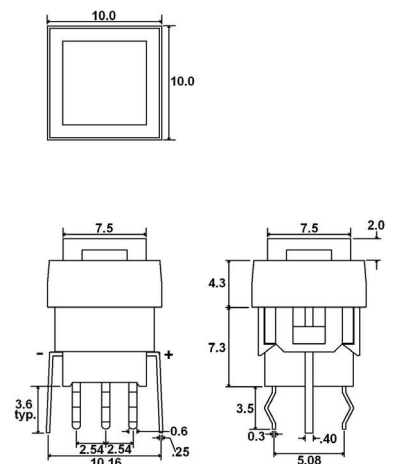
**B Style Cap without Frame**



**B Style Cap with S1 Frame**

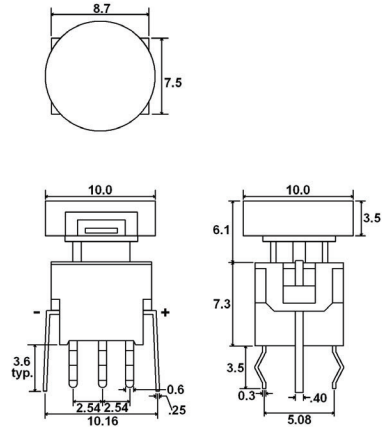


**C Style Cap without Frame**

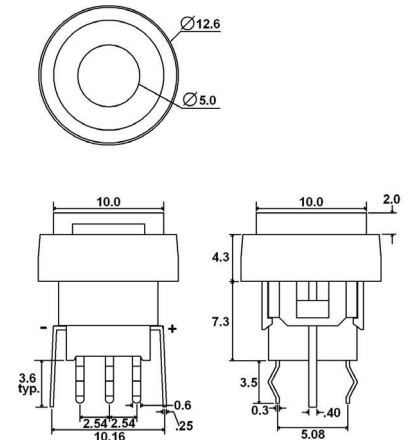


**C Style Cap with S2 Frame**

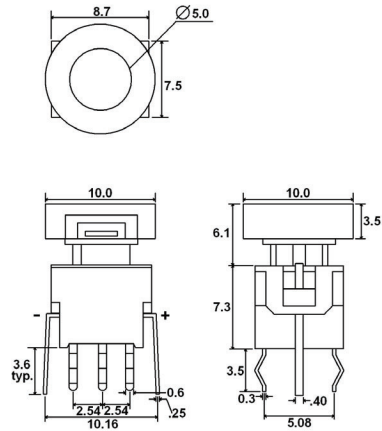
**Dimensions**



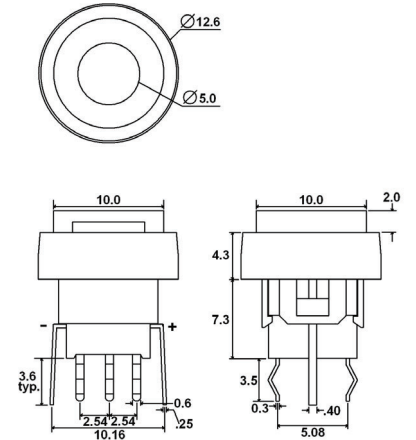
**D Style Cap without Frame**



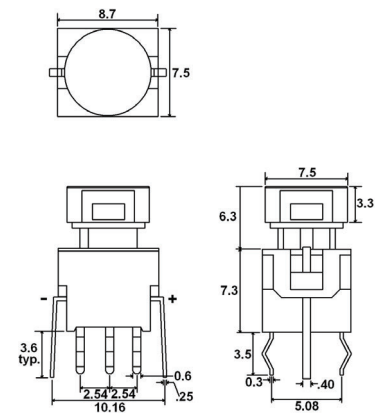
**D Style Cap with R1 Frame**



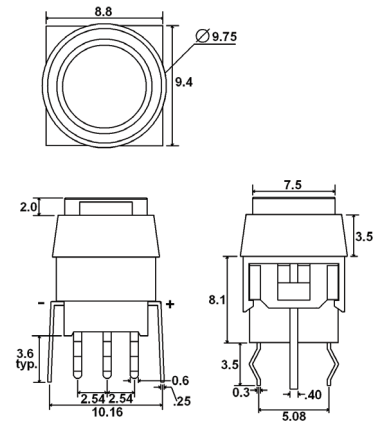
**E Style Cap without Frame**



**E Style Cap with R1 Frame**

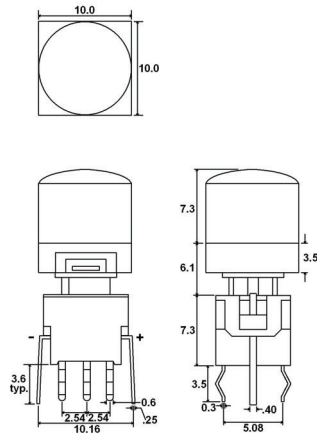


**F Style Cap without Frame**

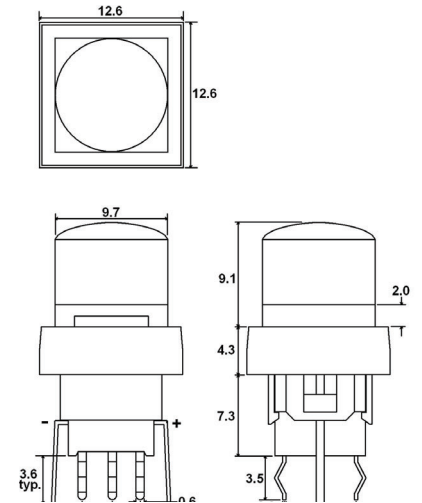


**F Style Cap with R2 Frame**

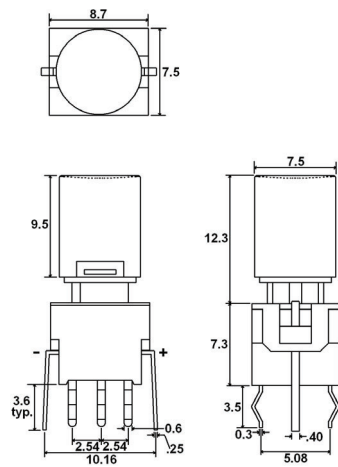
