

UB 01 K W03 5C — JC

Mounting Types

PCB Mounting	
01	Square
03	Rectangular
* Snap-in Mounting	
04	Square
06	Rectangular
06B	Rectangular with Side Barriers
* Standard with Solder Lug terminals	

Housing	
K	Black

Terminals	
W01	Silver Solder Lug (for Snap-in Mounting)
W03	Silver Straight PC (for PCB Mounting)

LEDs

Bright LED	
5C	Red
5D	Amber
5F	Green

Super Bright LED	
6B	White
6F	Green
6G	Blue

Super Bright Bicolor LED	
6CF	Red/Green
6DG	Amber/Blue

Cap Types & Colors

Full Face Illuminated Cap for Bright LED			
Lens/Diffuser Colors			
CB	Red/White	FF	Green/Green
CC	Red/Red	*FJ	Green/Clear
*CJ	Red/Clear	JB	Clear/White
DB	Amber/White	JC	Clear/Red
DD	Amber/Amber	JD	Clear/Amber
*DJ	Amber/Clear	JF	Clear/Green
FB	Green/White	*JJ	Clear/Clear
* Not available with Rectangular cap			

Full Face Illuminated Cap for Super Bright LED	
JB	Clear Lens/White Diffuser

Spot Illuminated Cap for Bright & Super Bright LEDs	
AB	Black with White Window

Bicolor Alternating Legend Cap/Diffuser for Square or Rectangular	
JCF	Red/Green
JDG	Amber/Blue

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

UB01KW035C-JC



Alternating Legends

11	ON (pos)	OFF (pos)
12	ON (neg)	OFF (neg)
13	START	STOP
14	OPEN	CLOSE



Part Numbers for Alternating Legends

Square Alternating Legends				Rectangular Alternating Legends			
Color	Part Number	Color	Part Number	Color	Part Number	Color	Part Number
Red/Green	AT9450CF11	Amber/Blue	AT9450DG11	Red/Green	AT9451CF11	Amber/Blue	AT9451DG11
	AT9450CF12		AT9450DG12		AT9451CF12		AT9451DG12
	AT9450CF13		AT9450DG13		AT9451CF13		AT9451DG13
	AT9450CF14		AT9450DG14		AT9451CF14		AT9451DG14

Refer to Ordering Table for Alternating Legend that corresponds with last 2 digits of part number.

BRIGHT & SUPER BRIGHT LED COLORS & SPECIFICATIONS

The electrical specifications shown are determined at a basic temperature of 25°C. LED circuit is isolated and requires external power source. Polarity marks are on bottom of switch. If the source voltage exceeds the rated voltage, a ballast resistor is required. Resistor value can be calculated by using the formula in the Supplement section. LED is an integral part of switch and not available separately.

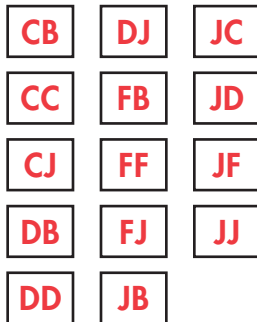
	Color	Bright			Super Bright			Unit
		5C	5D	5F	6B	6F	6G	
Super Bright LEDs are Electrostatic Sensitive								
Maximum Forward Current	I_{FM}	30	30	25	30	30	30	mA
Typical Forward Current	I_F	20	20	20	20	20	20	mA
Forward Voltage	V_F	1.85	2.0	2.1	3.2	3.2	3.2	V
Maximum Reverse Voltage	V_{RM}	5	5	5	5	5	5	V
Current Reduction Rate Above 25°C	ΔI_F	0.40	0.42	0.46	0.40	0.40	.040	mA/°C
Ambient Temperature Range		-25° ~ +50°C			-25° ~ +50°C			

CAP TYPES & COLOR COMBINATIONS

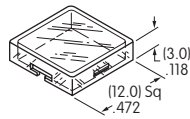
Full Face Illuminated Cap for Bright LED

Lens/Diffuser

Colors Available for Square Cap:



AT4074 Lens

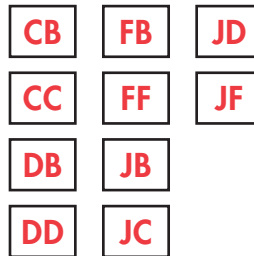


AT4075 Diffuser

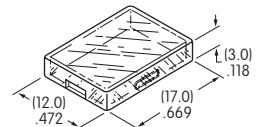


Lens/Diffuser

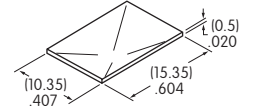
Colors Available for Rectangular Cap:



