



Contents Indicators

Toggles



A Series..... M3
Complement to A Switches

Rockers



G Series..... M5
Complement to G Switches

Pushbuttons



HB Series..... M6
Complement to HB Pushbuttons

Illuminated PB

Programmable



JF Series..... M8
Complement to JF Tactiles

Keylocks

Rotaries



KB Series..... M9
Complement to KB Pushbuttons

Slides



LB Series..... M14
Complement to LB Pushbuttons

Tactiles



P01 for MLW Series..... M19
Complement to MLW Rockers

Tilt

Touch



UB Series..... M21
Complement to UB Pushbuttons

Indicators



UB2 Series..... M26
Complement to UB2 Pushbuttons

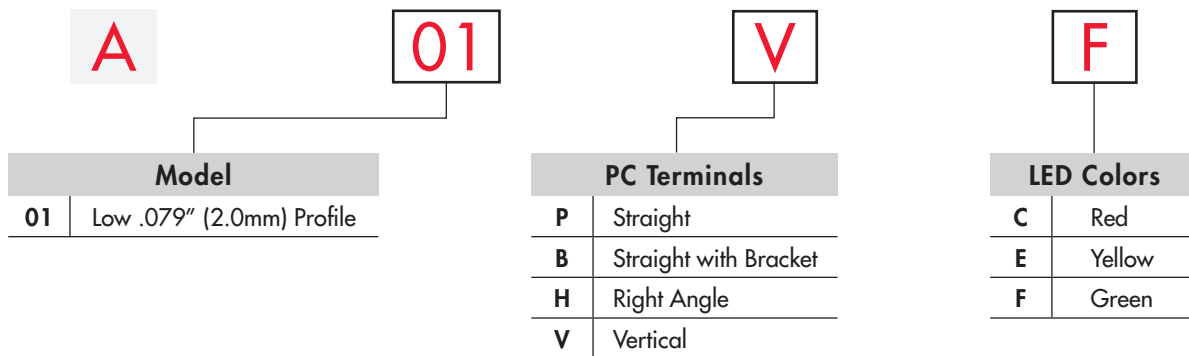
Accessories



YB Series..... M29
Complement to YB Pushbuttons

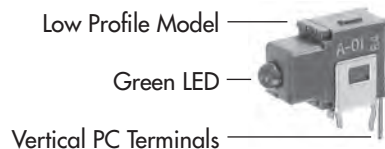
Supplement

TYPICAL INDICATOR ORDERING EXAMPLE

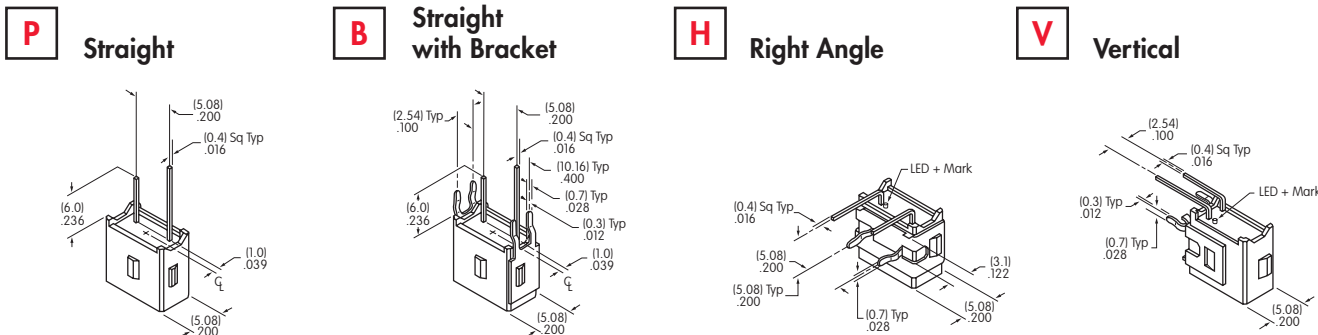


DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

A01VF



PC TERMINALS



LED COLORS & SPECIFICATIONS

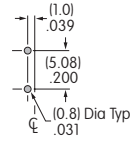
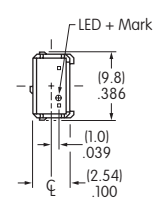
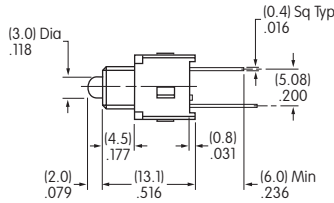
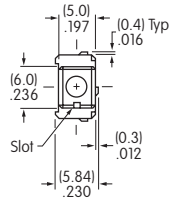
		A01 Indicator		
		C	E	F
Color		Red	Yellow	Green
LED is colored in OFF state	Color	Red	Yellow	Green
Maximum Forward Current	I_{FM}	50mA	50mA	50mA
Typical Forward Current	I_F	30mA	30mA	30mA
Forward Voltage	V_F	1.7V	2.2V	2.1V
Maximum Reverse Voltage	V_{RM}	4V	4V	4V
Current Reduction Rate Above 25°C	ΔI_F	0.67mA/°C	0.67mA/°C	0.67mA/°C
Ambient Temperature Range		-30°C ~ +85°C		

Electrical specifications are determined at a basic temperature of 25°C.

If the source voltage is greater than the LED's rated voltage, a ballast resistor must be connected in series with the LED. The ballast resistor value can be calculated by using the formula shown in the Supplement section.

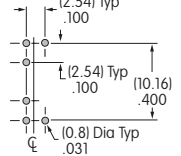
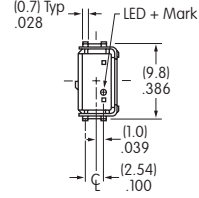
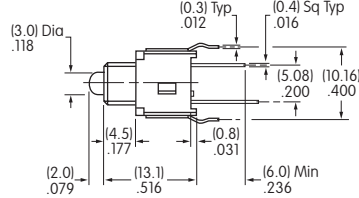
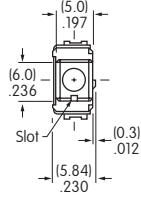
TYPICAL INDICATOR DIMENSIONS

Straight PC



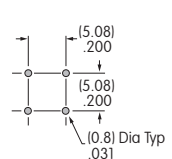
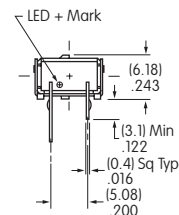
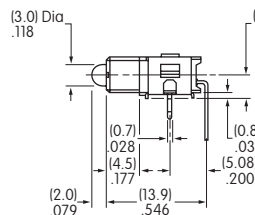
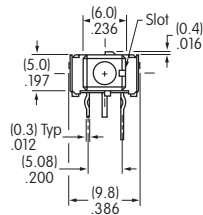
A01PF

Straight PC • Bracket



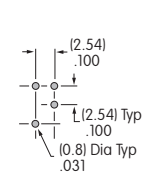
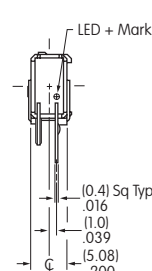
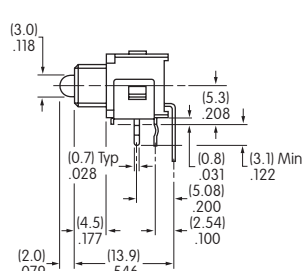
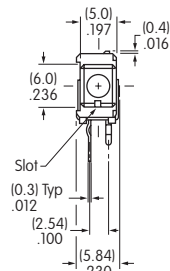
A01BF

Right Angle PC



A01HF

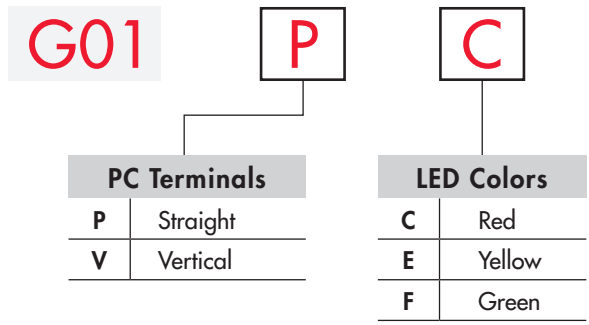
Vertical PC



A01VF

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

TYPICAL INDICATOR ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

G01PC

Straight PC Terminals



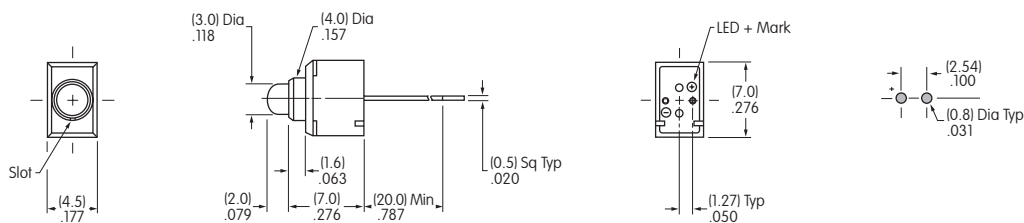
LED COLORS & SPECIFICATIONS

		C	E	F
LED is colored in OFF state	Color	Red	Yellow	Green
Maximum Forward Current	I_{FM}	30mA	30mA	25mA
Typical Forward Current	I_F	20mA	20mA	20mA
Forward Voltage	V_F	2.0V	2.1V	2.25V
Maximum Reverse Voltage	V_{RM}	5V	5V	5V
Current Reduction Rate Above 25°C	ΔI_F	0.40mA/°C	0.40mA/°C	0.33mA/°C
Ambient Temperature Range		-25°C ~ +85°C		

Electrical specifications are determined at a basic temperature of 25°C.

If the source voltage is greater than the LED's rated voltage, a ballast resistor must be connected in series with the LED. That ballast resistor value can be calculated by using the formula shown in the Supplement section.

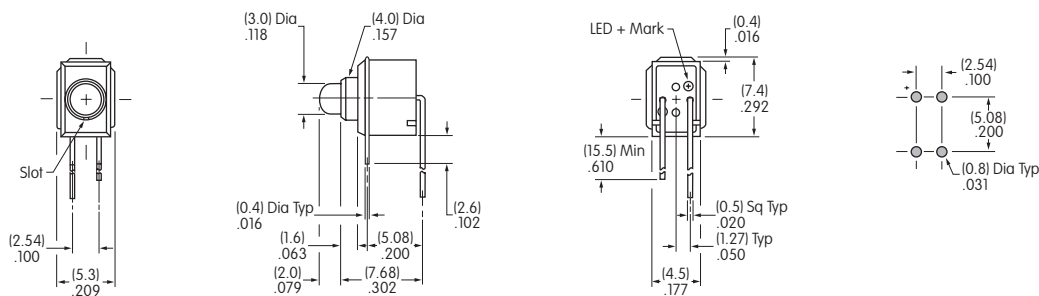
TYPICAL INDICATOR DIMENSIONS



Straight PC



G01PC



Vertical PC



G01VC

These indicators have anode and cathode terminals along with 2 support pins.

TYPICAL INDICATOR ORDERING EXAMPLE


HB	01	K	W01	5C	CB
Shapes		Housing		Terminals	
01	Square	K	Black	W01	Silver Solder Lug
02	Round				

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

HB01KW01-5C-CB

Square Shape

Black Housing





Red Lens and White Diffuser with Red, Bright LED

Silver Solder Lug Terminals

LEDs		Cap Types & Colors	
Bright		LED Cap: Lens/Diffuser Color	
5C	Red	CB	Red/White
5D	Amber	DB	Amber/White
5F	Green	FB	Green/White
5G	Blue	JB	Clear/White
Super Bright		LED Cap: Lens/Diffuser Color	
6B	White	JB	Clear/White
6F	Green		
6G	Blue		

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. Single element LED is colored in OFF state. If the source voltage exceeds the rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula in the Supplement section.

