

SPECIFICATIONS

Electrical Ratings	50mA @ 35VDC
Electrical Life	100,000 cycles typical
Contact Resistance	< 50 mΩ initial
Actuation Force	130 +/- 50gF
Actuator Travel	.50 +/- .1mm
Dielectric Strength	500Vrms min
Insulation Resistance	> 100MΩ min
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C



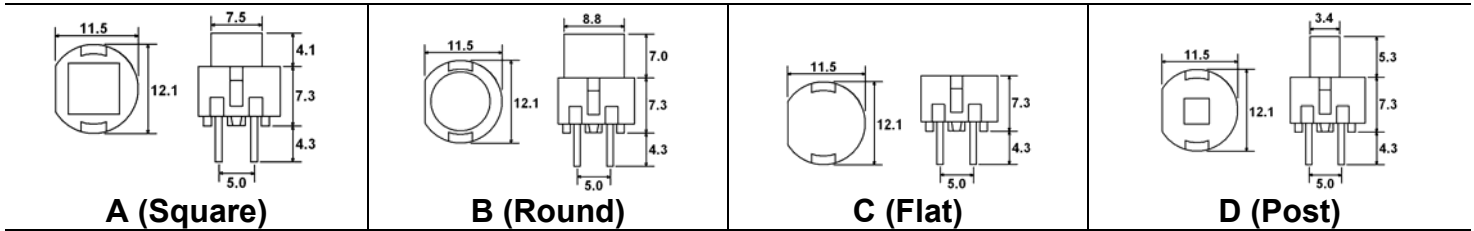
MATERIALS ←RoHS COMPLIANT

Cover	PC
Base	Valox
Contacts	Copper Alloy, Silver Plated
Terminals	Copper Alloy, Silver Plated

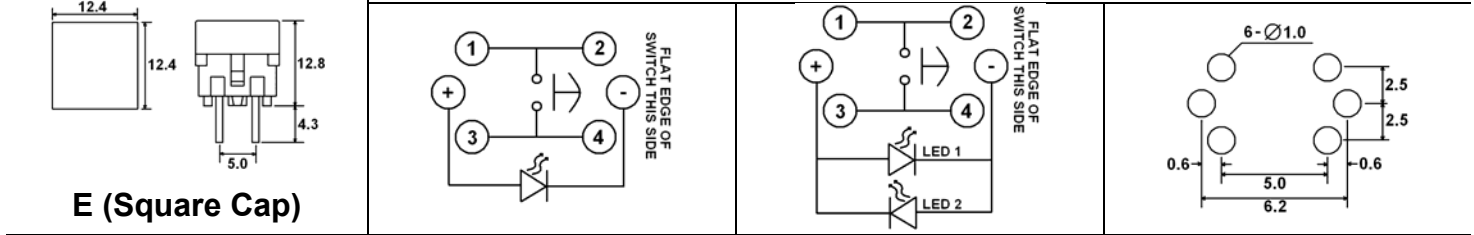
ORDERING INFORMATION

1. Series:	SH	B	L	B	A	MS
SH						
2. Actuator Options:						
A - Square						
B - Round						
C - Flat						
D - Post						
E - Large Square Cap						
3. Actuator Colors:						
Non-illuminated Actuator Color Options	Illuminated Actuator Options					
1 = White	5 = Green	L = LED Option – Clear Actuator Color				
2 = Black	6 = Orange	L1 = LED Option – With Laser Etching Style				
3 = Red	7 = Blue	**LED only available with A, B & E actuators				
4 = Yellow	8 = Dark Gray					
	9 = Beige					
4. LED Colors:	Bicolor LED Colors:					
Blank = No LED	RG = Red/Green					
R = Red	RY = Red/Yellow					
G = Green	YG = Yellow/Green					
Y = Yellow	BG = Blue/Green					
B = Blue	BR = Blue/Red					
W = White	BY = Blue/Yellow					
5. Laser Etching Styles:	**Laser etching styles are only available with the A or B actuator. A colored film is applied to the actuator and is laser etched to allow the LED to shine through the pattern.					
Blank = No Laser Etching Style						
A F						
B G						
C H						
D J						
E K						
6. Laser Etching Colors:	** A colored film is applied to the actuator and is laser etched to allow the standard color of the actuator or the LED to shine through the pattern.					
Blank = No Laser Etching Color						
MS =Misty Silver						
BS = Bright Silver						
BG = Bright Gold						
7. Caps:	Cap Colors:					
Blank = No Cap	C15	C22				
C11	C16	C26	**See Cap Options for color availability			
C12	C17	C27	** Caps available with D actuator only			
C13	C18	C28				
C14	C19					

