

EB20

11

B

J23

Poles & Circuits

| | | | |
|----|------|----|------|
| 11 | SPDT | ON | (ON) |
| 65 | SPDT | ON | ON |
| 61 | DPDT | ON | (ON) |
| 85 | DPDT | ON | ON |

() = Momentary

Contacts, Ratings, & Terminals

| | |
|----------------|---|
| No Code | Silver Contacts; Solder Lug Terminals 3A @ 125V AC |
| G | Gold Contacts; Solder Lug Terminals 0.4VA max @ 28V AC/DC max |
| P | Silver Contacts; Straight PC Terminals; 3A @ 125V AC |
| PG | Gold Contacts; Straight PC Terminals 0.4VA max @ 28V AC/DC max |

Cap Colors

| | |
|----------|--------|
| A | Black |
| B | White |
| C | Red |
| E | Yellow |
| F | Green |
| G | Blue |
| H | Gray |

Cap Extensions & Bezel Types

| Low Rise | | High Rise | | Description |
|-----------|-----------|-----------|-----------|-------------------------------|
| Momentary | Alternate | Momentary | Alternate | |
| J20 | J30 | J40 | J50 | Without Bezel |
| J21 | J31 | J41 | J51 | Bezel without LED |
| J22 | J32 | J42 | J52 | Bezel with 1 Round LED |
| J23 | J33 | J43 | J53 | Bezel with 2 Round LEDs |
| J24 | J34 | J44 | J54 | Bezel with 2 Rectangular LEDs |

IMPORTANT:

Switches are supplied without UL, cULus & CSA marking unless specified.

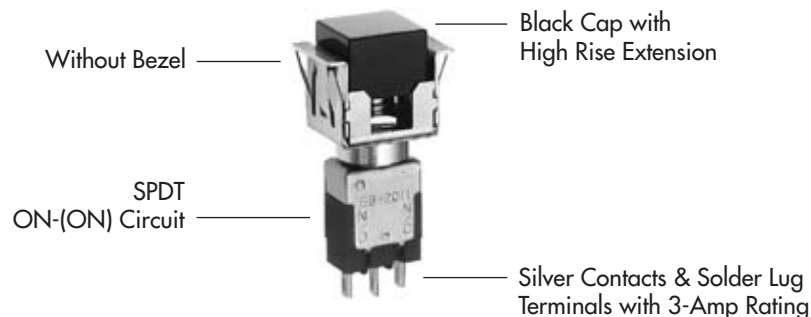
UL, cULus & CSA recognized only when ordered with marking on the switch.

Specific models, ratings, & ordering instructions are noted on the General Specifications page.



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE WITHOUT BEZEL

EB2011-A-J40



ORDERING EXAMPLES

| | | | | | | | |
|---|--------|----------|-------|-------------------|--------|-------------------|--------|
| A | | | | C F | | | |
| Bezel Colors | | | | Led Colors | | | |
| Bezel without LEDs | | | | | | | |
| A | Black | F | Green | | | | |
| B | White | G | Blue | | | | |
| C | Red | H | Gray | | | | |
| E | Yellow | | | | | | |
| Bezel with 1 Round LED | | | | 1 LED | | | |
| A | Black | | | C | Red | | |
| | | | | F | Green | | |
| Bezel with 2 Round or Rectangular LEDs | | | | 2 LEDs | | | |
| | | | | Top LED | | Bottom LED | |
| A | Black | | | C | Red | C | Red |
| | | | | E | Yellow | E | Yellow |
| | | | | F | Green | F | Green |

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE WITH BEZEL

EB2011-B-J23ACF



Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt







Touch

Indicators

Accessories

Supplement

POLES & CIRCUITS

| | | Plunger Position () = Momentary | | Connected Terminals | | Throw & Switch Schematics |
|------|------------------|---|---|---|---|---|
| Pole | Model | Normal  | Down  | Normal  | Down  | |
| SP | EB2011 EB2065 | ON ON | (ON) ON | 2-3 | 2-1 | SPDT  |
| DP | EB2061 EB2085 | ON ON | (ON) ON | 2-3 5-6 | 2-1 5-4 | DPDT  |

Note: Terminal numbers are not actually on the switch.