AT4117 Lens



AT4118 Diffuser

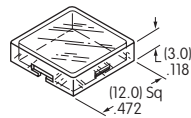


Lens & Diffuser Material: Polycarbonate Lens Finish: Glossy Diffuser Finish: Textured

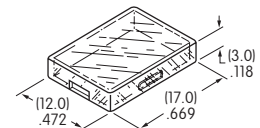
Full Face Illuminated Caps for Super Bright Bicolor LED



AT4074 Square Lens



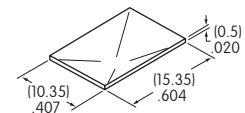
AT4117 Rectangular Lens



AT4188 Square Diffuser



AT4189 Rectangular Diffuser

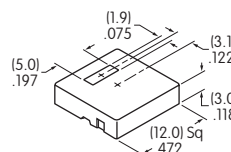


Lens & Diffuser Material: Polycarbonate Lens Finish: Glossy Diffuser Finish: Textured

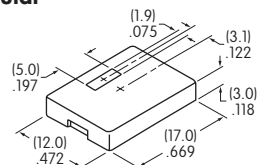
Spot Illuminated Caps

AB Black Cap with Translucent White Window for LED Display

AT4119 Square for Bright and Super Bright LED



AT4120 Rectangular for Bright and Super Bright LED



Material: Polycarbonate
Finish: Matte


Color Codes: A Black B White C Red D Amber F Green J Clear

Toggles
Rocker
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

SUPER BRIGHT BICOLOR LEDS FOR ALTERNATING LEGENDS

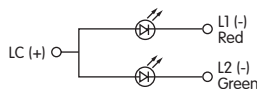
The electrical specifications shown are determined at a basic temperature of 25°C. LED circuit is isolated and requires external power source. Polarity marks are on bottom of switch. If the source voltage exceeds the rated voltage, a ballast resistor is required. Resistor value can be calculated by using the formula in the Supplement section. LED is an integral part of switch and not available separately.

Electrical Specifications for Super Bright Bicolor LEDS

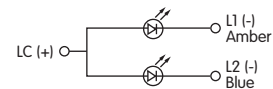
Super Bright LEDs are Electrostatic Sensitive		6CF		6DG		Unit
		Color	Red	Green	Amber	
Maximum Forward Current	I_{FM}	* 30	* 30	* 30	* 30	mA
Typical Forward Current	I_F	20	20	20	20	mA
Forward Voltage	V_F	2.3	3.2	2.1	3.0	V
Maximum Reverse Voltage	V_{RM}	4	4	4	4	V
Current Reduction Rate Above 25°C	ΔI_F	0.33	0.33	0.33	0.33	mA/°C
Ambient Temperature Range		-25° ~ +50°		-25° ~ +50°		°C

* Value applies to single color illumination for either Red or Green or Amber or Blue. When both colors are illuminated simultaneously, the sum of the currents should not exceed the smallest value of the maximum forward current.

Super Bright Bicolor Red/Green LED with 2 elements



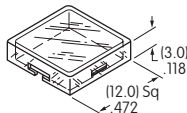
Super Bright Bicolor Amber/Blue LED with 2 elements



Alternating Legend Caps for Super Bright Bicolor LED

JCF JDG

AT4074 12.0mm Square Flat Cap



AT9450 Square Legend Insert

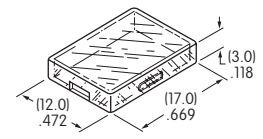


AT4188 Square Diffuser



JCF JDG

AT4117 12.0mm x 17.0mm Rectangular Flat Cap



AT9451 Rectangular Legend Insert



AT4189 Rectangular Diffuser



Lens & Diffuser Material: Polycarbonate Legend Insert Material: Polyethylene Terephthalate (PET)
 Lens Finish: Glossy Diffuser Finish: Textured

Standard Alternating Legend Pairs



Green/Red or Blue/Amber



Green/Red or Blue/Amber



Green/Red or Blue/Amber



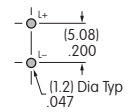
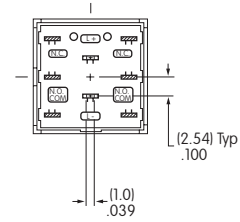
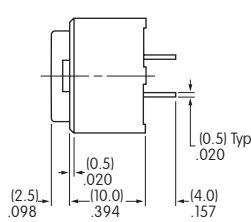
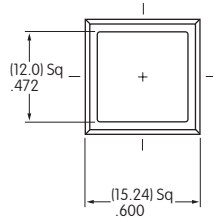
Green/Red or Blue/Amber

Cap illumination is alternating Green/Red or Blue/Amber; legend text is black.
 Contact factory for other Alternating Legends.

Legend illustrations are approximate representations of the actual characters on the filters.