Bright AT633	Note for Super Bright:	Color	Bright			Super Bright			Unit		
			5C	5D	5F	6B	6F	6G			
Super Bright AT624G Blue AT629B White AT630F Green T-1 Bi-pin			Red	Amber	Green	White	Green	Blue			
			Maximum Forward Current	I_{FM}	30	30	30	30	30	30	mA
			Typical Forward Current	I_F	20	20	20	20	20	20	mA
			Forward Voltage	V_F	1.95	2.0	2.1	3.3	3.3	3.3	V
			Maximum Reverse Voltage	V_{RM}	5	5	5	7	7	7	V
			Current Reduction Rate Above 25°C	ΔI_F	0.42	0.42	0.42	0.40	0.40	0.40	mA/°C
Ambient Temperature Range			-25° ~ +50°C			-25° ~ +50°C					

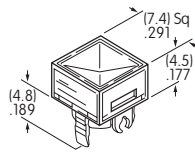
CAP TYPES & COLORS

Colored Cap for Bright LEDs

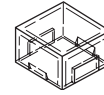
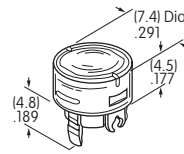
Lens/Diffuser
Colors Available:

- CB** Red/White
- DB** Amber/White
- FB** Green/White

AT4168
Square



AT4169
Round



Transparent Colored Lens



Translucent White Diffuser



Colored LED AT633

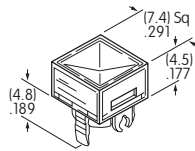
Material: Polycarbonate Finish: Glossy

White Cap for Bright & Super Bright LEDs

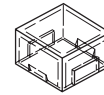
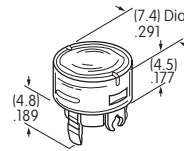
JB Clear Lens/
White Diffuser

Material: Polycarbonate
Finish: Glossy

AT4033
Square



AT4034
Round



Transparent Clear Lens

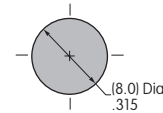
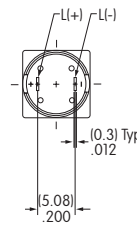
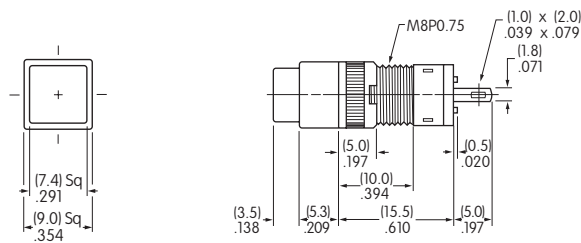


Translucent White Diffuser



Colored LEDs AT624, AT629, AT630, or AT633

TYPICAL INDICATOR DIMENSIONS

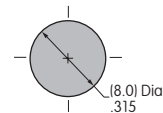
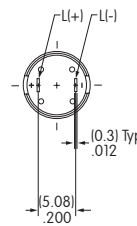
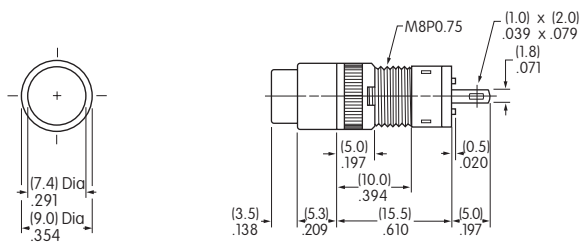


Recommended Panel Thickness: .020" ~ .197" (0.5 ~ 5.0mm)

Square



HB01KW01-5C-CB



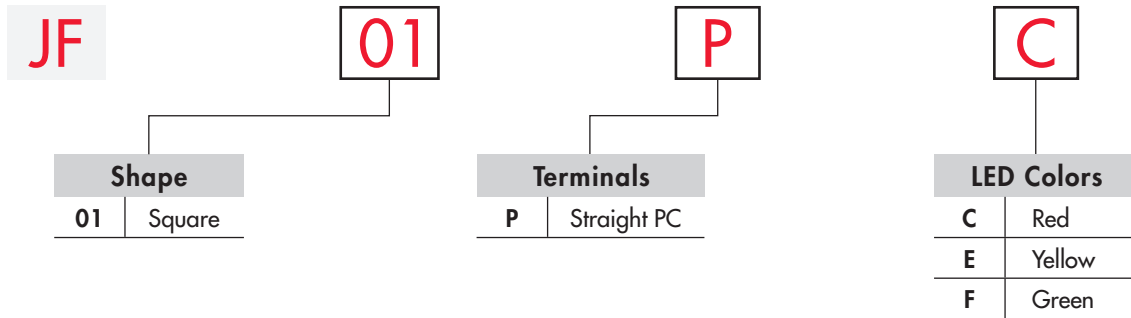
Recommended Panel Thickness: .020" ~ .197" (0.5 ~ 5.0mm)

Round



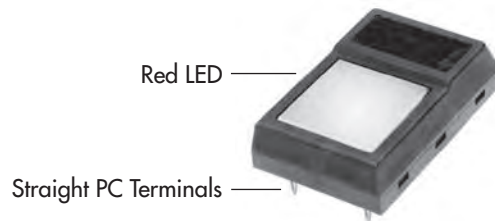
HB02KW01-5C-CB

TYPICAL INDICATOR ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

JF01PC



LED COLORS & SPECIFICATIONS

LED is an integral part of the indicator and not available separately.

LED polarity markings are on the bottom of the indicator.

The electrical specifications shown are determined at a basic temperature of 25°C. If the source voltage exceeds the rated voltage, a ballast resistor is required.

The resistor value can be calculated by using the formula in the Supplement section.

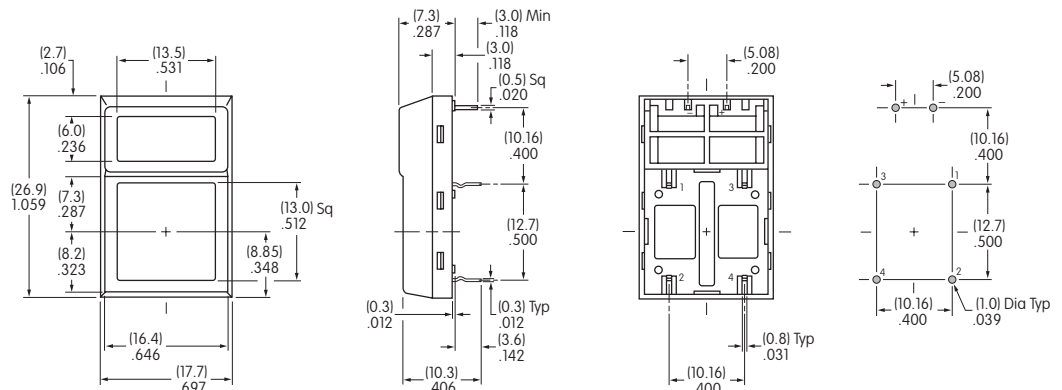
		C	E	F
	Color	Red	Yellow	Green
Maximum Forward Current	I_{FM}	30mA	30mA	30mA
Typical Forward Current	I_F	20mA	20mA	20mA
Forward Voltage	V_F	1.77V	2.1V	2.3V
Maximum Reverse Voltage	V_{RM}	4V	4V	4V
Current Reduction Rate Above 25°C	ΔI_F	0.4mA/°C	0.4mA/°C	0.4mA/°C
Ambient Temperature Range		-25° ~ +70°C		

TYPICAL INDICATOR DIMENSIONS

Square



JF01PC



TYPICAL INDICATOR ORDERING EXAMPLE

KB **02** **K** **W01** — **12** — **FF**

Shapes

Bushing Mounting

01	Square
02	Round
03	Rectangular

Snap-in Mounting

04	Square
05	Round
06	Rectangular

Housing

K	Black only
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Terminals

W01	Silver Solder Lug
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Lamps

Incandescent Lamp Used with Solid Cap

05	5-volt
12	12-volt

Incandescent or Neon Lamp Used with Insert Cap

05	5-volt
12	12-volt
01	110-volt Neon

Bright LED Used with Cap for LED

Colors	Resistor
5C Red	No Code No Resistor
5D Amber	05 5-volt
	12 12-volt
5F Green	24 24-volt

Super Bright LED Used with Cap for LED

6B	White
6F	Green
6G	Blue

Cap Types & Colors

Solid Cap: Lens/Filter Colors

BB	White/White	FB	Green/White
CB	Red/White	FF	Green/Green
CC	Red/Red	GB	Blue/White
EB	Yellow/White	GG	Blue/Blue

Insert Cap: Lens/Filter Colors

JB	Clear/White
JC	Clear/Red
JE	Clear/Yellow
*JF	Clear/Green
*JG	Clear/Blue

* JF & JG not suitable with neon.

LED Cap: Lens/Diffuser Colors

AB	Square Spot Illuminated Black Cap/White Window
JB	Clear/White
JC	Clear/Red
JD	Clear/Amber
JF	Clear/Green

LED Cap: Lens/Diffuser Colors

JB	Clear/White
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DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

KB02KW01-12-FF

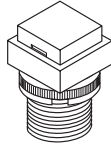


- 12-volt Incandescent Lamp Solid Cap with Green Lens and Green Filter
- Black Housing Round with Bushing Mounting
- Silver Solder Lug Terminals

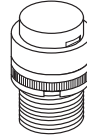
SHAPES & MOUNTING TYPES

Bushing Mounting

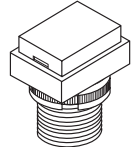
01 .551" (14mm)
Square



02 .551" (14mm)
Round

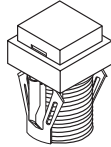


03 .551" x .728" (14mm x 18.5mm)
Rectangular

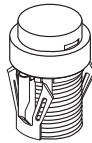


Snap-in Mounting

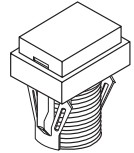
04 .551" (14mm)
Square



05 .551" (14mm)
Round



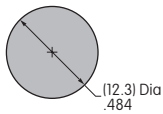
06 .551" x .728" (14mm x 18.5mm)
Rectangular



The bezel is an integral part of the indicator body.

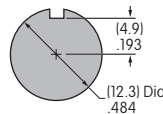
Bushing Mounting

Without
Keyway



Panel Thickness:
.020" ~ .315"
(0.5 ~ 8mm)

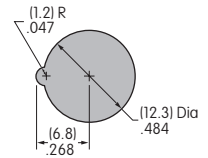
Panel Cutouts



With
Keyway

Snap-in Mounting

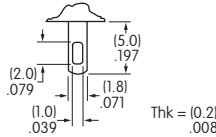
Panel Thickness:
.039" ~ .138"
(1.0 ~ 3.5mm)



TERMINALS

W01

Silver Solder Lug



LAMP COLORS & SPECIFICATIONS

The electrical specifications shown are determined at a basic temperature of 25°C.
If the source voltage exceeds the rated voltage, a ballast resistor is required.
The ballast resistor calculation and more lamp detail are shown in the Supplement section.

Incandescent & Neon Lamps

AT611 Incandescent	AT615 Neon		05	12	01	Recommended Resistors for Neon: 33K ohms for 110V AC; 100K ohms for 220V AC
			Voltage	V	5V AC	
Current	I	115mA	60mA	1.5mA		
Endurance	Hours	7,000 average		10,000		

Bright LED without Resistor

AT635	Color Codes	Red	Amber	Green	No Code No Resistor	
		5C	5D	5F		
LEDs are colored in OFF state.	Maximum Forward Current	I_{FM}			30mA	
	Typical Forward Current	I_F			20mA	
	Forward Voltage	V_F			1.9V	
	Maximum Reverse Voltage	V_{RM}			5V	
	Current Reduction Rate Above 25°C	ΔI_F			0.42mA/°C	
	Ambient Temperature Range	-25° ~ +50°C				




T-1 1/2 Bi-pin

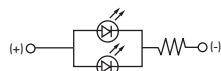
LAMP COLORS & SPECIFICATIONS

The electrical specifications shown are determined at a basic temperature of 25°C.
 If the source voltage exceeds the rated voltage, a ballast resistor is required.
 The ballast resistor calculation and more lamp detail are shown in the Supplement section.

