

RoHS Compliant



## Specifications

Electrical Ratings	50mA @ 48VDC
Electrical Life	100,000 cycles typical
Contact Resistance	<50mΩ initial
Actuation Force	160 ± 50gF
Actuation Travel	.25 ± .1mm

Dielectric Strength	500Vrms min
Insulation Resistance	>100MΩ min
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C

## Materials

Actuator	6/6 Nylon (Thru-Hole); 9T Nylon (SMD)
Housing	6/6 Nylon (Thru-Hole); 6T Nylon (SMD)
Cap	6/6 Nylon (Thru-Hole); 6/6 Nylon 33% GF (SMD)
Frame	6/6 Nylon (Thru-Hole); 6/6 Nylon 33% GF (SMD)
Contacts	Stainless Steel, Silver Plated
Terminals	Brass, Silver Plated

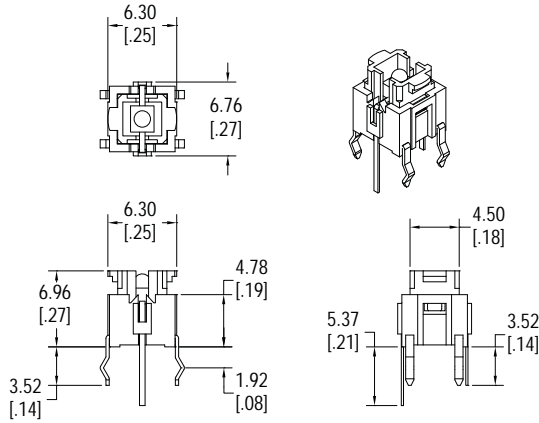
## Ordering Information

1. Series	CL1200	A	2	2	R	G
CL1200 CL1200V Right Angle CL1200S SMD						
2. Cap Style	Blank = No Cap A = Square Cap A1 = Square Cap without LED hole B = Round Cap B1 = Round Cap without LED hole C = Round Cap D = Round Cap E = Round Cap					
3. Frame Color	**Frame not available with CL1200V C = No Frame 2 = Black 9 = Gray					
4. Cap Color A, A1, B & B1	Cap Color C,D &E Blank = No Cap    4 = Yellow    0 = Clear Semi-Transparent 2 = Black            5 = Green 3 = Red              9 = Gray					
5. First LED Color	N = No LED        B = Blue R = Red            W = White G = Green          O = Orange Y = Yellow        RBG - RBG LED					
6. Second LED Color	**For bi-color LED option; white & orange RGB not available in bi-color Blank = No second LED R = Red G = Green Y = Yellow B = Blue					

