

Illuminated Pushbutton

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

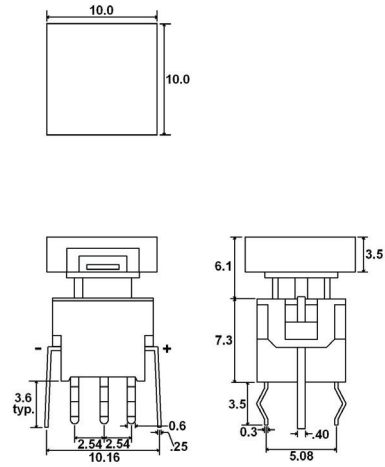
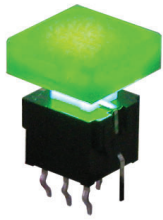
LED Characteristics

LED Ratings		Color						
		R	Y	G	B	PG	W	Units
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, $I_F = 20mA$	λ_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	Θ	120	120	120	120	120	120	deg

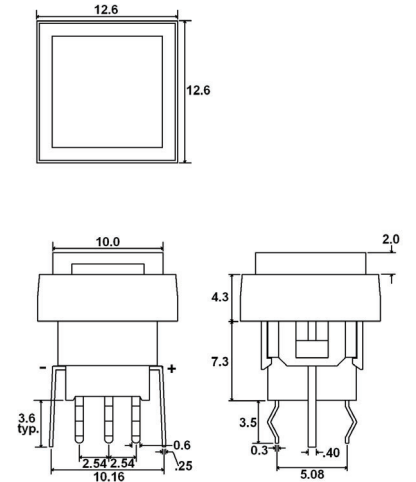
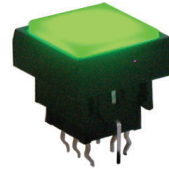
Ordering Information

1. Series	BT	N	R	C	X	N		
BT								
2. Switch Function	N = Momentary L = Latching							
3. LED Colors	X = No LED R = Red Y = Yellow G = Green PG = Pure Green B = Blue W = White RY = 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							
4. Frame Options	C = No Frame R1 = Round frame for use with D & E cap styles R2 = Round frame for use with F & H cap styles S1 = Square frame for use with A, B & G cap styles S2 = Square frame for use with C cap style							
5. Frame Color	X = No Frame K = Black							
6. Cap Style	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							
7. Cap Colors	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 & 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							
8. Laser Etching Styles	Blank = No etching A F B G C H D I E J							