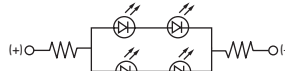
Bright LED with Resistor

AT634 LEDs are colored in OFF state.  T-1 1/4 Bi-pin	Color Codes: <table border="1" style="display: inline-table; margin: 0 10px;"> <tr><td>Red</td></tr> <tr><td>5C</td></tr> </table> <table border="1" style="display: inline-table; margin: 0 10px;"> <tr><td>Amber</td></tr> <tr><td>5D</td></tr> </table> <table border="1" style="display: inline-table; margin: 0 10px;"> <tr><td>Green</td></tr> <tr><td>5F</td></tr> </table>	Red	5C	Amber	5D	Green	5F	Resistor Codes <table border="1" style="display: inline-table; margin: 0 10px;"> <tr><td>05</td></tr> </table> <table border="1" style="display: inline-table; margin: 0 10px;"> <tr><td>12</td></tr> </table> <table border="1" style="display: inline-table; margin: 0 10px;"> <tr><td>24</td></tr> </table>			05	12	24
	Red												
	5C												
	Amber												
	5D												
	Green												
	5F												
	05												
12													
24													
Maximum Forward Current	I_{FM}	—	—	—									
Typical Forward Current	I_F	25mA	20mA	10mA									
Forward Voltage	V_F	5V	12V	24V									
Maximum Reverse Voltage	V_{RM}	4V	8V	16V									
Current Reduction Rate Above 25°C	ΔI_F	—	—	—									
Ambient Temperature Range		-25° ~ +50°C											

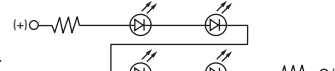
AT634
5-volt
2-element
with 1 Resistor





AT634
12-volt
4-element
with 2 Resistors



AT634
24-volt
4-element
with 2 Resistors



Super Bright Single Element LED

AT625G Blue AT631B White AT632F Green  T-1 Bi-pin		6B	6F	6G	
	Color	White	Green	Blue	
	Maximum Forward Current	I_{FM}	30mA	30mA	30mA
	Typical Forward Current	I_F	20mA	20mA	20mA
	Forward Voltage	V_F	3.3V	3.3V	3.3V
	Maximum Reverse Voltage	V_{RM}	7V	7V	7V
	Current Reduction Rate Above 25°C	ΔI_F	0.40mA/°C	0.40mA/°C	0.40mA/°C
	Ambient Temperature Range		-25° ~ +50°C		

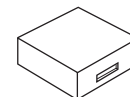
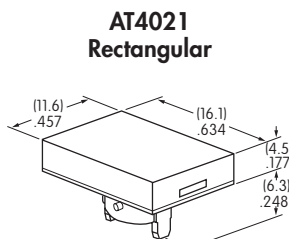
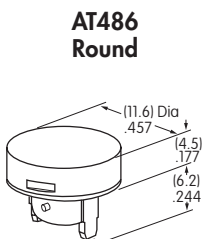
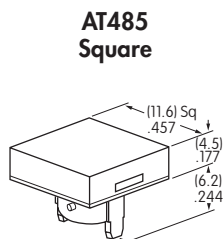
CAP TYPES & COLOR COMBINATIONS

Color Codes: **B** White **C** Red **E** Yellow **F** Green **G** Blue **J** Clear

Solid Cap for Incandescent Lamp

Lens/Filter Colors Available:

- | | |
|-----------|-----------|
| BB | FB |
| CB | FF |
| CC | GB |
| EB | GG |



Translucent Colored Lens



Translucent Colored Filter



Lamp AT611

Material: Polycarbonate Finish: Glossy

Toggles
 Rockers
 Pushbuttons
 Illuminated PB
 Programmable
 Key locks
 Rotaries
 Slides
 Tactiles
 Tilt
 Touch
 Accessories
 Supplement

CAP TYPES & COLOR COMBINATIONS

Color Codes: A Black B White C Red D Amber E Yellow F Green G Blue J Clear

Insert Cap for Incandescent or Neon Lamp

Lens/Filter Colors Available:

JB

AT487
Square

AT488
Round

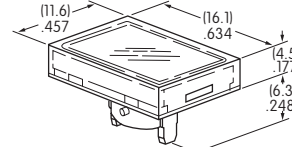
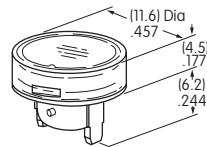
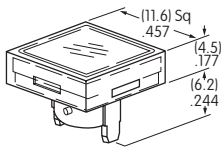
AT4022
Rectangular



Transparent Clear Lens

JC

JE



Translucent Colored Filter

JF

JG



JF and JG not suitable with neon lamp.

Material: Polycarbonate Finish: Glossy

Lamp AT611 Lamp AT615

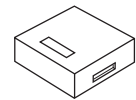
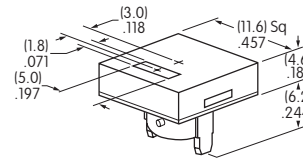
Spot Illuminated Cap for Bright LED without Resistor or with Resistor

Cap/Window Colors Available:

AB

Opaque Black Cap with Translucent White Window for Spot Illumination

AT4051
Square



Bright LED AT635

Bright LED AT634

Material: Polycarbonate Finish: Matte

Cap for Bright LED without Resistor or LED with Resistor

Lens/Diffuser Colors Available: (AT4133, 4132, 4134 white diffusers; AT4158, 4160, 4159 colored diffusers)

JB

AT4133

AT4132

AT4134



Transparent Clear Lens

Square

Round

Rectangular

JC

AT4158

AT4160

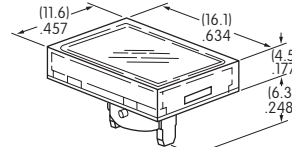
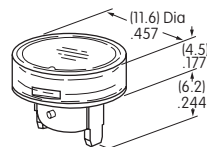
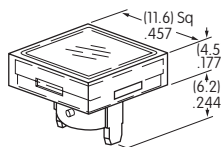
AT4159



Translucent Diffuser

JD

JF



Bright LED AT635

Bright LED AT634

Material: Polycarbonate Finish: Glossy

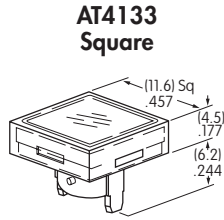
CAP TYPES & COLOR COMBINATIONS

Cap for Super Bright LED

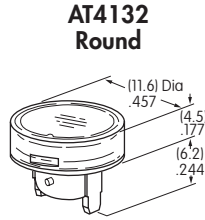
Lens/Diffuser
Colors Available:



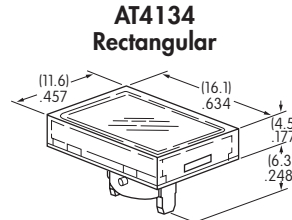
Clear Lens
White Diffuser



AT4133 Square



AT4132 Round



AT4134 Rectangular



Translucent Clear Lens



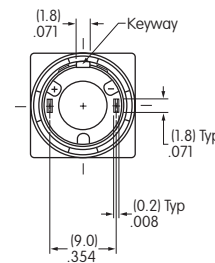
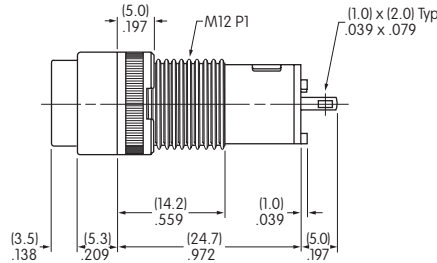
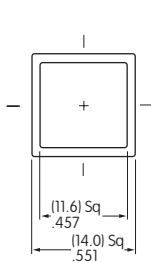
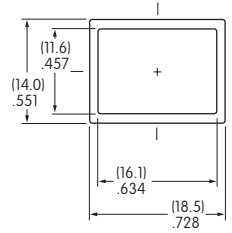
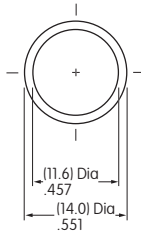
Translucent White Diffuser



Super Bright LEDs
AT625, AT631, AT632

Material: Polycarbonate Finish: Glossy

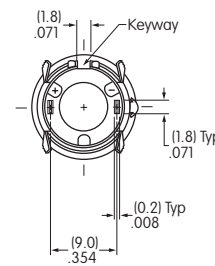
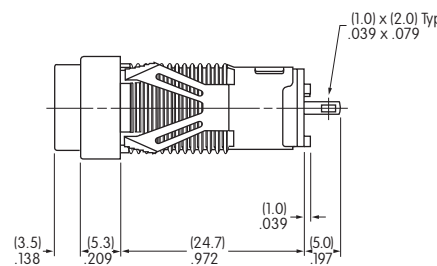
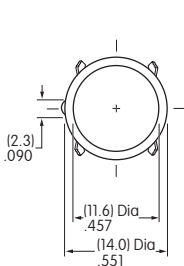
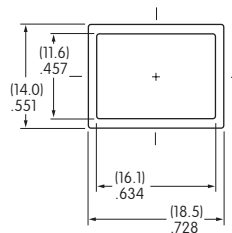
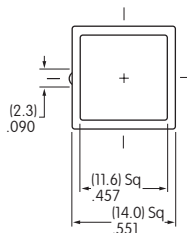
TYPICAL INDICATOR DIMENSIONS



Bushing Mount



KB01KW01-05-GG



Snap-in Mount



KB05KW01-05-FF

TYPICAL INDICATOR ORDERING EXAMPLE

LB 01 G W01 — 5C12 — JC

Shapes	
01	Square
02	Round
03	Rectangular

Housing	
K	Black
G	Gray

Terminals	
W01	Silver Solder Lug/ Quick Connect Terminals

Lamps			
Incandescent Lamp Used with Solid Cap			
05	5-volt		
12	12-volt		
Incandescent or Neon Used with Insert Cap			
01	110-volt Neon		
05	5-volt Incandescent		
12	12-volt Incandescent		

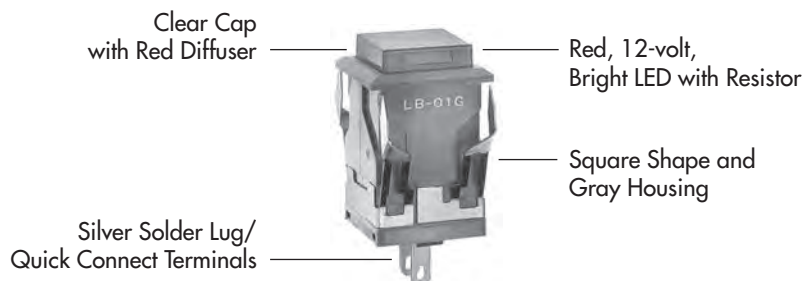
Bright LED Used with LED Cap			
Colors		Resistor	
5C	Red	No Code	No Resistor
5D	Amber	05	5-volt
		12	12-volt
5F	Green	24	24-volt

Super Bright LED Used with LED Cap	
6B	White
6F	Green
6G	Blue

Cap Types & Colors	
Solid Cap: Lens/Filter Colors	
BJ	White/Clear
CJ	Red/Clear
EJ	Yellow/Clear
FJ	Green/Clear
GJ	Blue/Clear
Insert Cap: Lens/Filter Colors	
JB	Clear/White
JC	Clear/Red
JE	Clear/Yellow
*JF	Clear/Green
*JG	Clear/Blue
*JF & JG not suitable with neon.	
LED Cap: Lens/Diffuser Colors	
JB	Clear/White
JC	Clear/Red
JD	Clear/Amber
JF	Clear/Green
LED Cap: Lens/Diffuser Colors	
JB	Clear/White

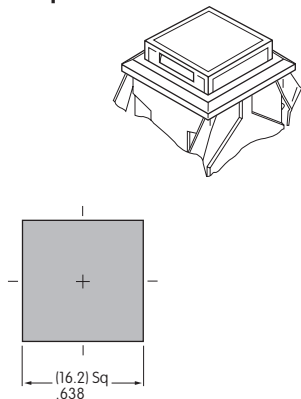
DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

LB01GW01-5C12-JC

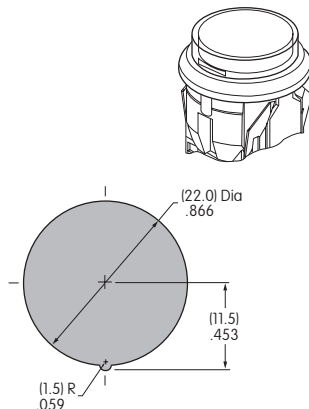


SHAPES & PANEL CUTOUTS

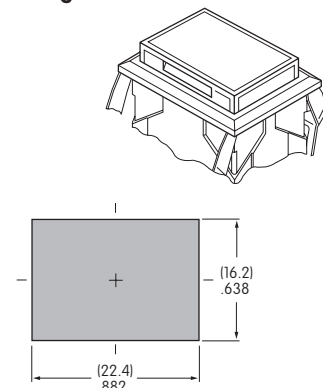
01 .622" (15.8mm)
Square



02 .854" (21.7mm)
Round



03 .622" x .866" (15.8mm x 22.0mm)
Rectangular



Panel Thickness: .039" ~ .157" (1.0 ~ 4.0mm)

HOUSING

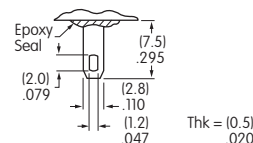
Housing Colors Available:

K Black

G Gray


TERMINALS

W01 Silver Solder Lug/.110" (2.8mm) Quick Connect




LAMP CODES & SPECIFICATIONS

Incandescent Lamp for Solid Colored and Colored Insert Caps

AT607  T-1 Bi-pin		05	12	
	Voltage	V	5V AC	12V AC
	Current	I	115mA	60mA
	Endurance	Hours	10,000 average	
	Ambient Temp. Range		-25°C ~ +50°C	

Neon Lamp for Colored Insert Cap


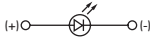
AT607N  T-1 Bi-pin		01	
	Voltage	V	110V AC
	Current	I	1.5mA
	Endurance	Hours	10,000 average
	Ambient Temp. Range		-25°C ~ +50°C
Recommended Resistors: 33K ohms for 110V AC; 100K ohms for 220V AC			

The electrical specifications shown are determined at a basic temperature of 25°C.