CONTACT MATERIALS, RATINGS, & TERMINALS



**Solder Lug
Silver Contacts**

Power Level

3A @ 125V AC

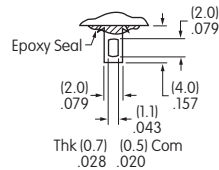


**Solder Lug
Gold Contacts**

Logic Level

0.4VA maximum @ 28V AC/DC maximum

Complete explanation of operating range in Supplement section.



**Straight PC
Silver Contacts**

Power Level

3A @ 125V AC



**Straight PC
Gold Contacts**

Logic Level

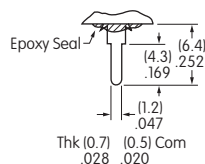
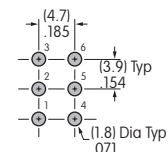
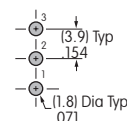
0.4VA maximum @ 28V AC/DC maximum

Complete explanation of operating range in Supplement section.

PCB Footprints

Single Pole

Double Pole



CAP COLORS

Factory Assembled on the Switch:
 Square snap-on cap AT465, snap-in moulder
 AT529, and optional bezels which follow.

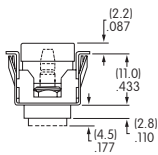
- | | | | |
|----------------|----------------|---------------|-----------------|
| A Black | B White | C Red | E Yellow |
| F Green | G Blue | H Gray | |

CAP EXTENSIONS & BEZEL TYPES

Cap Extension without Bezel

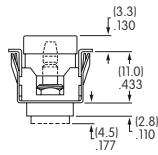
J20

Low Rise Momentary



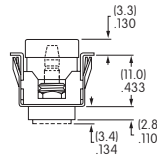
J30

Low Rise Alternate



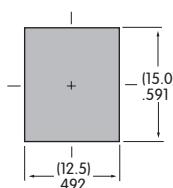
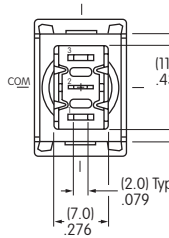
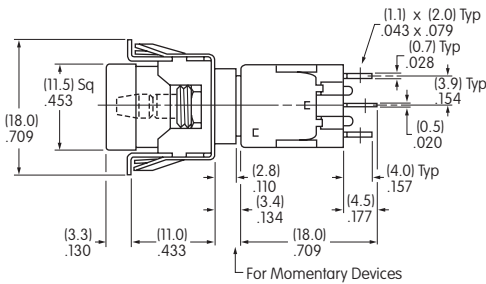
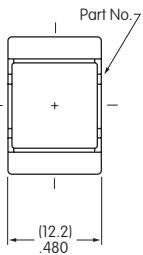
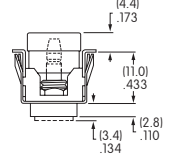
J40

High Rise Momentary



J50

High Rise Alternate



Maximum Panel Thickness
 .039" ~ .157" (1.0mm ~ 4.0mm)
 Cutout applies to SP & DP



High Rise

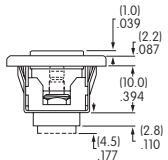
Single Pole

EB2011-A-J40

Cap Extension with Bezel

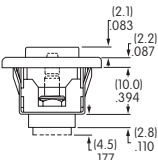
J21

Low Rise Momentary



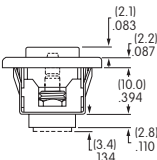
J31

Low Rise Alternate



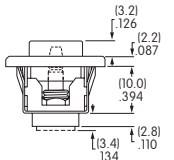
J41

High Rise Momentary



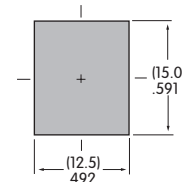
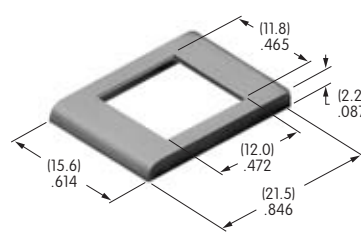
J51