DIMENSIONS



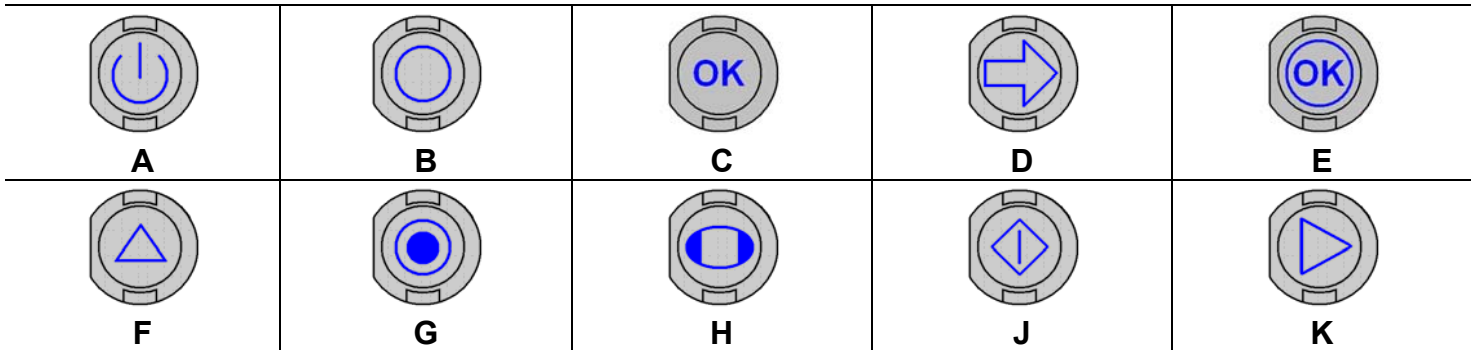
SCHEMATIC & PC LAYOUT



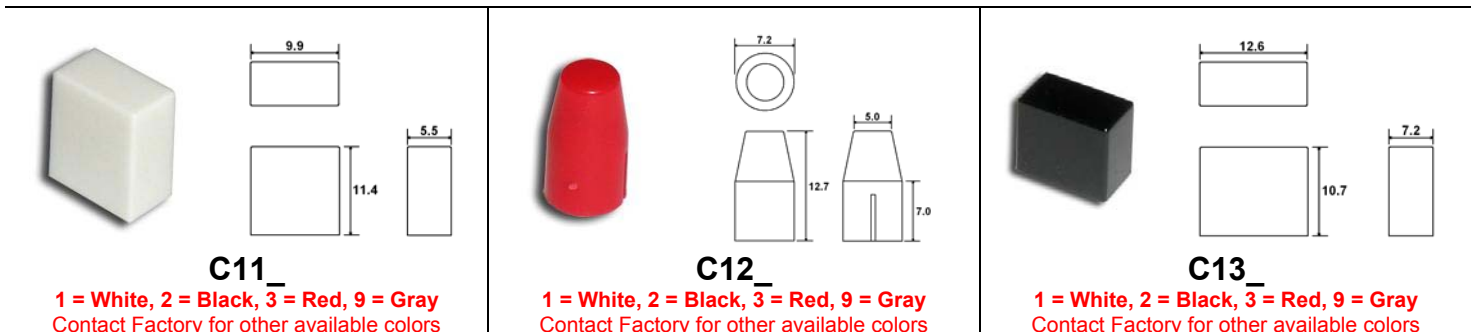
LED SPECIFICATIONS

LED Ratings		R	G	Y	B	W	Units
Reverse Voltage	V_R	5	5	5	5	5	V
Forward Current (avg / peak)	I_F / I_{FS}	30 / 125	30 / 125	30 / 125	30 / 125	30 / 125	mA
Reverse Current $V_R = 5V$	I_R	10	10	10	10	10	μA
Power Dissipation	P_T	69	75	75	120	120	mW
Forward Voltage (typ. / max), $I_F = 20mA$	V_F	1.8 / 2.3	2.0 / 2.5	2.0 / 2.5	3.5 / 4.0	3.5 / 4.0	V
Wavelength, Peak Emmission, $I_F = 20mA$	λ_P	660	572	595	455	----	nm
Spectral Line Half-Width, $I_F = 20mA$	$\Delta\lambda$	20	20	20	30	----	nm
Luminous Intensity, $I_F = 20mA$	LI	20	20	80	40	200	mcd
Viewing Angle	Θ	150	150	150	150	150	Deg


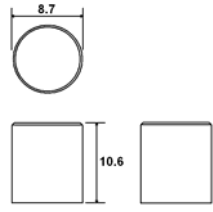

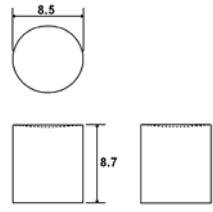
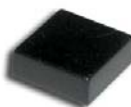
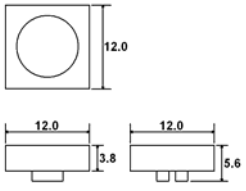

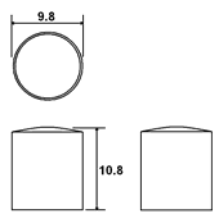

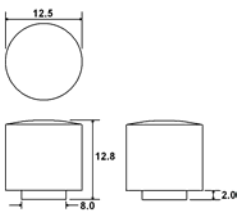

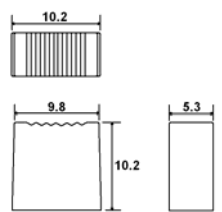

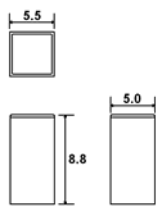

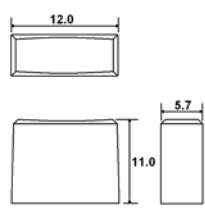