LED COLORS & SPECIFICATIONS

The electrical specifications shown are determined at a basic temperature of 25°C. Polarity marks are on the device.
 If the source voltage exceeds the rated voltage, a ballast resistor is required.
 The resistor value can be calculated by using the formula in the Supplement section.
 Additional lamp detail is shown in the Accessories & Hardware section.

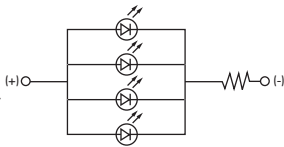
Bright LED without Resistor

AT635 LEDs are colored in OFF state.   T-1 1/2 Bi-pin	Color Codes	Red 5C	Amber 5D	Green 5F	No Code No Resistor		
	Maximum Forward Current			I_{FM}	30mA	30mA	30mA
	Typical Forward Current			I_F	20mA	20mA	20mA
	Forward Voltage			V_F	1.9V	2.0V	2.1V
	Maximum Reverse Voltage			V_{RM}	5V	5V	5V
	Current Reduction Rate Above 25°C			ΔI_F	0.42mA/°C	0.42mA/°C	0.42mA/°C
	Ambient Temperature Range				-25° ~ +50°C		

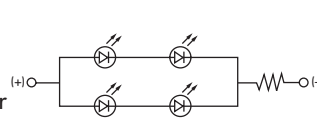
Bright LED with Resistor

AT627 with Resistor  T-1 Bi-pin	Color Codes:	Red 5C	Amber 5D	Green 5F	Resistor Codes		
					05	12	24
	Maximum Forward Current			I_{FM}	—	—	—
	Typical Forward Current			I_F	52mA	26mA	13mA
	Forward Voltage			V_F	5V	12V	24V
	Maximum Reverse Voltage			V_{RM}	4V	8V	16V
	Current Reduction Rate Above 25°C			ΔI_F	0.50mA/°C		
Ambient Temperature Range				-25° ~ +50°C			

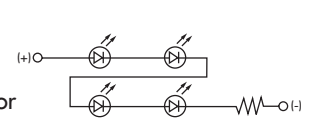
AT627
5-volt
4-element
with Resistor






AT627
12-volt
4-element
with Resistor



AT627
24-volt
4-element
with Resistor



Super Bright Single Element LED

AT625G Blue AT631B White AT632F Green   T-1 Bi-pin				Color	White	Green	Blue
				6B	6F	6G	
	Maximum Forward Current		I_{FM}	30mA	30mA	30mA	
	Typical Forward Current		I_F	20mA	20mA	20mA	
	Forward Voltage		V_F	3.3V	3.3V	3.3V	
	Maximum Reverse Voltage		V_{RM}	7V	7V	7V	
	Current Reduction Rate Above 25°C		ΔI_F	0.40mA/°C	0.40mA/°C	0.40mA/°C	
Ambient Temperature Range			-25° ~ +50°C				

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

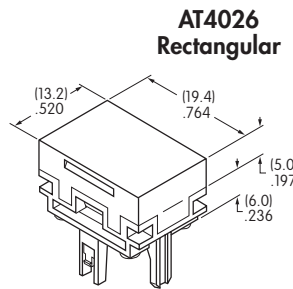
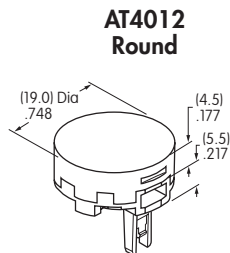
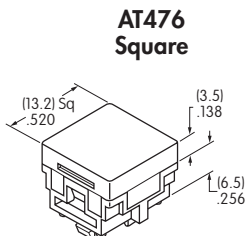
CAP TYPES & COLOR COMBINATIONS

Color Codes: B White C Red D Amber E Yellow F Green G Blue J Clear

Solid Cap for Incandescent Lamp

Lens/Filter Colors Available:

- BJ** **FJ**
- CJ** **GJ**
- EJ**



Translucent Colored Lens



Transparent Clear Filter



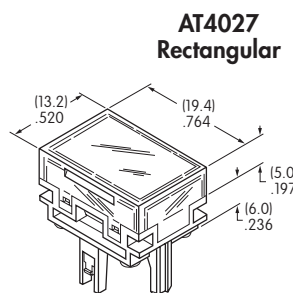
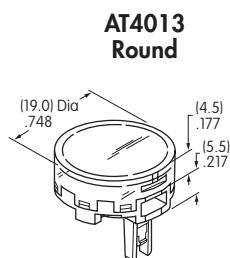
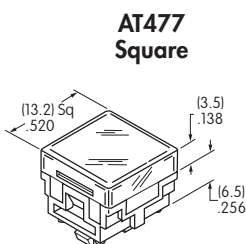
Lamp AT607

Material: Polycarbonate Finish: Glossy

Insert Cap for Incandescent or Neon Lamp

Lens/Filter Colors Available:

- JB** **JF**
- JC** **JG**
- JE**



Transparent Clear Lens



Translucent Colored Filter



Lamp AT607 or 607N

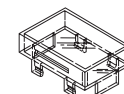
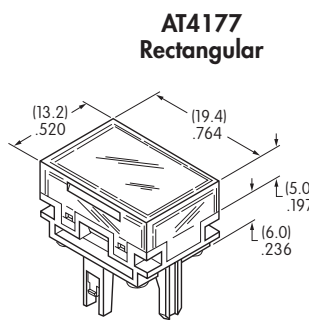
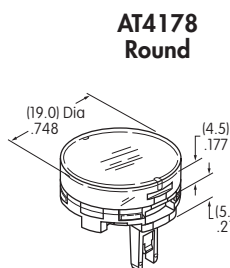
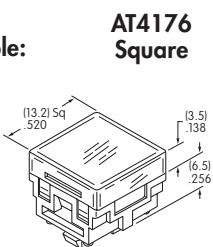
Material: Polycarbonate Finish: Glossy

JF and JG not suitable with neon lamp.

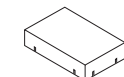
Cap for Bright LED without Resistor

Lens/Diffuser Colors Available:

- JB**
- JC**
- JD**
- JF**



Transparent Clear Lens



Translucent Colored Diffuser



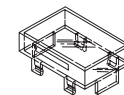
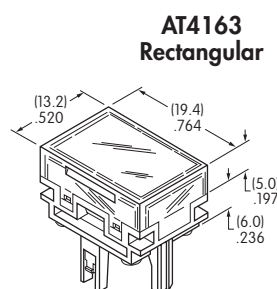
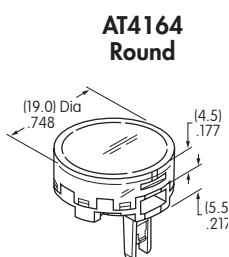
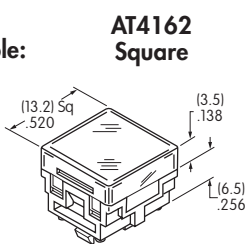
Bright LED AT635

Material: Polycarbonate Finish: Glossy

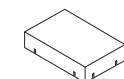
Cap for Bright LED with Resistor

Lens/Diffuser Colors Available:

- JB**
- JC**
- JD**
- JF**



Transparent Clear Lens



Translucent Colored Diffuser



Bright LED AT627

Material: Polycarbonate Finish: Glossy

Toggle
Rockers
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

CAP TYPES & COLOR COMBINATIONS

Cap for Super Bright LEDs

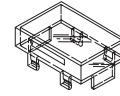


**Clear Lens
White Diffuser**

**AT4129
Square**

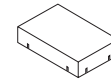
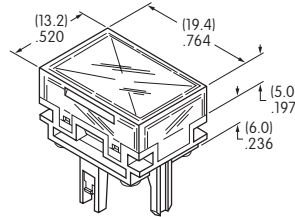
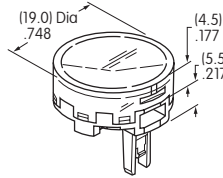
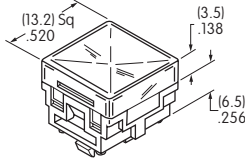
**AT4128
Round**

**AT4130
Rectangular**



Transparent
Clear Lens

Material:
Polycarbonate
Finish: Glossy



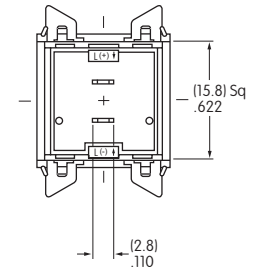
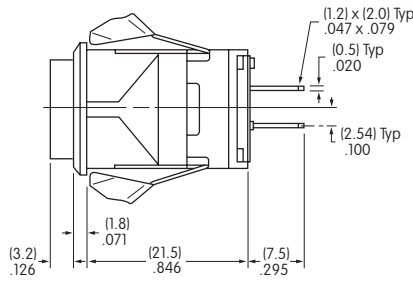
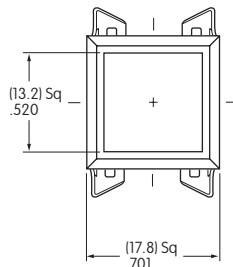
Translucent
White Diffuser



LEDs AT625
AT631 AT632

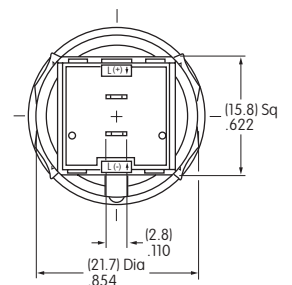
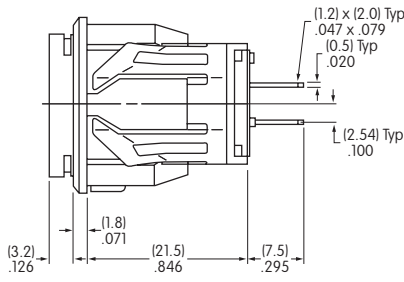
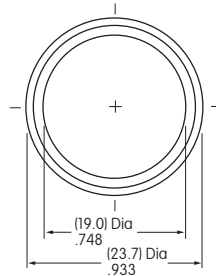
TYPICAL INDICATOR DIMENSIONS

Square



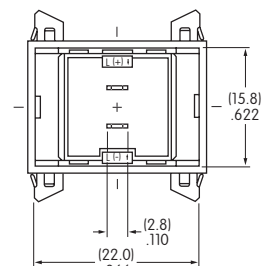
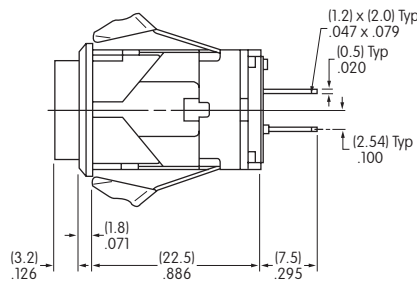
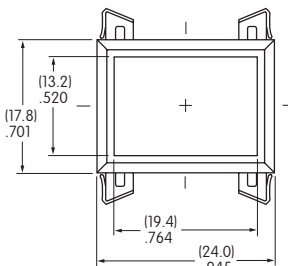
LB01KW01-12-CJ

Round



LB02KW01-12-CJ

Rectangular



LB03KW01-12-CJ

TYPICAL INDICATOR ORDERING EXAMPLE

P01

12

C

1

A

Lamps	
Incandescent	
06	6-volt
12	12-volt
18	18-volt
24	24-volt
28	28-volt
Neon	
N	110-volt

Cap Colors	
B	White
C	Red
D	Orange
E	Yellow
*F	Green
*G	Blue

*F & G not suitable with neon.

Bezels	
1	.787" (20.0mm) Wide
2	.937" (23.8mm) Wide

Bezel Colors	
A	Black
B	White
C	Red
D	Orange
E	Yellow
F	Green
G	Blue
H	Gray

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

P01-12-C-1A



LAMP CODES & SPECIFICATIONS

Incandescent & Neon Lamps for Solid & Design Caps

AT602 Incandescent	AT602N Neon		06	12	18	24	28	N	
		Voltage	6V	12V	18V	24V	28V	110V	
		Current	80mA	50mA	35mA	25mA	22mA	1.5mA	
		MSCP	.159	.215	.398	.215	.247	NA	
		Endurance	2,000 Average					15,000 Avg.	
		Ambient Temperature Range	-10° ~ +50°C						
T- 1 1/2 Pilot Slide Base		Recommended Resistor for Neon: 33K ohms for 110V AC & 100K ohms for 220V AC							

Electrical specifications are determined at a basic temperature of 25°C.

For dimension drawings of lamps, see Accessories & Hardware Index.

If the source voltage is greater than rated voltage, a ballast resistor is required.

The ballast resistor calculation and more lamp detail are shown in the Supplement section.