High Rise Alternate

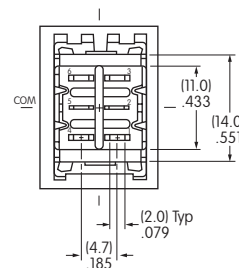
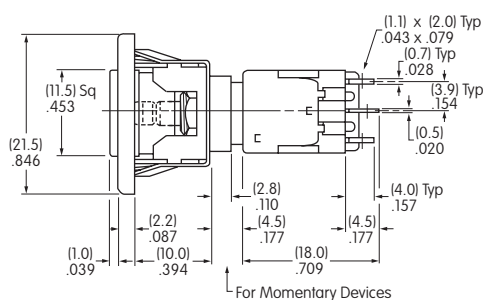
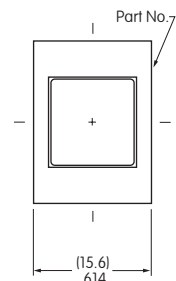


AT207 Bezel without LED

- | | | |
|-----------------|----------------|----------------------------|
| E Yellow | F Green | Material: Polycarbonate |
| A Black | G Blue | |
| B White | H Gray | Finish: Glossy |
| C Red | | |



Maximum Panel Thickness
 .039" ~ .126" (1.0mm ~ 3.2mm)
 Cutout applies to SP & DP



Low Rise

Double Pole

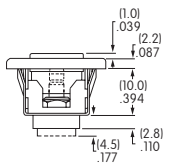
EB2061-B-J21A

CAP EXTENSIONS & BEZEL TYPES

Cap Extension with Bezel

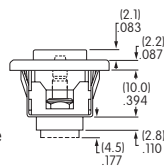
J22

Low Rise Momentary



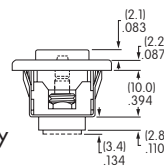
J32

Low Rise Alternate



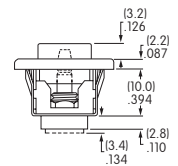
J42

High Rise Momentary



J52

High Rise Alternate

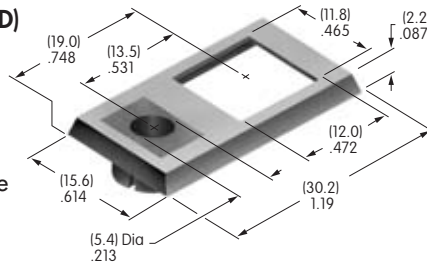


AT208 Bezel with 1 Round LED (AT070 LED)

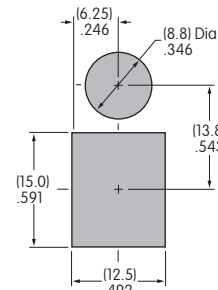
A

Black

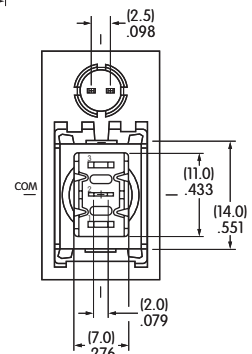
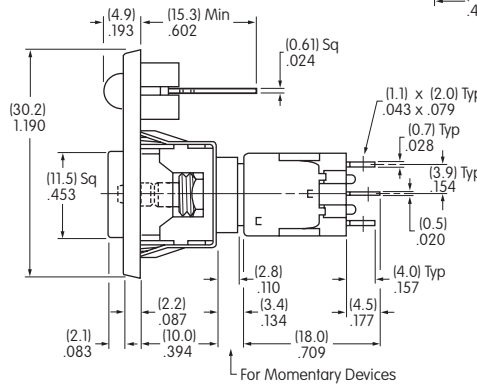
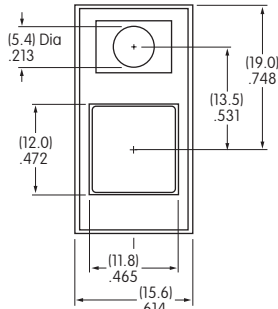
Material: Polycarbonate
Finish: Glossy



Maximum Panel Thickness
.039" ~ .126"
(1.0mm ~ 3.2mm)
Cutout applies to SP & DP



LED colors and specifications on next to last page of this EB section.