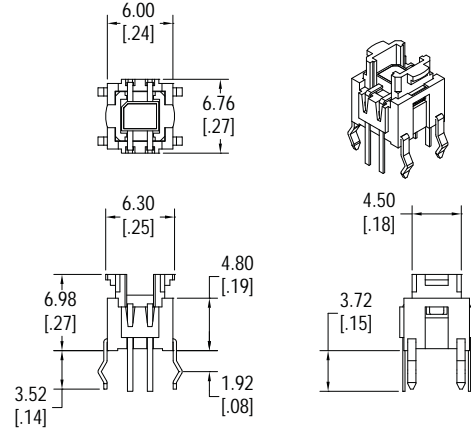
# CL1200

## Illuminated Tactile

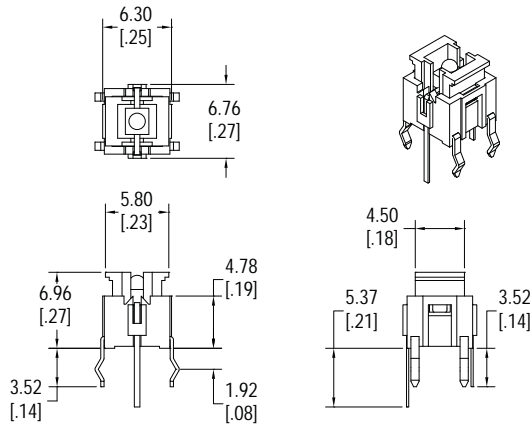
### Dimensions



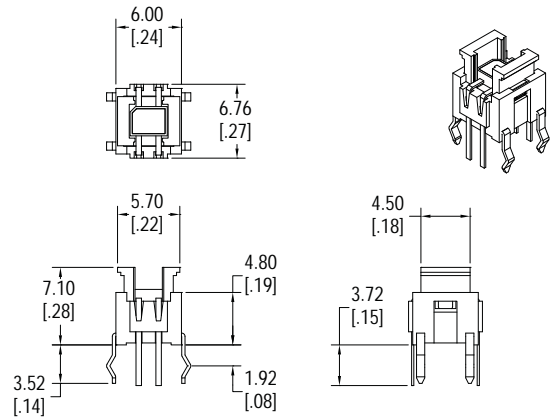
**CL1200 for Cap A, A1, B & B1**



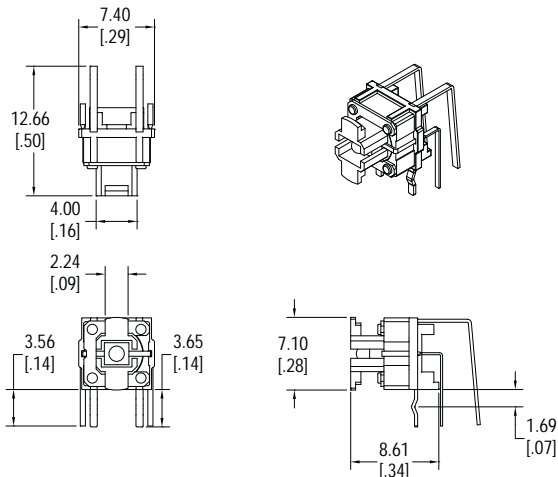
**CL1200 for Cap A, A1, B, & B1 with RGB LED**