CAP COLORS

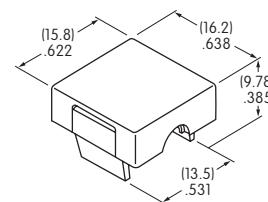
B White	D Orange	F Green
C Red	E Yellow	G Blue

Material: Polycarbonate

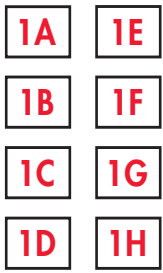
Finish: Glossy

F & G not suitable for neon

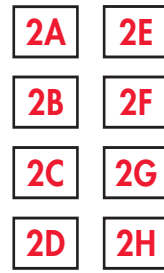
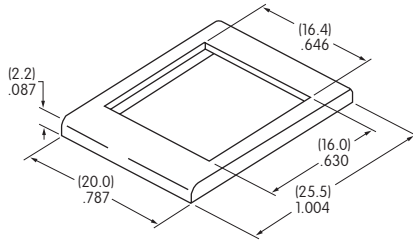
AT429



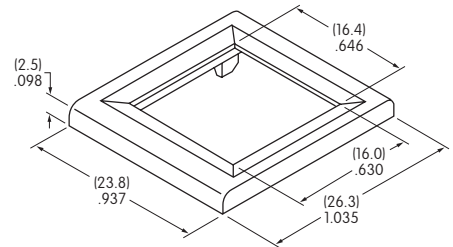
OPTIONAL BEZELS & COLORS



AT204
.787" (20.0mm) Wide Bezel



AT9201
.937" (23.8mm) Wide Bezel

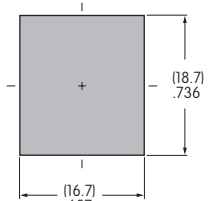
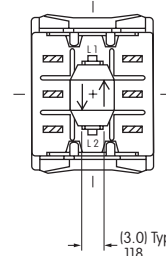
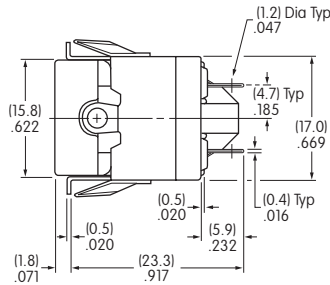
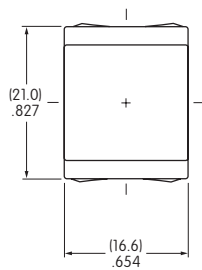


Material: Polycarbonate Standard Finish: Glossy

Color Codes: A Black B White C Red D Orange E Yellow F Green G Blue H Gray

TYPICAL INDICATOR DIMENSIONS

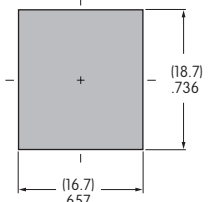
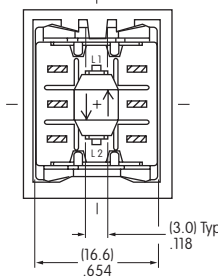
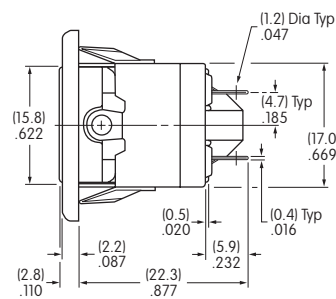
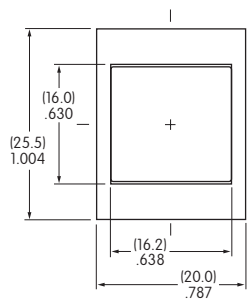
Without Bezel



Panel Thickness:
 .039" ~ .157"
 (1.0mm ~ 4.0mm)

P01-12-C

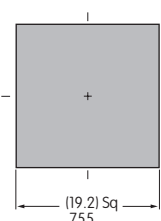
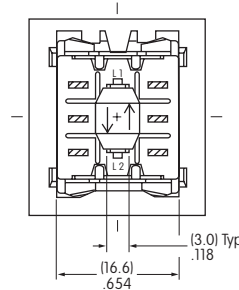
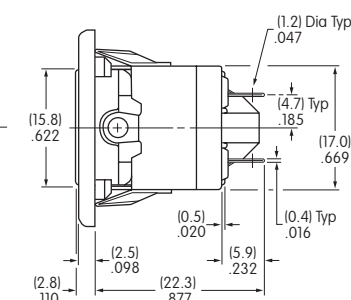
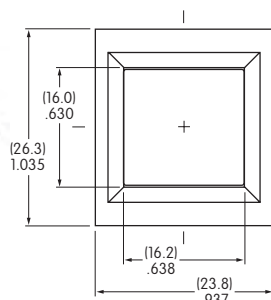
With Bezel



Panel Thickness:
 .039" ~ .157"
 (1.0mm ~ 4.0mm)

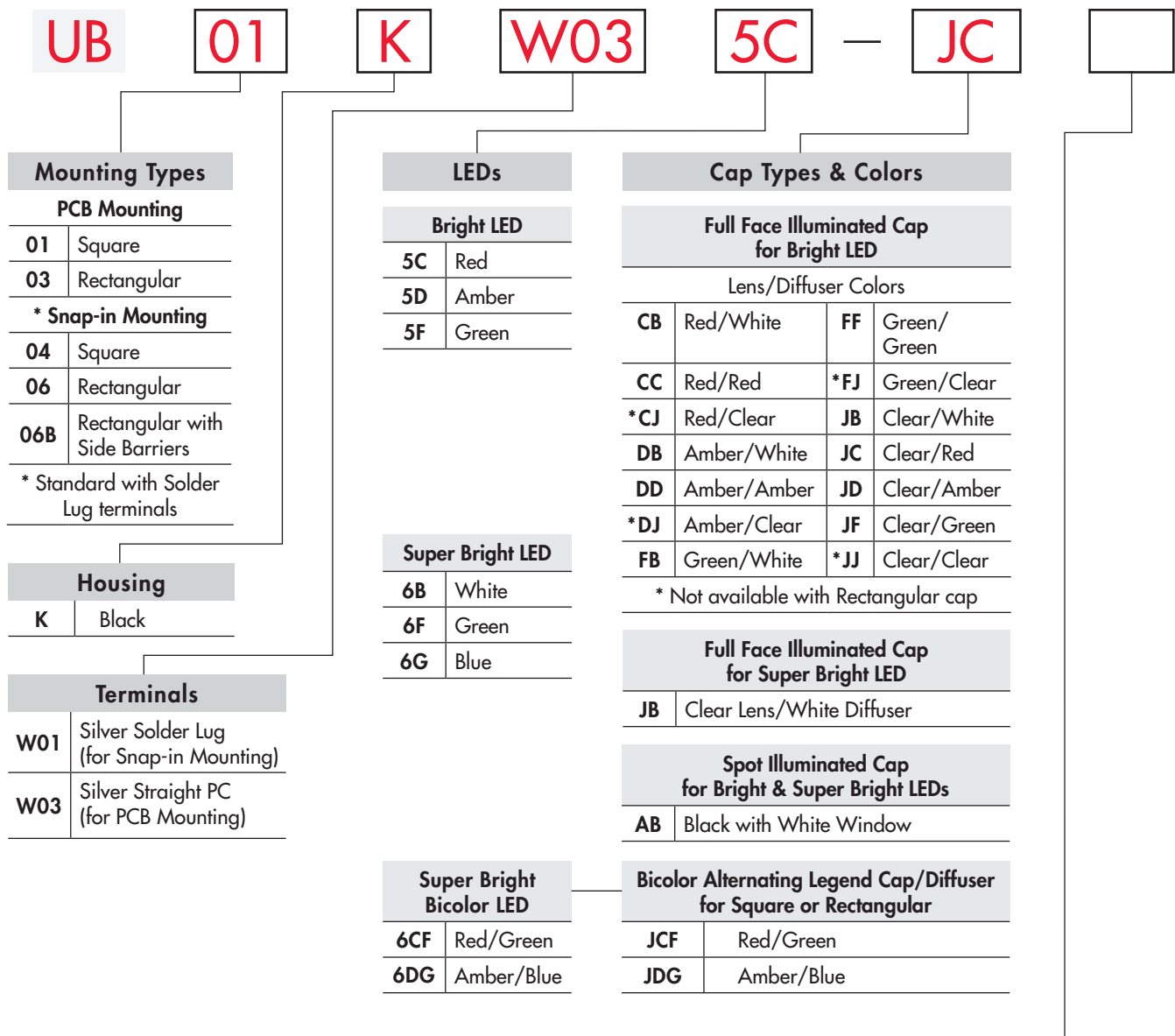
P01-12-C-1A

With Large Bezel



Panel Thickness:
 .039" ~ .157"
 (1.0mm ~ 4.0mm)

P01-12-C-2A



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.

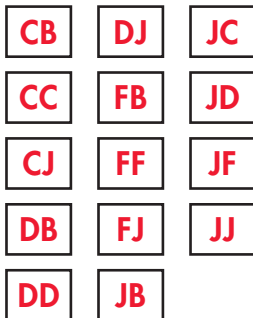
	Super Bright LEDs are Electrostatic Sensitive	Bright			Super Bright			Unit	
		5C	5D	5F	6B	6F	6G		
		Color	Red	Amber	Green	White	Green	Blue	
Maximum Forward Current	I_{FM}		30	30	25	30	30	30	mA
Typical Forward Current	I_F		20	20	20	20	20	20	mA
Forward Voltage	V_F		1.85	2.0	2.1	3.2	3.2	3.2	V
Maximum Reverse 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

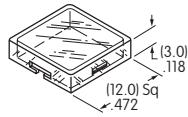
Full Face Illuminated Cap for Bright LED

Lens/Diffuser

Colors Available for Square Cap:



AT4074
Lens

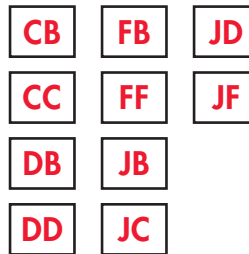


AT4075
Diffuser

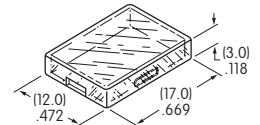


Lens/Diffuser

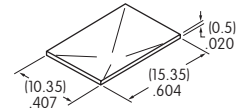
Colors Available for Rectangular Cap:



AT4117
Lens



AT4118
Diffuser

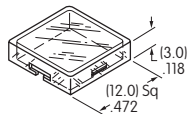


Lens & Diffuser Material: Polycarbonate Lens Finish: Glossy Diffuser Finish: Textured

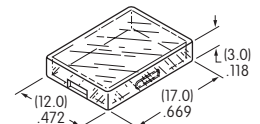
Full Face Illuminated Caps for Super Bright Bicolor LED



AT4074 Square Lens



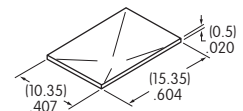
AT4117 Rectangular Lens



AT4188 Square Diffuser



AT4189 Rectangular Diffuser



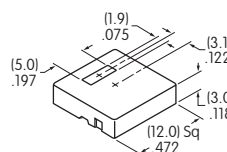
Lens & Diffuser Material: Polycarbonate Lens Finish: Glossy Diffuser Finish: Textured

Spot Illuminated Caps

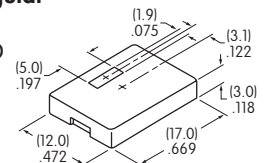
AB Black Cap with Translucent White Window for LED Display

Material: Polycarbonate
Finish: Matte

AT4119 Square for Bright and Super Bright LED



AT4120 Rectangular for Bright and Super Bright LED



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

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

SUPER BRIGHT BICOLOR LEDs FOR ALTERNATING LEGENDS

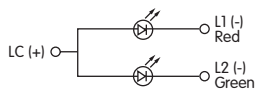
The electrical specifications shown are determined at a basic temperature of 25°C. LED circuit is isolated and requires external power source. Polarity marks are on bottom of switch. If the source voltage exceeds the rated voltage, a ballast resistor is required. Resistor value can be calculated by using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

Electrical Specifications for Super Bright Bicolor LEDs

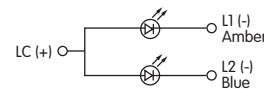
Super Bright LEDs are Electrostatic Sensitive	ATTENTION ELECTROSTATIC SENSITIVE DEVICES	6CF		6DG		Unit
		Red	Green	Amber	Blue	
Maximum Forward Current	I_{FM}	* 30	* 30	* 30	* 30	mA
Typical Forward Current	I_F	20	20	20	20	mA
Forward Voltage	V_F	2.3	3.2	2.1	3.0	V
Maximum Reverse Voltage	V_{RM}	4	4	4	4	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



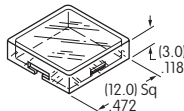
Super Bright Bicolor Amber/Blue LED with 2 elements



Alternating Legend Caps for Super Bright Bicolor LED

JCF JDG

AT4074 12.0mm Square Flat Cap



AT9450 Square Legend Insert

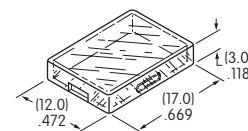


AT4188 Square Diffuser



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

11



Green/Red or Blue/Amber

12



Green/Red or Blue/Amber

13



Green/Red or Blue/Amber

14



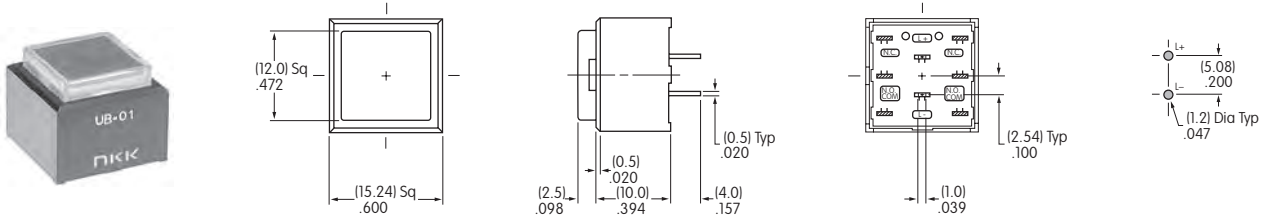
Green/Red or Blue/Amber

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.