EB2011-B-J42AC

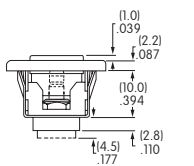
High Rise

Single Pole

Cap Extension with Bezel

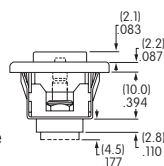
J23

Low Rise Momentary



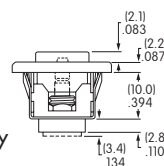
J33

Low Rise Alternate



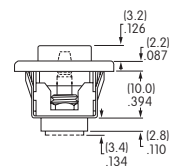
J43

High Rise Momentary



J53

High Rise Alternate

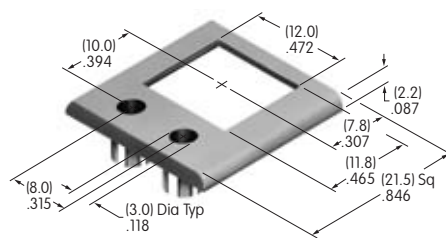


AT212 Bezel with 2 Round LEDs (AT617 LEDs)

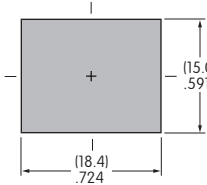
A

Black

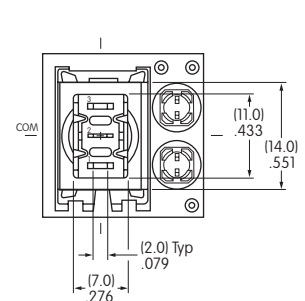
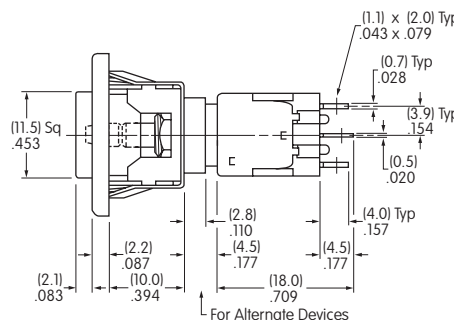
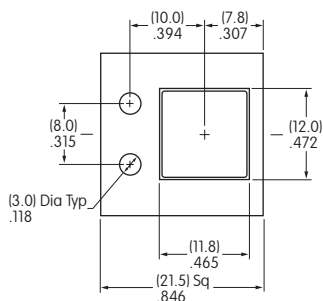
Material: Polycarbonate
Finish: Glossy



Maximum Panel Thickness
.039" ~ .126" (1.0mm ~ 3.2mm)
Cutout applies to SP & DP



LED colors and specifications on next to last page of this EB section.



EB2065-B-J33ACF

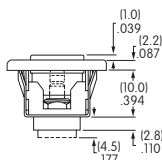
Low Rise

Single Pole

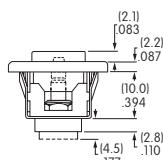
CAP EXTENSIONS & BEZEL TYPES

Cap Extension with Bezel

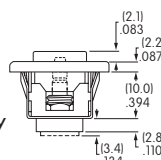
J24
Low Rise Momentary



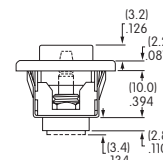
J34
Low Rise Alternate



J44
High Rise Momentary



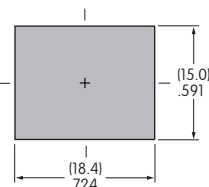
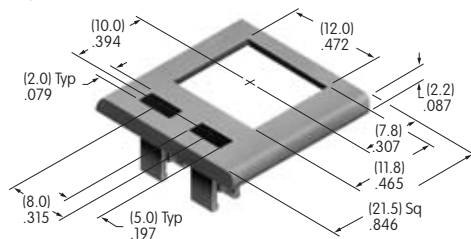
J54
High Rise Alternate



AT213 Bezel with 2 Rectangular LEDs (AT618 LEDs)

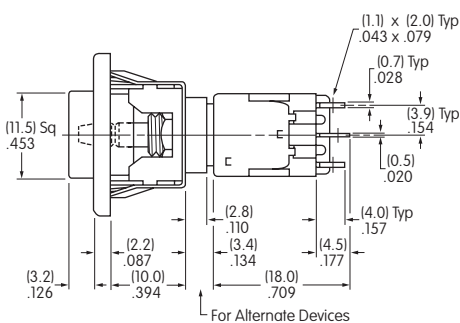
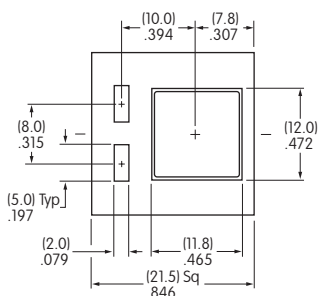
A Black

Material: Polycarbonate
Finish: Glossy

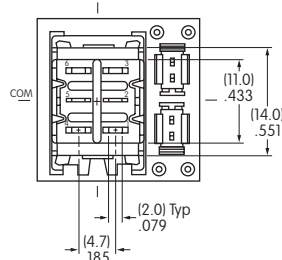


Maximum Panel Thickness
.039" ~ .126" (1.0mm ~ 3.2mm)
Cutout applies to SP & DP

LED colors and specifications on next page of this EB section.