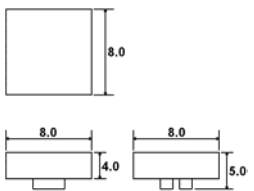

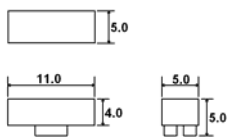
LASER ETCHING STYLES



CAP OPTIONS ←FOR D ACTUATOR



CAP OPTIONS ←FOR D ACTUATOR

  <p>C14_ 1 = White, 2 = Black, 3 = Red, 9 = Gray Contact Factory for other available colors</p>	  <p>C15_ 2 = Black, 0 = Clear Contact Factory for other available colors</p>	  <p>C16_ 1 = White, 2 = Black, 3 = Red, 7 = Blue Contact Factory for other available colors</p>
  <p>C17_ 2 = Black, 0 = Clear Contact Factory for other available colors</p>	  <p>C18_ 1 = White, 2 = Black, 9 = Light Gray Contact Factory for other available colors</p>	  <p>C19_ 1 = White, 2 = Black, 3 = Red, 8 = Dark Gray Contact Factory for other available colors</p>
  <p>C22_ 2 = Black, 8 = Dark Gray, 9 = Light Gray Contact Factory for other available colors</p>	  <p>C26_ 1 = White, 2 = Black, 3 = Red, 9 = Light Gray Contact Factory for other available colors</p>	  <p>C27_ 1 = White, 2 = Black, 3 = Red, 7 = Blue Contact Factory for other available colors</p>
  <p>C28_ 1 = White, 2 = Black, 3 = Red, 7 = Blue Contact Factory for other available colors</p>		