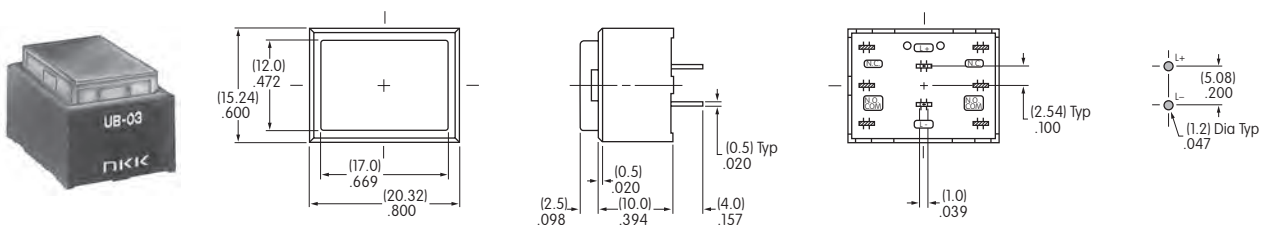
TYPICAL INDICATOR DIMENSIONS

Square • PCB Mount



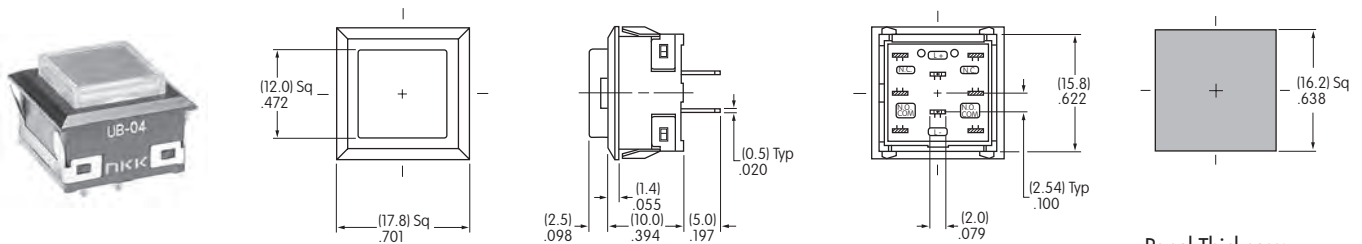
UB01KW035C-JC

Rectangular • PCB Mount



UB03KW035F-FF

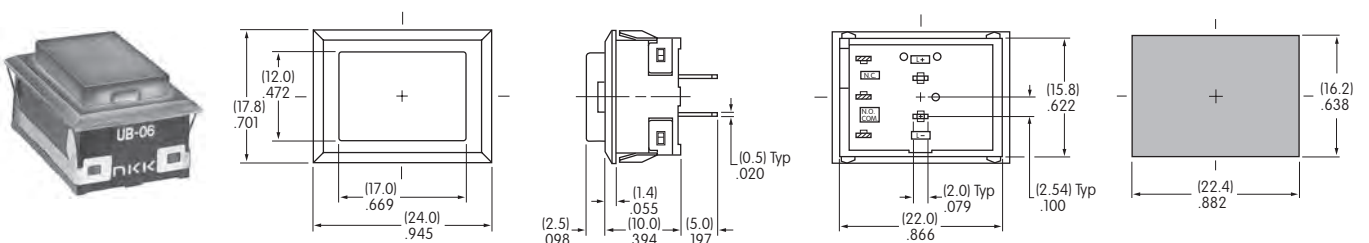
Square • Snap-in Mount • Built-in Bezel



UB04KW015C-JC

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

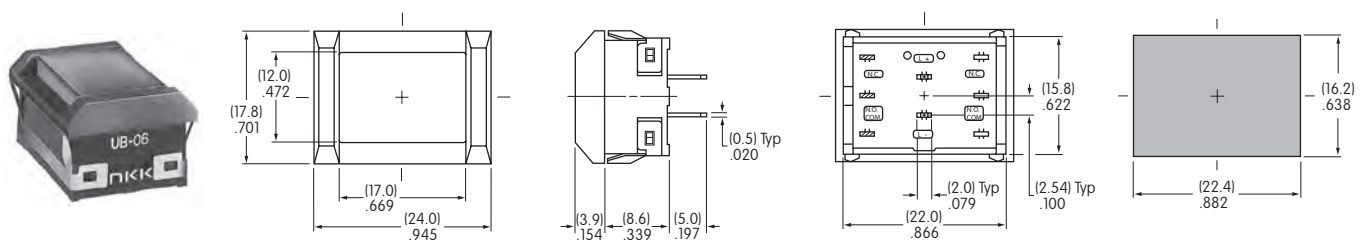
Rectangular • Snap-in Mount • Built-in Bezel



UB06KW015D-DD

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

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

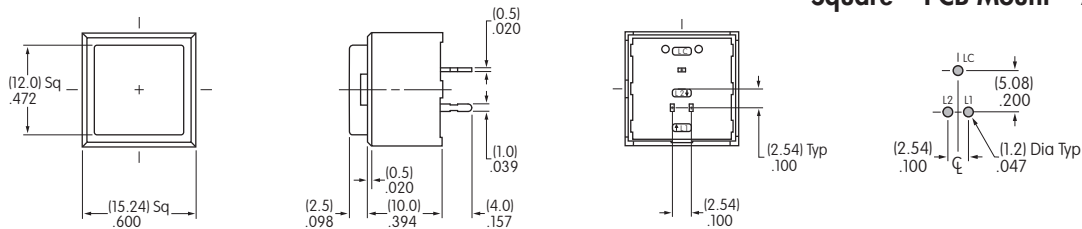


UB06BKW015F-FF

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

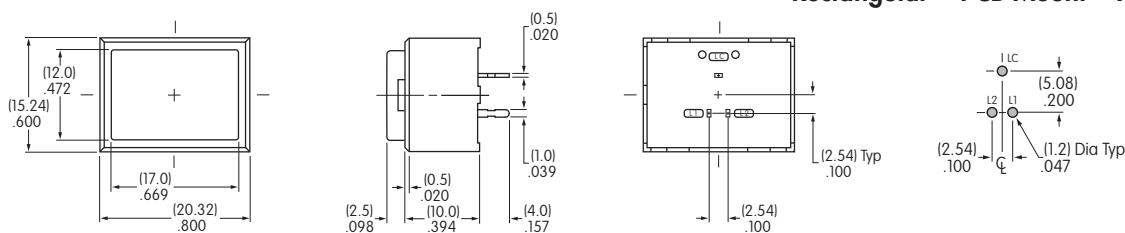
TYPICAL INDICATOR DIMENSIONS

Square • PCB Mount • Alternating Legends



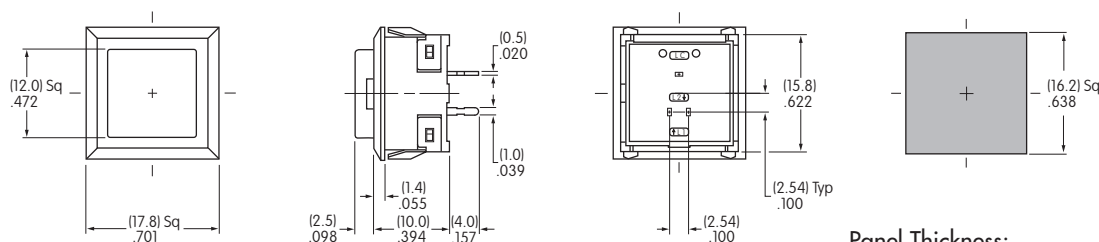
UB01KW036DG-JDG11

Rectangular • PCB Mount • Alternating Legends



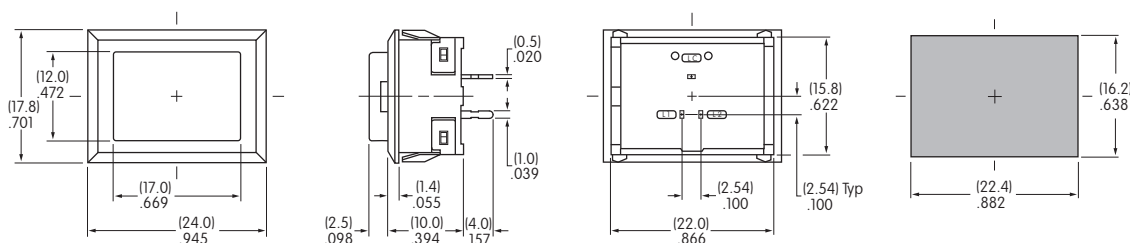
UB03KW016DG-JDG11

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



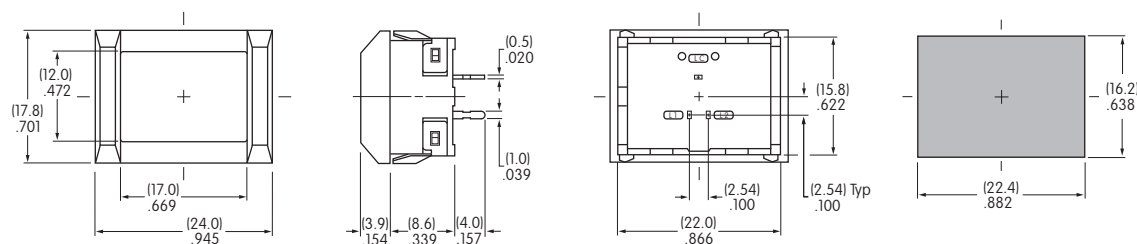
Panel Thickness: (1.0 ~ 3.2mm) .039 ~ .126" UB04KW016DG-JDG11

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

TYPICAL INDICATOR ORDERING EXAMPLE

UB2

01

K

W03

6CF

1JB



Mounting Types

PCB Mounting

01 Square

Snap-in Mounting

04 Square

Housing

K Black

Terminals

W03 Silver PC/Turret

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

Sculptured Cap Lens/Diffuser Colors

1JB Clear/White

1JC Clear/Red

1JD Clear/Amber

1JF Clear/Green

Beveled Cap & Colors

2B White

2C Red

2D Amber

2F Green

Flat Cap Lens/Diffuser Colors

3JB Clear/White

3JC Clear/Red

3JD Clear/Amber

3JF Clear/Green

Sculptured Cap Lens/Diffuser Color

1JB Clear/White

Beveled Cap & Color

2B White

Flat Cap Lens/Diffuser Color

3JB Clear/White

Sculptured Cap Lens/Diffuser Color

1JB Clear/White

Beveled Cap & Color

2B White

Flat Cap Lens/Diffuser Color

3JB Clear/White

Sculptured Cap with Alternating Legend

4JCF Clear; Red/Green

4JDG Clear; Amber/Blue

Flat Cap with Alternating Legend

5JCF Clear; Red/Green

5JDG Clear; Amber/Blue

Alternating Legends

11 ON (pos) OFF (pos)

12 ON (neg) OFF (neg)

13 START STOP

14 OPEN CLOSE

See Part Numbers Table on Next Page

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

UB201KW036CF-1JB

Sculptured Cap with Clear Lens, White Diffuser

Red/Green Super Bright Bicolor LED

Square with PCB Mounting



Black Housing

Silver PC/Turret Terminals

Toggle

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

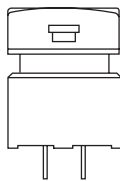
Part Numbers for Alternating Legends		
Color	15mm Square Sculptured Cap	15mm Square Flat Cap
	Part Number	Part Number
Red/Green	AT3069JCF11 ~ AT3069JCF14	AT3070JCF11 ~ AT3070JCF14
Amber/Blue	AT3069JDG11 ~ AT3069JDG14	AT3070JDG11 ~ AT3070JDG14