High Rise



Double Pole



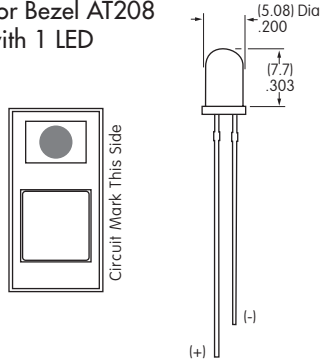
EB2085-B-J54ACF

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

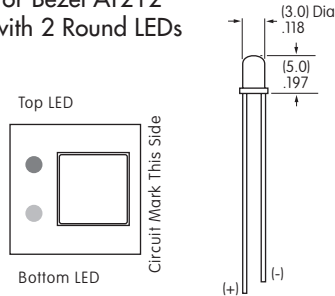
LED COLORS & SPECIFICATIONS

Bezel Orientation on Switch

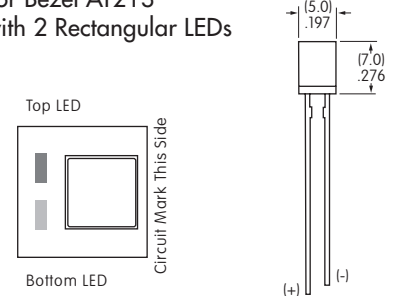
AT070 LED
For Bezel AT208
with 1 LED



AT617 LED
For Bezel AT212
with 2 Round LEDs



AT618 LED
For Bezel AT213
with 2 Rectangular LEDs



Note: Lead lengths may differ from manufacturing lot to lot. The longer lead is the anode (+).

| | | AT070 | | AT617 | | | AT618 | | |
|--|--------------|--------------|------------|--------------|------------|------------|--------------|------------|------------|
| | | C | F | C | E | F | C | E | F |
| | Color | Red | Green | Red | Yellow | Green | Red | Yellow | Green |
| Maximum Forward Current | I_{FM} | 25mA | 30mA | 30mA | 30mA | 25mA | 25mA | 30mA | 25mA |
| Typical Forward Current | I_F | 20mA | 20mA | 20mA | 20mA | 20mA | 20mA | 20mA | 20mA |
| Forward Voltage | V_F | 2.8V | 2.1V | 2.0V | 2.1V | 2.2V | 2.25V | 2.1V | 2.2V |
| Maximum Reverse Voltage | V_{RM} | 4V | 5V | 5V | 5V | 5V | 5V | 5V | 5V |
| Current Reduction Rate Above 25°C | ΔI_F | 0.33 mA/°C | 0.40 mA/°C | 0.40 mA/°C | 0.40 mA/°C | 0.33 mA/°C | 0.33 mA/°C | 0.40 mA/°C | 0.33 mA/°C |
| Ambient Temperature Range (when used with a bezel) | | -10° ~ +70°C | | -15° ~ +70°C | | | -25° ~ +70°C | | |

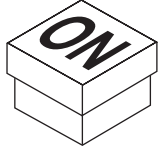
The electrical specifications shown are determined at a basic temperature of 25°C.
LED circuit is independent of switch operation. LED is colored in OFF state.

If the source voltage is greater than the rated voltage of the LED, a ballast resistor must be connected in series with the lamp.
The ballast resistor calculation and more lamp detail are shown in the Supplement section.

LEGENDS

NKK Switches can provide custom legends for caps. Contact factory for more information.

Suggested Printable Area for Cap



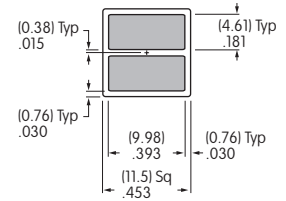
Recommended Print Method:

Screen Print or Pad Print

Epoxy based ink is recommended.



AT465



AT465

Shaded areas are printable areas.

Toggles

Rockers

C Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

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