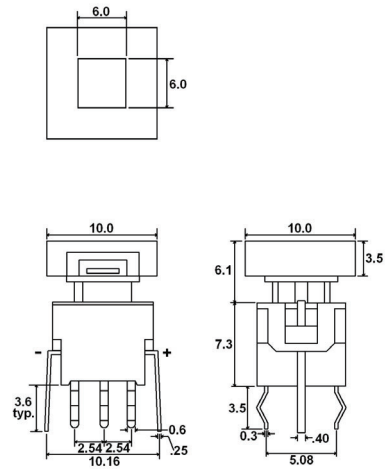
Dimensions



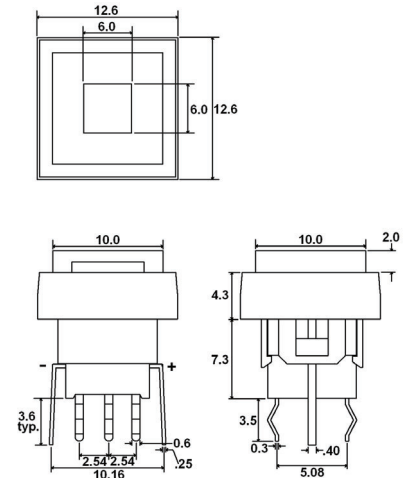
A Style Cap without Frame



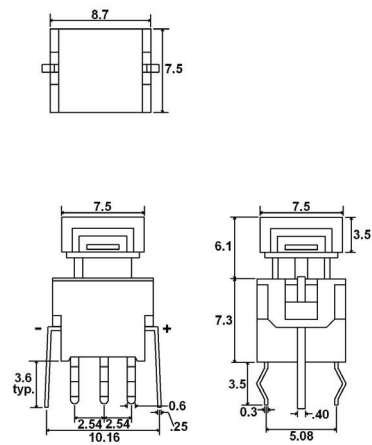
A Style Cap with S1 Frame



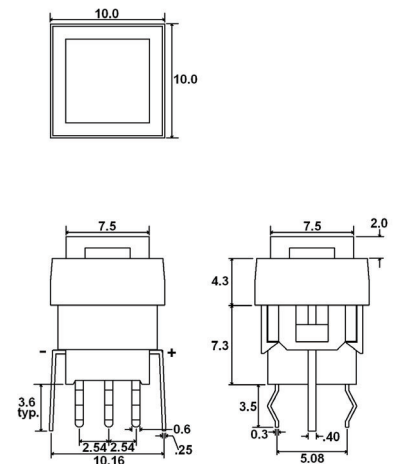
B Style Cap without Frame



B Style Cap with S1 Frame

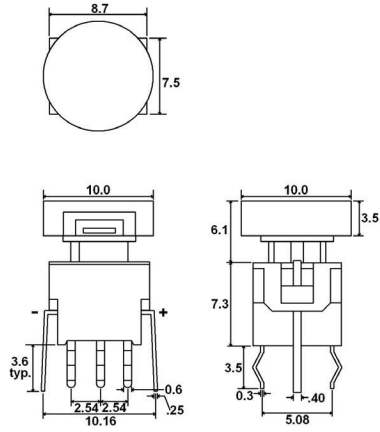


C Style Cap without Frame

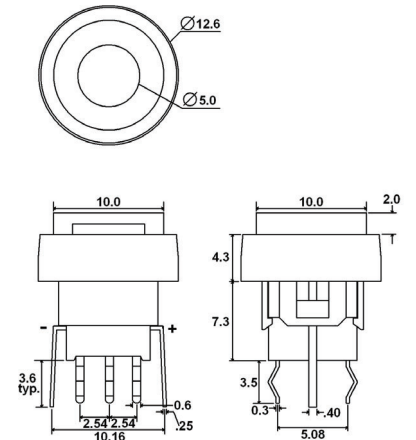


C Style Cap with S2 Frame

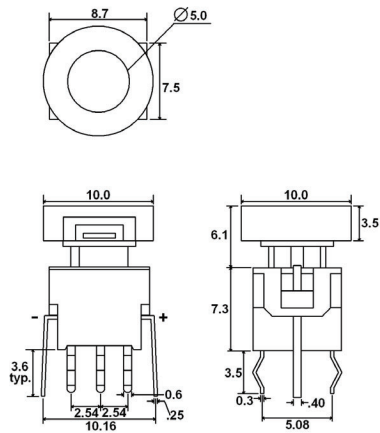
Dimensions



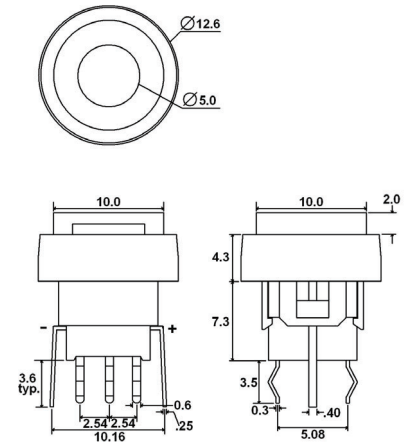
D Style Cap without Frame



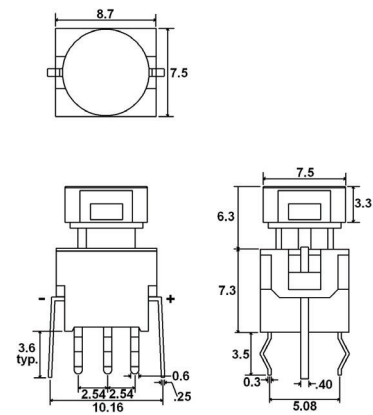
D Style Cap with R1 Frame



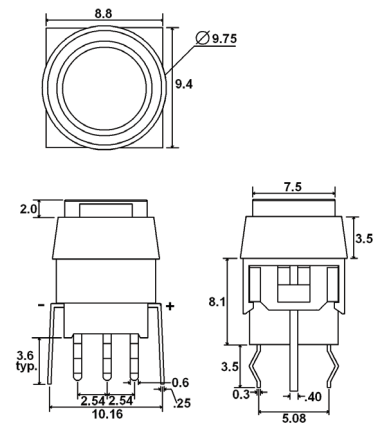
E Style Cap without Frame



E Style Cap with R1 Frame