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

MOUNTING TYPES, SHAPES, & TERMINALS

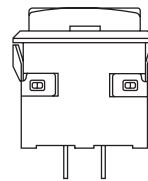
01 PCB Mounting

Square



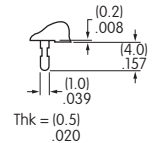
04 Snap-in Mounting

Square with Built-in Bezel



W03 Terminals


Silver PC/Turret

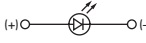


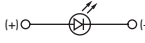
Panel Thickness: .039 ~ .126" (1.0 ~ 3.2mm)

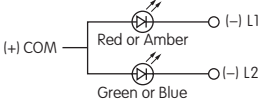
LED COLORS & SPECIFICATIONS

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

Note for Super Bright: 		Bright			Super Bright			Super Bright Bicolor		Unit
		5C	5D	5F	6B	6F	6G	6CF	6DG	
Color		Red	Amber	Green	White	Green	Blue	Red/Green	Amber/Blue	
Maximum Forward Current	I_{FM}	30	30	25	20	30	30	30/25 *Amber 25/22	30/30	mA
Typical Forward Current	I_F	20	20	20	15	20	20	20/20	15/15	mA
Forward Voltage	V_F	1.85	2.0	2.1	3.3	3.5	3.6	2.1/3.5	2.0/2.8	V
Maximum Reverse Voltage	V_{RM}	5	5	5	5	5	5	4/4	4/4	V
Current Reduction Rate Above 25°C	ΔI_F	0.40	0.42	0.46	0.25	0.50	0.50	0.40/0.33	0.33/0.33	mA/°C
Ambient Temperature Range		-25° ~ +50			-20° ~ +50			-25° ~ +50	-25° ~ +50	°C

Bright Single Color LED with 1 element 

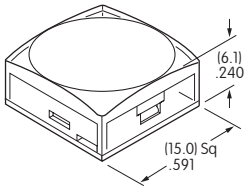
Super Bright Single Color LED with 1 element 

Super Bright Bicolor LED with 2 elements 

*Amber color can be achieved by lighting red and green simultaneously on the bicolor LED (not suitable for Alternating Legends).

CAP TYPES & COLOR COMBINATIONS

1 AT3074
Sculptured

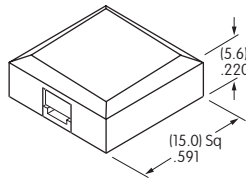


Lens/Diffuser Colors Available:

- JB** Clear/White
- JC** Clear/Red
- JD** Clear/Amber
- JF** Clear/Green

Material: Polycarbonate
Finish: Glossy

2 AT3075
Beveled

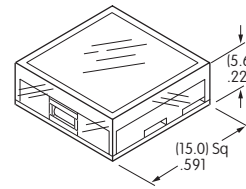


Material: Polycarbonate
Finish: Glossy

Cap Colors Available:

- B** White
- C** Red
- D** Amber
- F** Green

3 AT3076
Flat



Material: Polycarbonate
Finish: Glossy

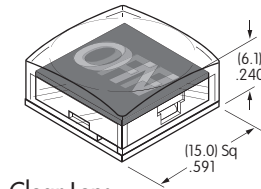
Lens/Diffuser Colors Available:

- JB** Clear/White
- JC** Clear/Red
- JD** Clear/Amber
- JF** Clear/Green

Alternating Legend Caps for Super Bright Bicolor LED

AT3069J Sculptured Cap with Alternating Legend

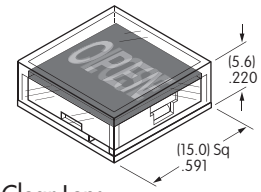
- 4JCF** Red/Green
- 4JDG** Amber/Blue



Clear Lens
Alternating Legend Filter
Material: Polycarbonate

AT3070J Flat Cap with Alternating Legend

- 5JCF** Red/Green
- 5JDG** Amber/Blue



Clear Lens
Alternating Legend Filter

Standard Alternating Legend Pairs

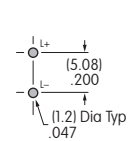
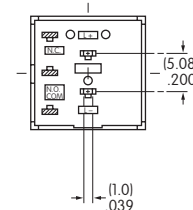
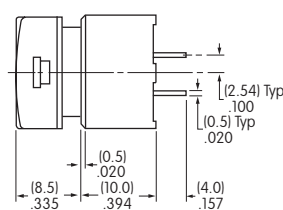
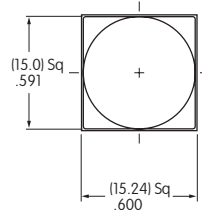
- 11** ON OFF
Green/Red or Blue/Amber
- 12** ON OFF
Green/Red or Blue/Amber
- 13** START STOP
Green/Red or Blue/Amber
- 14** OPEN CLOSE
Green/Red or Blue/Amber

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.

Note: Cap Removal Tool available for PCB Mount. See AT093ABC in Accessories & Hardware section for dimensions and other details.

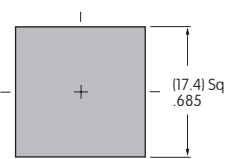
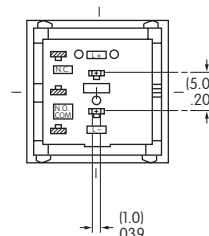
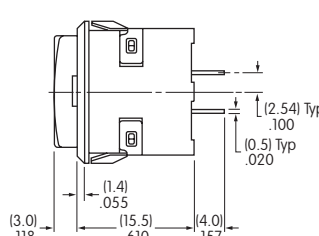
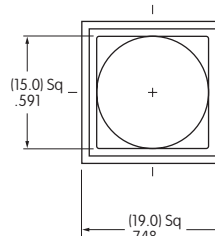
TYPICAL INDICATOR DIMENSIONS

PCB Mount



UB201KW035C-1JC

Snap-in Mount



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

TYPICAL INDICATOR ORDERING EXAMPLE

YB 04 [] K W01 — 12 — FB

Shapes

Bushing Mounting

01	Square
02	Round
03	Rectangular

Snap-in Mounting

04	Square
05	Round
06	Rectangular

Panel Seal

No Code	Without Panel Seal
W	With Panel Seal (Bushing Mount only)

Housing

K	Black only
---	------------

Terminals

W01	Silver Solder Lug/ .110" (2.8mm) Quick Connect
-----	--

Lamps

Incandescent Lamp

05	5-volt
12	12-volt

Bright LED

LED Colors		Resistor	
5C	Red	No Code	No Resistor
5D	Amber	05	5-volt
		12	12-volt
5F	Green	24	24-volt

Super Bright LED

6B	White
6F	Green
6G	Blue

Bicolor LED

LED Colors		Forward Voltage	
2CF	Red/Green	02	2-volt (no resistor)
		05	5-volt
		12	12-volt
		24	24-volt

Cap Types & Colors

Solid Cap: Lens/Insert Colors

BB	White/White
CB	Red/White
EB	Yellow/White
FB	Green/White
GB	Blue/White

LED Cap: Lens/Insert Colors

JB	Clear/White
JC	Clear/Red
JD	Clear/Amber
JF	Clear/Green

LED Cap: Lens/Insert Colors

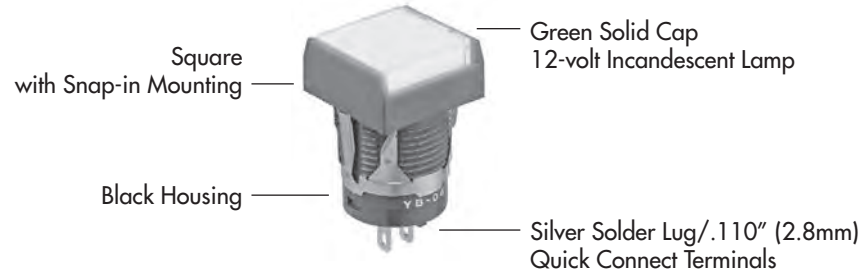
JB	Clear/White
----	-------------

LED Cap: Lens/Insert Colors

JB	Clear/White
----	-------------

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

YB04KW01-12-FB

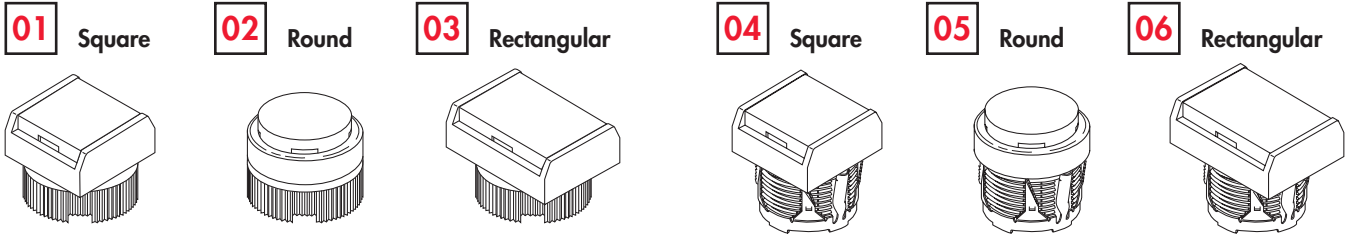


Toggle
Rockers
Pushbuttons
Illuminated PB
Programmable
Key locks
Rotaries
Slides
Tactiles
Tilt
Touch
Accessories
Supplement

SHAPES & MOUNTING TYPES

Bushing Mounting

Snap-in Mounting



Bezel-barrier is an integral part of the indicator body.

PANEL SEAL

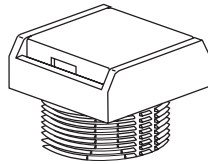
No Code

Without Panel Seal

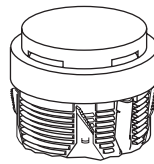
W

With Panel Seal

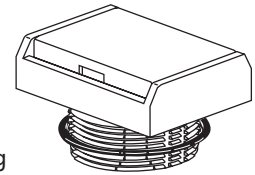
Bushing Mounting



Snap-in Mounting



Bushing Mounting only




Supplied with mounting nut.

Supplied with mounting nut and o-ring AT089.

INCANDESCENT LAMP & SOLID CAP

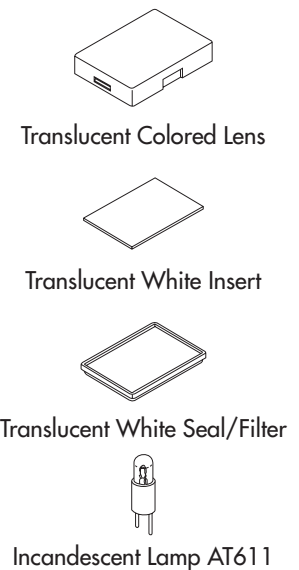
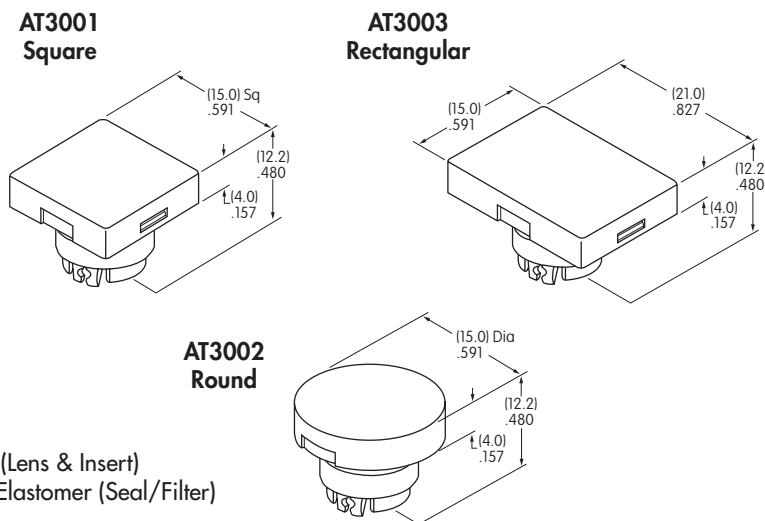
The electrical specifications shown are determined at a basic temperature of 25°C.
If the source voltage exceeds the rated voltage, a ballast resistor is required.
The resistor value can be calculated by using the formula in the Supplement section.