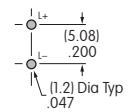
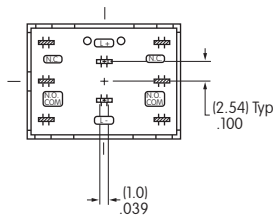
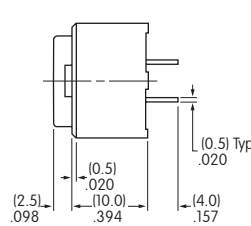
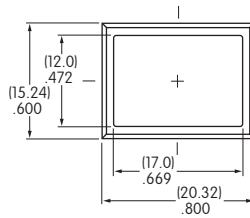
TYPICAL INDICATOR DIMENSIONS

Square • PCB Mount



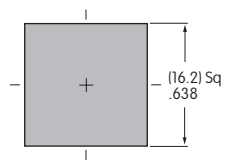
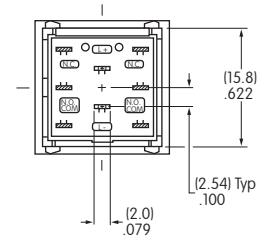
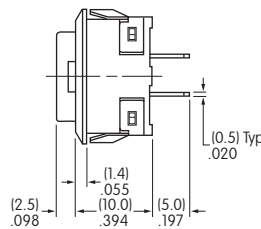
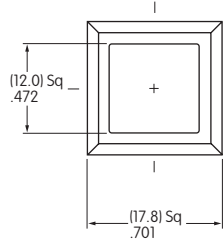
UB01KW035C-JC

Rectangular • PCB Mount



UB03KW035F-FF

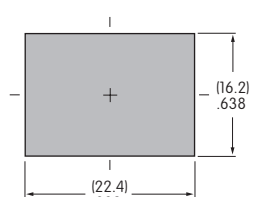
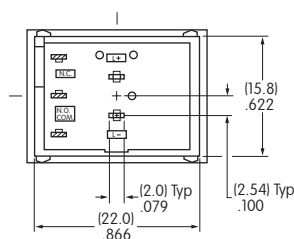
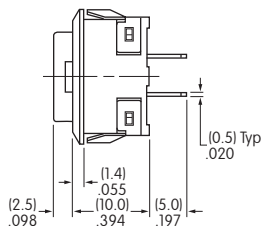
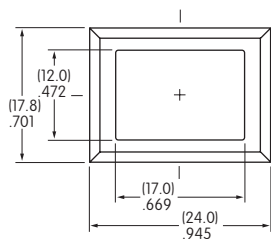
Square • Snap-in Mount • Built-in Bezel



Panel Thickness:
1.0 ~ 3.2mm (.039 ~ .126")

UB04KW015C-JC

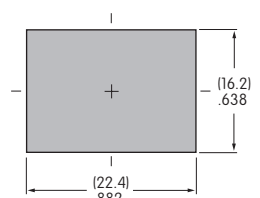
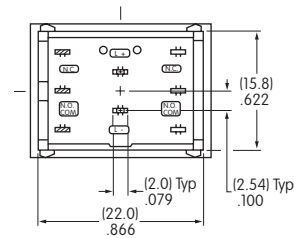
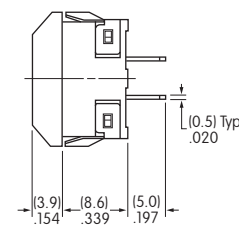
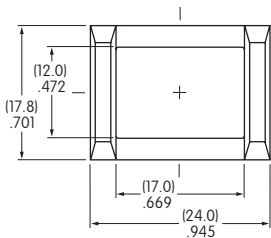
Rectangular • Snap-in Mount • Built-in Bezel



Panel Thickness:
1.0 ~ 3.2mm (.039 ~ .126")

UB06KW015D-DD

Rectangular • Snap-in Mount • Built-in Side Barriers

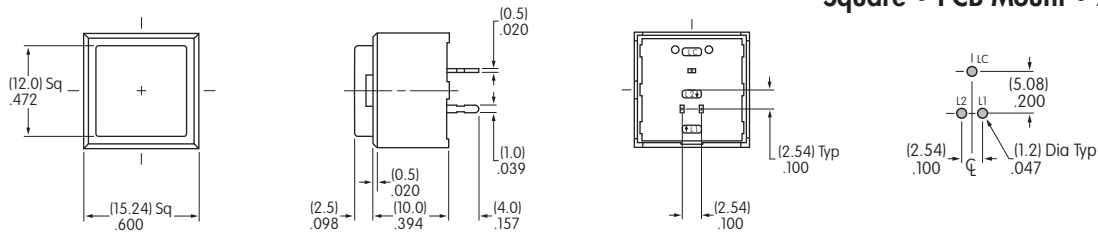


Panel Thickness:
1.0 ~ 3.2mm (.039 ~ .126")