## Dimensions



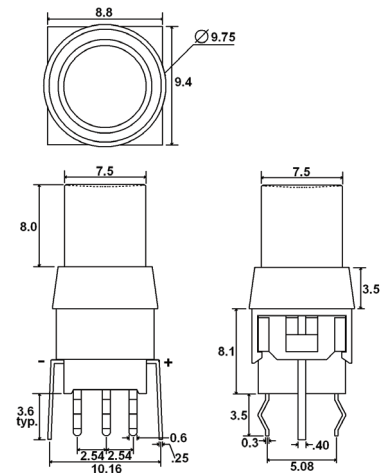
**G Style Cap without Frame**



**G Style Cap with S1 Frame**

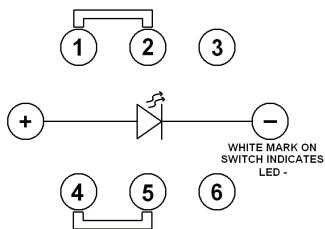


**H Style Cap without Frame**

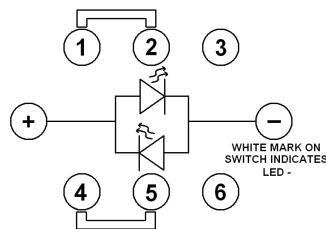


**H Style Cap with R2 Frame**

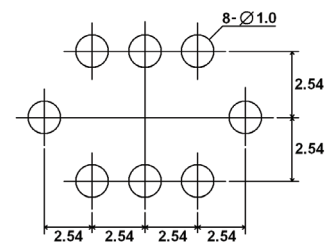
## Schematics & PC Layout



**Single Color LED**



**Dual Color LED**



Illuminated Miniature Pushbutton

**Laser Etching Styles**



**A**



**B**



**C**



**D**



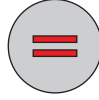
**E**



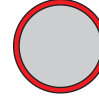
**F**



**G**



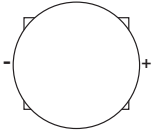
**H**



**I**



**J**



*All laser etching styles will be orientated with the + terminal located on the right hand side with respect to the legend.*