AT611  T-1 Bi-pin		05	12	
	Voltage	V	5V AC	12V AC
	Current	I	115mA	60mA
	MSCP		.150	.150
	Endurance	Hours	7,000 average	
	Ambient Temperature Range		-25°C ~ +50°C	

Solid Cap for Incandescent Lamp

Lens/Insert Colors Available:

- BB** White/White
- CB** Red/White
- EB** Yellow/White
- FB** Green/White
- GB** Blue/White




Materials: Polycarbonate (Lens & Insert)
Thermoplastic Elastomer (Seal/Filter)
Finish: Glossy

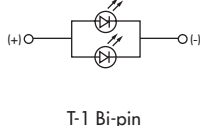
Toggles, Rockers, Pushbuttons, Illuminated PB, Programmable, Key locks, Rotaries, Slides, Tactiles, Tilt, Touch, Indicators, Accessories, Supplement

BRIGHT LEDS & LED CAPS


The electrical specifications shown are determined at a basic temperature of 25°C.
 If the source voltage exceeds the rated voltage, a ballast resistor is required.
 The resistor value can be calculated by using the formula in the Supplement section.

Electrical Specifications for Bright LED without Resistor

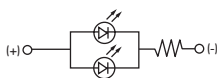
Bright AT628	Colors Available:	5C Red	5D Amber	5F Green	No Code	No Resistor	Unit
		Maximum Forward Current	I_{FM}	40	40	40	mA
	Typical Forward Current	I_F	26	26	26	mA	
	Forward Voltage	V_F	1.9	2.0	2.0	V	
	Maximum Reverse Voltage	V_{RM}	4	4	4	V	
	Current Reduction Rate Above 25°C	ΔI_F	0.50			mA/°C	
	Ambient Temperature Range				-25 ~ +50	°C	



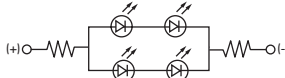
Electrical Specifications for Bright LED with Resistor

Bright AT634	Colors Available:	5C Red	5D Amber	5F Green	05	12	24	Unit
		Maximum Forward Current	I_{FM}	—	—	—	—	mA
	Typical Forward Current	I_F	25	20	10	mA		
	Forward Voltage	V_F	5	12	24	V		
	Maximum Reverse Voltage	V_{RM}	4	8	16	V		
	Current Reduction Rate Above 25°C	ΔI_F	—	—	—	mA/°C		
	Ambient Temperature Range				-25 ~ +50	°C		

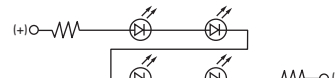
AT634
5-volt,
2-element
with Resistor



AT634
12-volt,
4-element
with Resistor



AT634
24-volt,
4-element
with Resistor

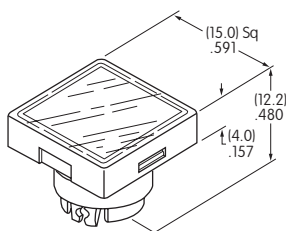


Cap for Bright LED

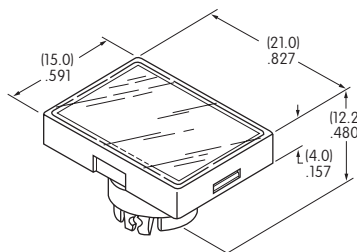
Lens/Insert
Colors Available:

- JB** Clear/White
- JC** Clear/Red
- JD** Clear/Amber
- JF** Clear/Green

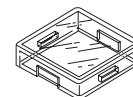
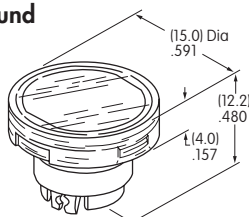
AT3004
Square



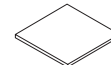
AT3006
Rectangular



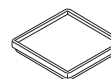
AT3005
Round



Transparent Clear Lens



Translucent Colored Insert



Translucent White Seal/Diffuser






Bright LEDs
AT628 AT634

Materials: Polycarbonate (Lens & Insert)
 Thermoplastic Elastomer (Seal/Diffuser)
 Finish: Glossy

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

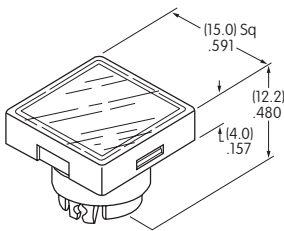
SUPER BRIGHT LEDS & LED CAPS

The electrical specifications shown are determined at a basic temperature of 25°C.
 If the source voltage exceeds the rated voltage, a ballast resistor is required.
 The resistor value can be calculated by using the formula in the Supplement section.

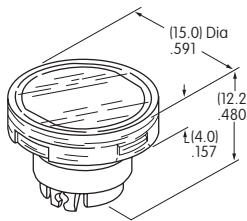
 <p>Super Bright AT625G Blue AT631B White AT632F Green</p> <p>T-1 Bi-pin</p>	 	<div style="border: 1px solid black; padding: 2px; display: inline-block;">6B</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-left: 20px;">6F</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-left: 20px;">6G</div>	Colors:	White	Green	Blue	Unit
	Maximum Forward Current	I_{FM}	30	30	30	mA	
	Typical Forward Current	I_F	20	20	20	mA	
	Forward Voltage	V_F	3.3	3.3	3.3	V	
	Maximum Reverse Voltage	V_{RM}	7	7	7	V	
	Current Reduction Rate Above 25°C	ΔI_F	0.40	0.40	0.40	mA/°C	
	Ambient Temperature Range		-25 ~ +50			°C	

Cap for Super Bright LED

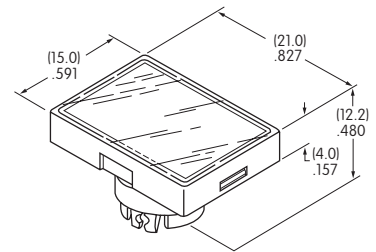
AT3014
Square



AT3015
Round

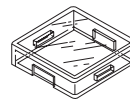


AT3016
Rectangular

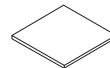


Lens/Insert
 Colors Available:

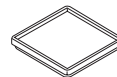
JB Clear/White



Transparent Clear Lens



Translucent White Insert



Translucent White Seal/Diffuser




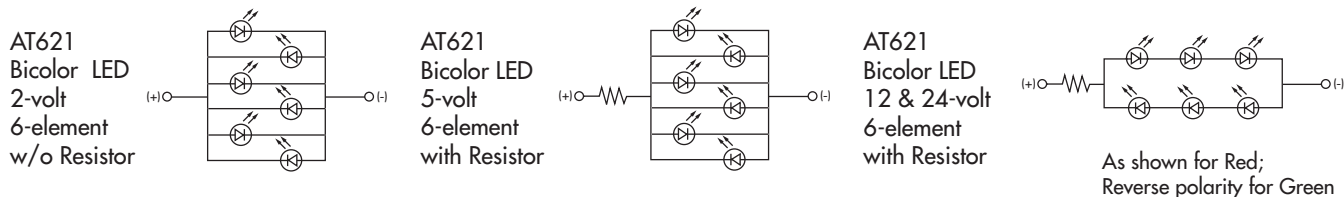
Super Bright LEDs
 AT625 AT631
 AT632

Materials: Polycarbonate (Lens & Insert)
 Thermoplastic Elastomer (Seal/Diffuser)

BICOLOR LED & LED CAPS

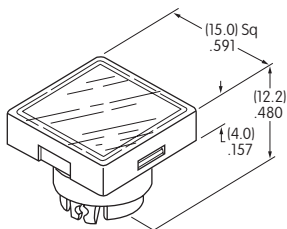
The electrical specifications shown are determined at a basic temperature of 25°C.
 If the source voltage exceeds the rated voltage, a ballast resistor is required.
 The resistor value can be calculated by using the formula in the Supplement section.

Bicolor AT621		02	05	12	24	Unit
 T-1 1/2 Bi-pin	Bicolor LED is translucent white in OFF state.					
	Maximum Forward Current I_{FM}	60	60	20	12	mA
	Typical Forward Current I_F	45	45	15	10	mA
	Forward Voltage (Red/Green) V_F	1.9 / 2.1	5	12	24	V
	Current Reduction Rate Above 25°C ΔI_F	0.80	----	----	----	mA/°C
	Ambient Temperature Range		-25 ~ +50			°C

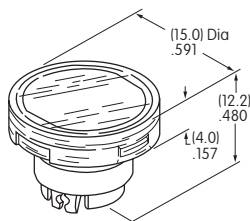


LED Caps

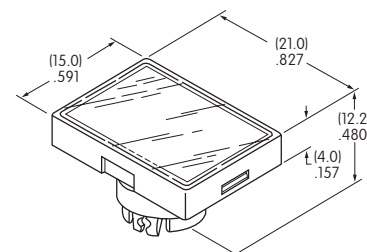
AT3004 Square



AT3005 Round

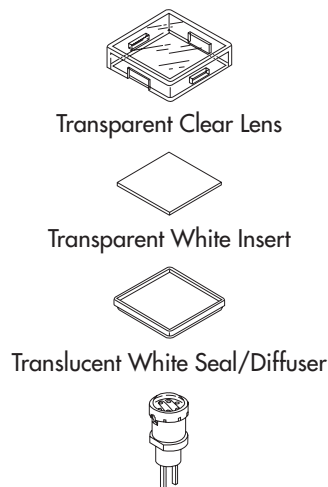


AT3006 Rectangular



Lens/Insert Colors Available:

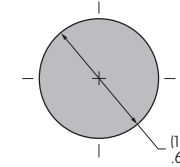
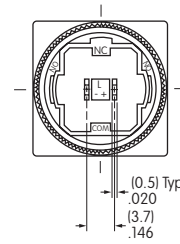
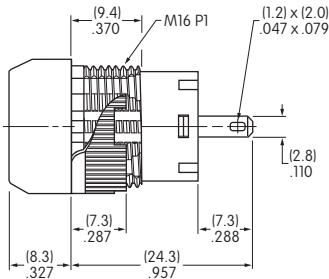
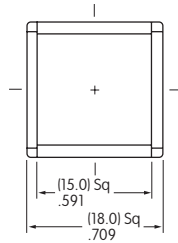
JB Clear/White



Materials: Polycarbonate (Lens & Insert)
 Thermoplastic Elastomer (Seal/Diffuser)

TYPICAL INDICATOR DIMENSIONS

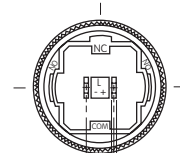
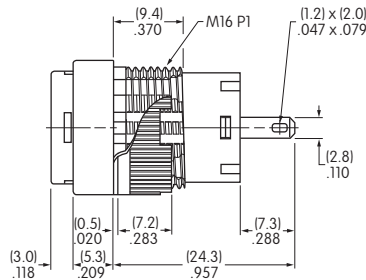
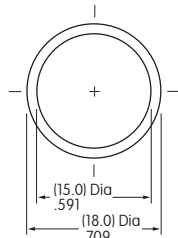
Square • Bushing Mounting



YB01KW01-12-CB

Panel Thickness
.020" ~ .197" (0.5mm ~ 5.0mm)

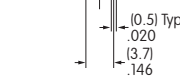
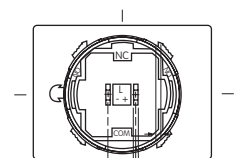
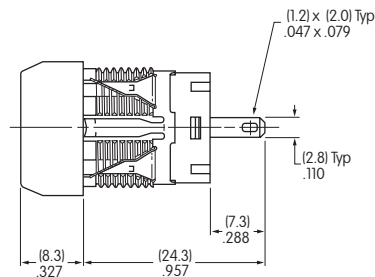
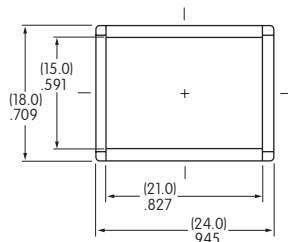
Round • Panel Seal



YB02WKW01-12-GB

Panel Thickness
.020" ~ .197" (0.5mm ~ 5.0mm)

Rectangular • Snap-in Mounting



YB06KW01-12-EB

Panel Thickness
.039" ~ .138" (1.0mm ~ 3.5mm)



Broadcast



Medical



Industrial Automation



Construction



Transportation

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NKK Switches is known throughout the world as the industry leader of electromechanical switches and manufacturer of the widest range of illuminated, process sealed, miniature, specialty, surface mount and programmable switches. With over 3.5 million switch options, all products are designed with innovation, high reliability, customization and a commitment to excellence.

NKK's sales and engineering teams are dedicated to providing technical expertise and outstanding customer support.

Our manufacturing centers are ISO 9001 and ISO 14001 certified and feature state-of-the-art production and testing facilities to assure the highest quality products.

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Warranty: All NKK products are warranted against defects in workmanship, material and construction for a period of one (1) year from the date of shipment if the products have been properly installed, used, and maintained. There are no express warranties of merchantability or fitness for a particular purpose. Materials, finishes, and component parts are subject to change without notification.



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