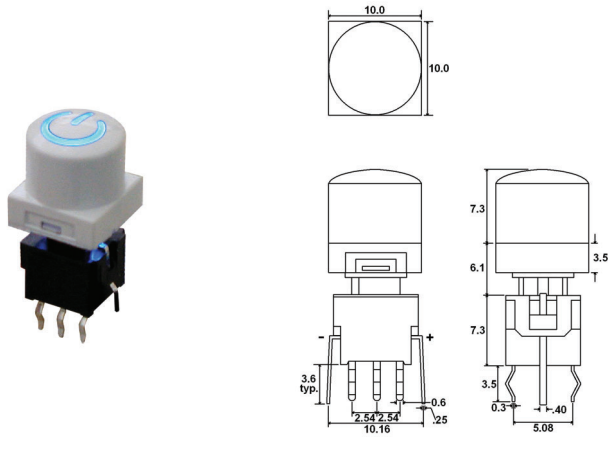


F Style Cap without Frame

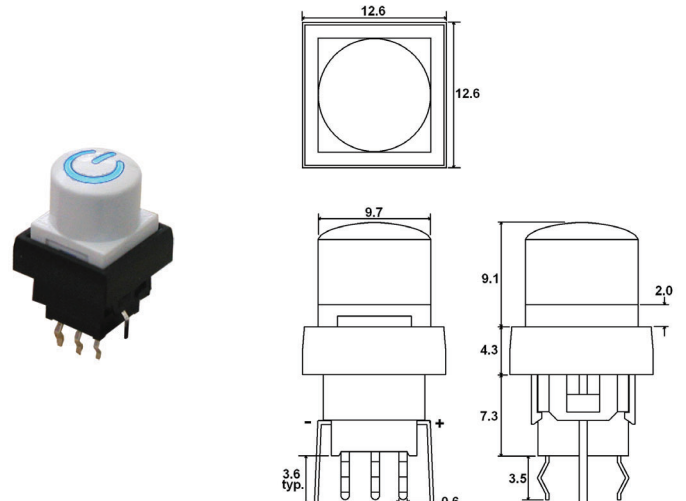


F Style Cap with R2 Frame

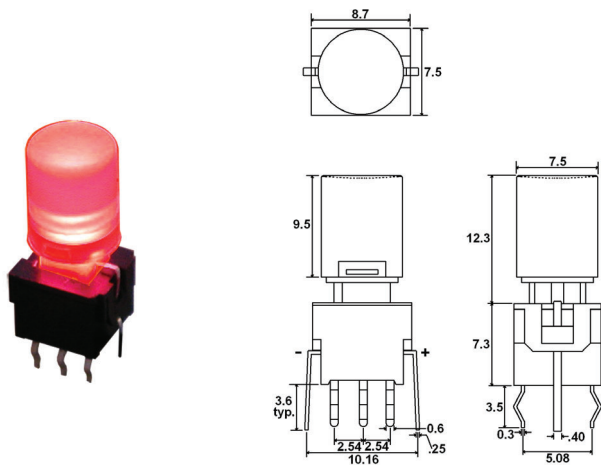
Dimensions



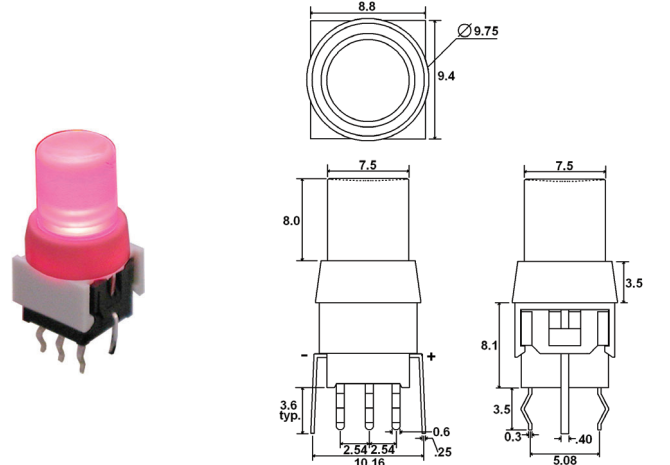
G Style Cap without Frame



G Style Cap with S1 Frame

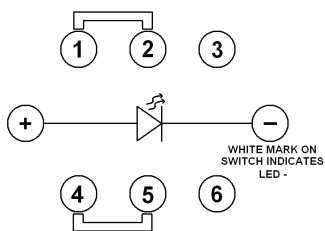


H Style Cap without Frame

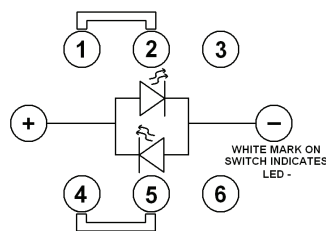


H Style Cap with R2 Frame

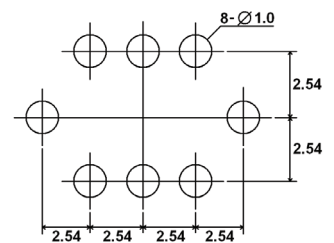
Schematics & PC Layout













Single Color LED



Dual Color LED



Laser Etching Styles

 <p>A</p>	 <p>B</p>	 <p>C</p>	 <p>D</p>	 <p>E</p>
 <p>F</p>	 <p>G</p>	 <p>H</p>	 <p>I</p>	 <p>J</p>

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

