

RoHS Compliant

Bi-Colored SMT Illuminated Tactile

Specifications

Electrical Ratings	50mA @ 24VDC
Electrical Life	500,000 cycles typical
Contact Resistance	<50mΩ initial
Actuation Force	160 ± 100gF
Actuation Travel	0.5 ± .2mm

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

Materials

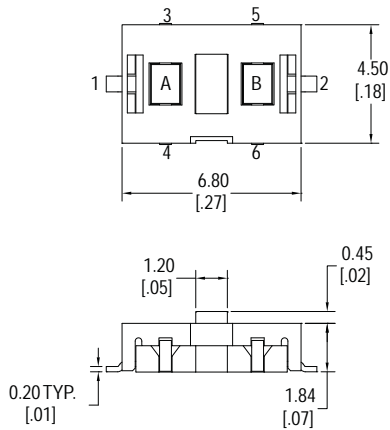
Actuator	Liquid Crystal Polymer (LCP)
Housing	Nylon 9T
Base	Liquid Crystal Polymer (LCP)
Contacts	Phosphor Bronze, Silver Plated
Terminals	Brass, Silver Plated

Ordering Information

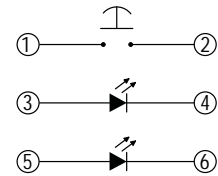
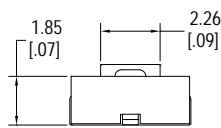
1. Series	NL	R	G
NL			
2. First LED Color			
R = Red			
G = Green			
Y = Yellow			
B = Blue			
W = White			
3. Second LED Color			
R = Red			
G = Green			
Y = Yellow			
B = Blue			
W = White			
4. Cap Options			
A0 = Round, Clear Semi-Transparent			
B0 = Rectangle, Clear Semi-Transparent			

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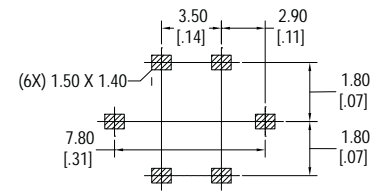
Dimensions



A = 1st LED Color
B = 2nd LED Color

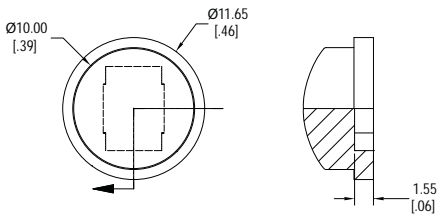


Schematic

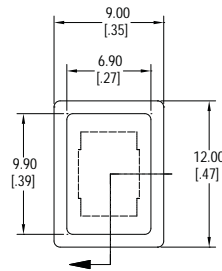
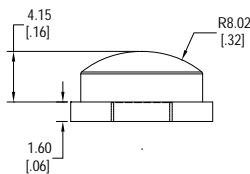


PCB Layout

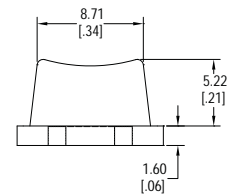
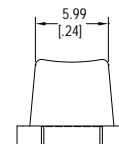
Caps



A0



B0



LED Characteristics

LED Ratings		Color					Units
		R	G	Y	B	W	
Reverse Voltage	V_R	5	5	5	5	5	V
Forward Current (avg / peak)	I_F	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	81	81	81	120	mW
Forward Voltage (typ / max) $I_F = 20mA$	V_F	1.8 / 2.3	2.2 / 2.7	2.2 / 2.7	3.5 / 3.8	3.5 / 4.0	V
Wavelength at Peak Emission, $I_F = 20mA$	λ_P	660	565	585	470	n/a	nm
Spectral Line Half-Width, $I_F = 20mA$	$\Delta\lambda$	24	30	35	25	40	nm
Luminous Intensity, $I_F = 20mA$	LI	4	6	6	110	180	mcd
Viewing Angle	Θ	150	150	150	150	150	deg