UB06BKW015F-FF

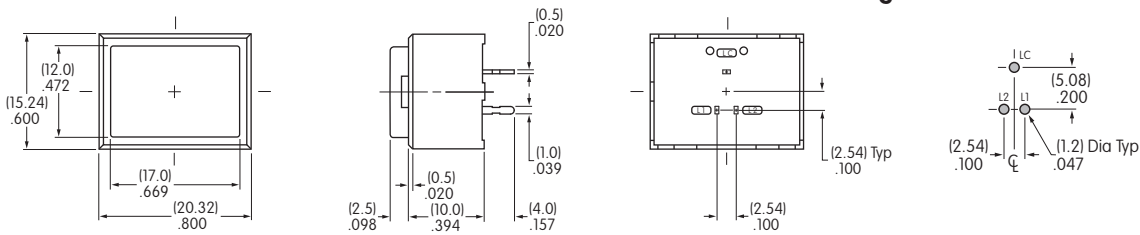
TYPICAL INDICATOR DIMENSIONS

Square • PCB Mount • Alternating Legends



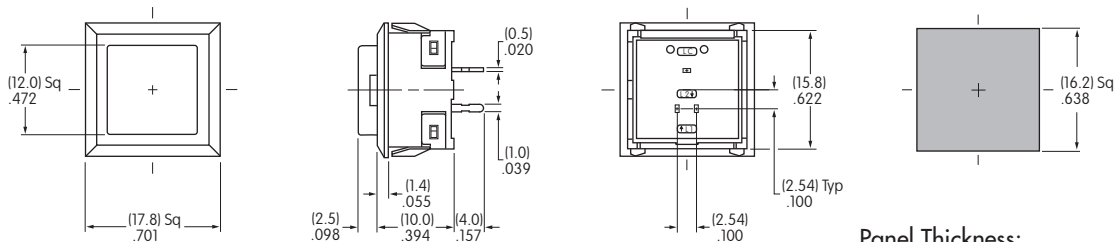
UB01KW036DG-JDG11

Rectangular • PCB Mount • Alternating Legends



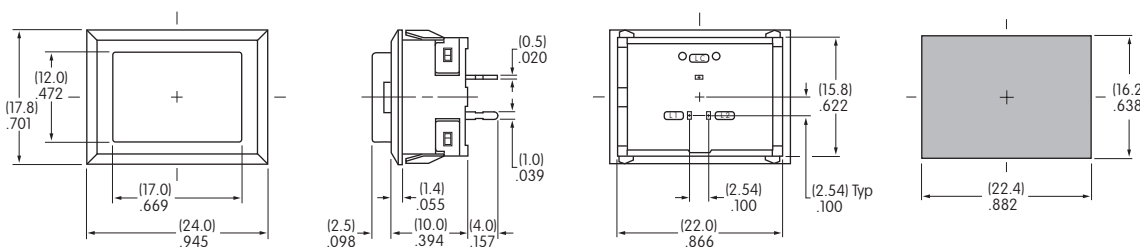
UB03KW016DG-JDG11

Square • Snap-in Mount • Built-in Bezel • Alternating Legends



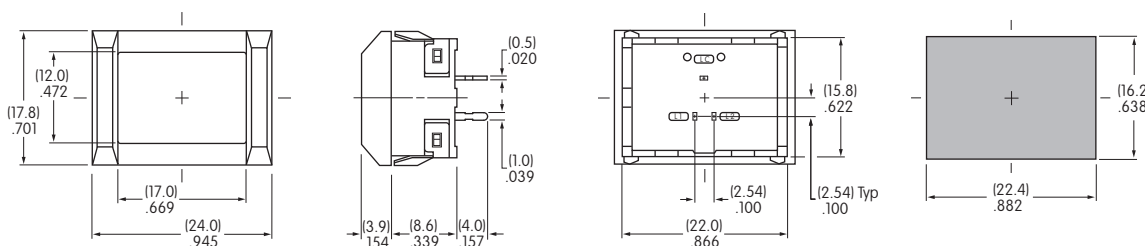
Panel Thickness: (1.0 ~ 3.2mm) .039 ~ .126" UB04KW016DG-JDG11

Rectangular • Snap-in Mount • Built-in Bezel • Alternating Legends



Panel Thickness: (1.0 ~ 3.2mm) .039 ~ .126" UB06KW016DG-JDG11

Rectangular • Snap-in Mount • Built-in Side Barriers • Alternating Legends



Panel Thickness: (1.0 ~ 3.2mm) .039 ~ .126" UB06BKW016DG-JDG11