**CL1200 for Cap C, D & E**



**CL1200 for Cap C, D & E with RGB LED**

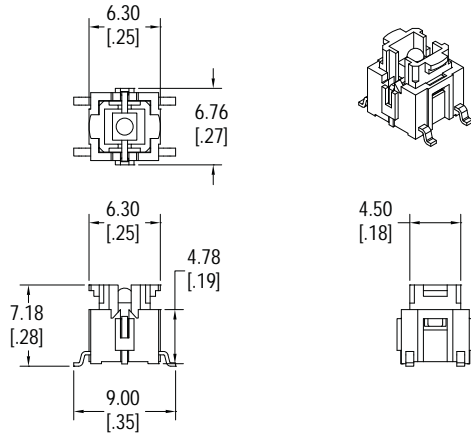


**CL1200V**

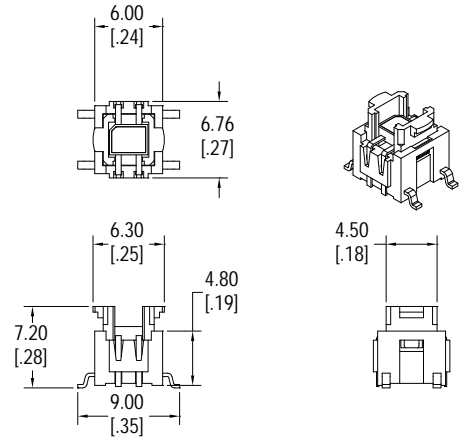
# CL1200

Illuminated Tactile

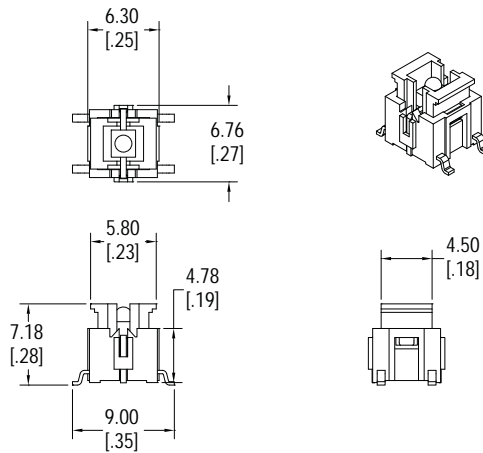
## Dimensions



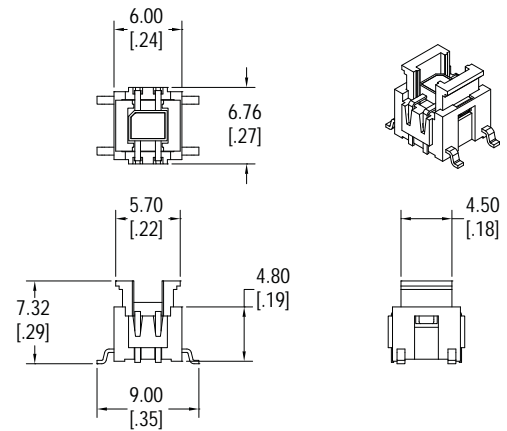
**CL1200S for Cap A, A1, B & B1**



**CL1200S for Cap A, A1, B, & B1 with RGB LED**



**CL1200S for Cap C, D & E**

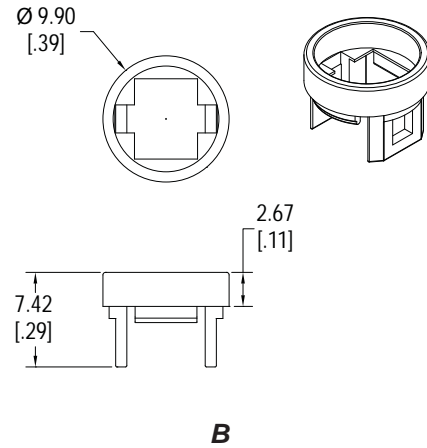
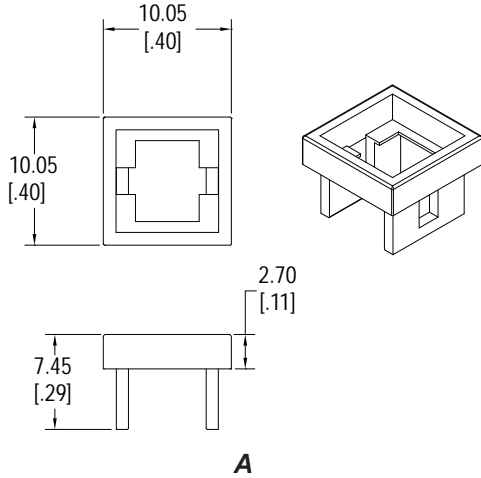


**CL1200S for Cap C, D & E with RGB LED**

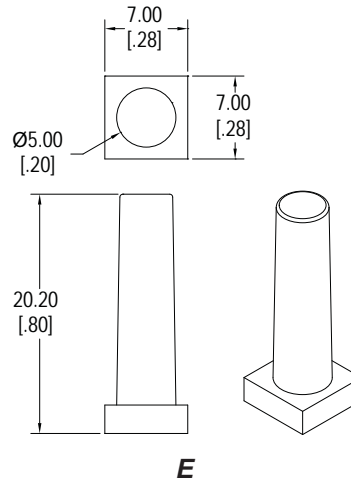
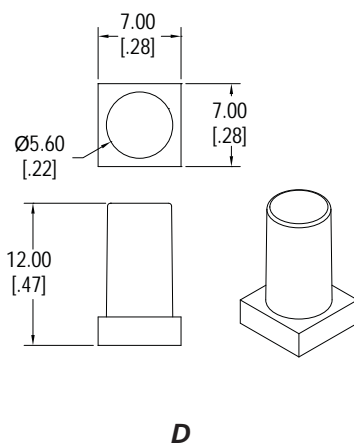
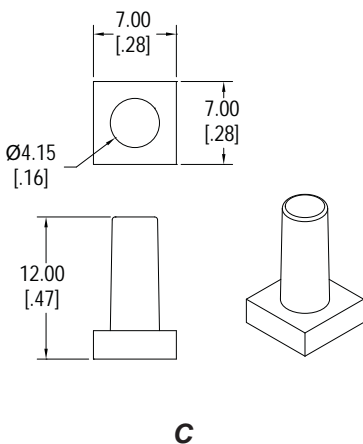
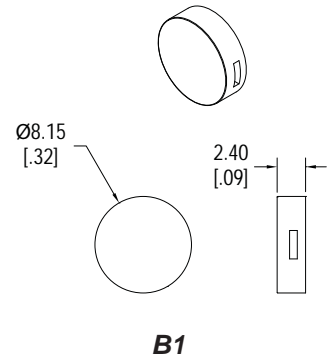
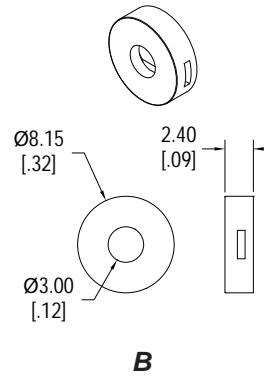
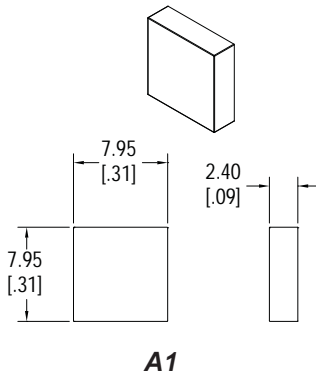
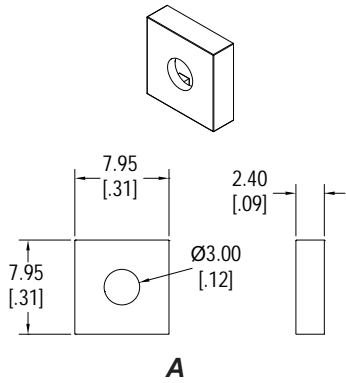
# CL1200

## Illuminated Tactile

### Dimensions - Frames



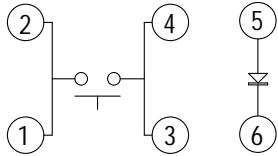
### Dimensions - Caps



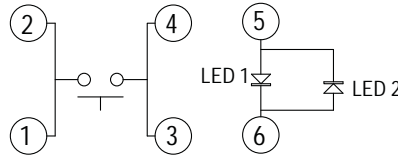
# CL1200

Illuminated Tactile

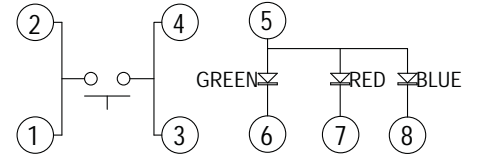
## Schematics



**1 LED**

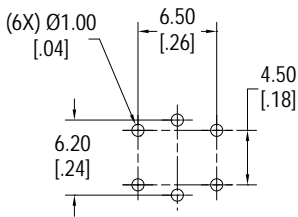


**Dual LED**

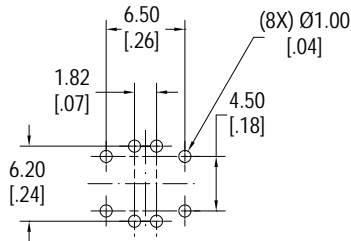


**RGB LED**

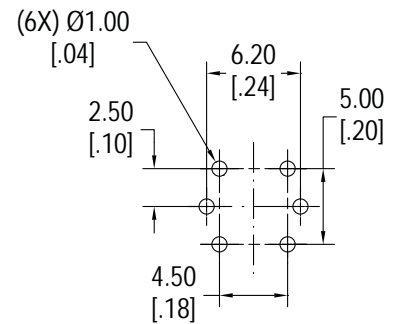
## PC Layout



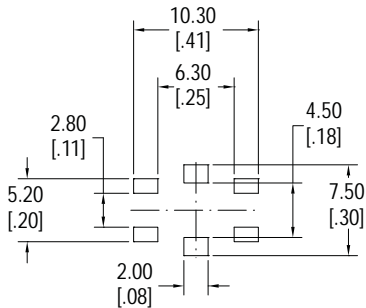
**Thru Hole**



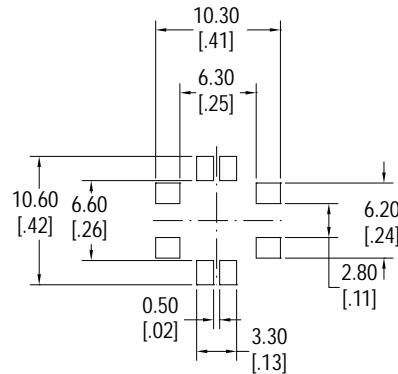
**Thru Hole RGB**



**Right Angle**



**Surface Mount**



**Surface Mount RGB**

# CL1200

Illuminated Tactile

## LED Characteristics

LED Ratings		B	W	O	R	G	Y	Units
		Reverse Voltage	$V_R$	5	5	5	5	5
Forward Current (avg)	$I_F$	30	30	30	30	30	30	mA
Forward Current (peak)	$I_{FS}$	125	125	125	125	125	125	mA
Reverse Current $V_R = 5V$	$I_R$	10	10	10	10	10	10	$\mu A$
Power Dissipation	$P_T$	120	120	75	75	75	75	mW
Operating & Storage Temperature	$T_A$	-40 ~ +85						$^{\circ}C$
Forward Voltage (typ) $I_F = 20mA$	$V_F$	3.5	3.5	2.0	2.0	2.0	2.0	V
Forward Voltage (max) $I_F = 20mA$	$V_F$	4.0	4.0	2.5	2.5	2.5	2.5	V
Wavelength at Peak Emmission, $I_F = 20mA$	$\lambda_P$	460	n/a	610	630	572	590	nm
Spectral Line Half-Width, $I_F = 20mA$	$\Delta\lambda$	40	n/a	610	630	572	590	nm
Luminous Intensity, $I_F = 20mA$	LI	200	60	50	1120	525	1550	mcd
Viewing Angle	$\Theta$	20	165	20	20	20	20	deg