

TYPICAL SWITCH

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
Momen- tary	Alter- nate	Momen- tary	Alter- nate	
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

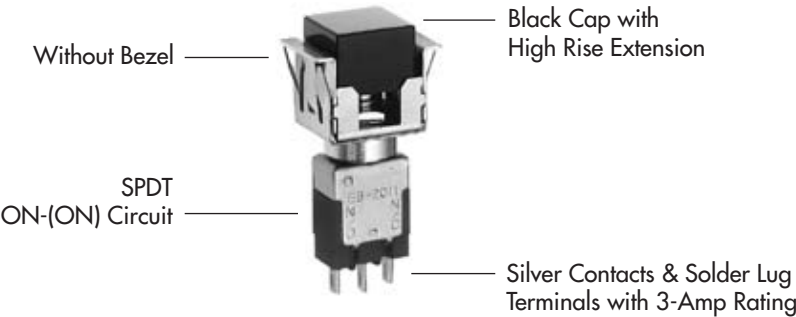
IMPORTANT:

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

Bezel Colors

Bezel without LEDs

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

C

F

Led Colors

Bezel with 1 Round LED

A	Black
---	-------

Bezel with 2 Round or Rectangular LEDs

A	Black
---	-------

1 LED

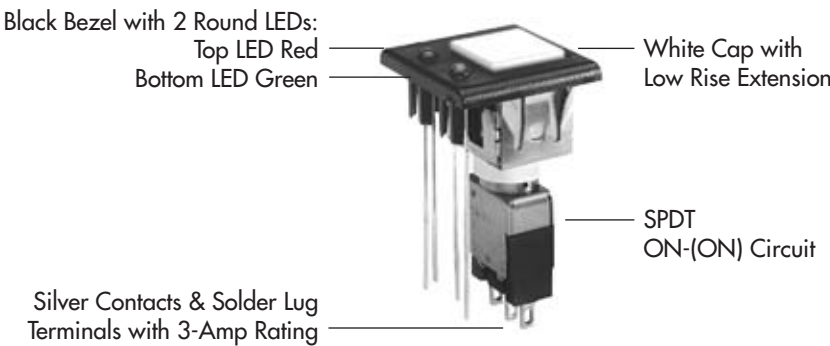
C	Red
F	Green

2 LEDs

Top LED		Bottom LED	
C	Red	C	Red
E	Yellow	E	Yellow
F	Green	F	Green

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE WITH BEZEL

EB2011-B-J23ACF



POLES & CIRCUITS

		Plunger Position () = Momentary		Connected Terminals		Throw & Switch Schematics
Pole	Model	Normal 	Down 	Normal 	Down 	Note: Terminal numbers are not actually on the switch.
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 

CONTACT MATERIALS, RATINGS, & TERMINALS



**Solder Lug
Silver Contacts**

Power Level

3A @ 125V AC

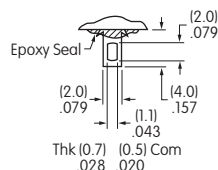


**Solder Lug
Gold Contacts**

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**

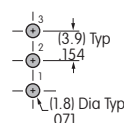
Logic Level

0.4VA maximum @ 28V AC/DC maximum

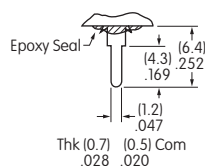
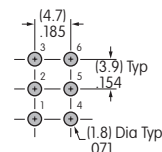
Complete explanation of operating range in Supplement section.

PCB Footprints

Single Pole



Double Pole



CAP COLORS

Factory Assembled on the Switch:

Square snap-on cap AT465, snap-in mounter AT529, and optional bezels which follow.



Black



White



Red



Yellow



Green



Blue



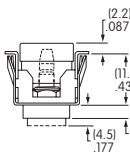
Gray

CAP EXTENSIONS & BEZEL TYPES

Cap Extension without Bezel

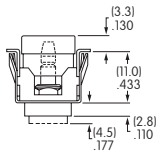
J20

Low Rise Momentary



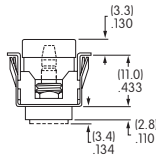
J30

Low Rise Alternate



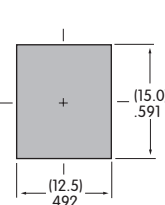
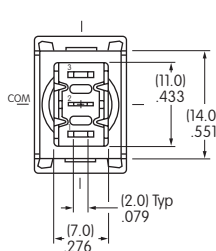
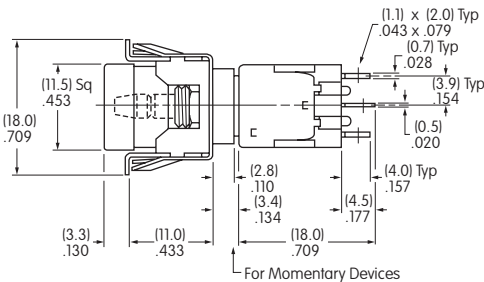
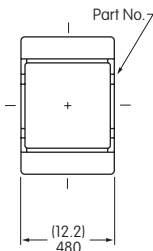
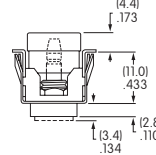
J40

High Rise Momentary



J50

High Rise Alternate



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



High Rise

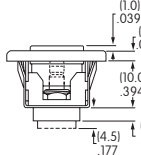
Single Pole

EB2011-A-J40

Cap Extension with Bezel

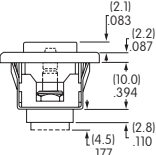
J21

Low Rise Momentary



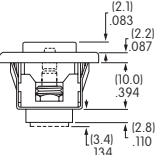
J31

Low Rise Alternate



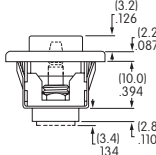
J41

High Rise Momentary



J51

High Rise Alternate



AT207 Bezel without LED



Yellow



Black



Green



White



Blue



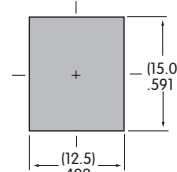
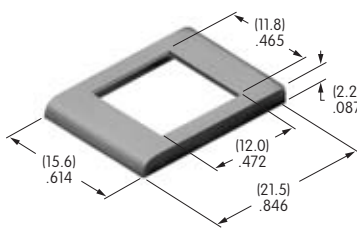
Red



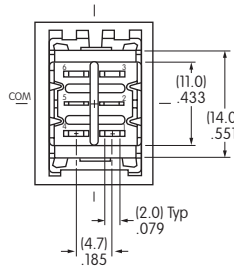
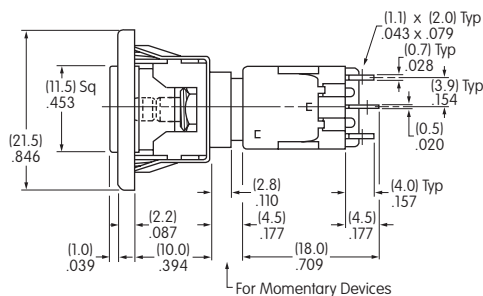
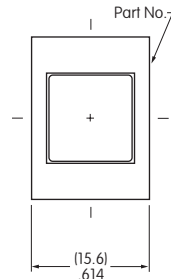
Gray

Material:
Polycarbonate

Finish:
Glossy



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



Low Rise

Double Pole

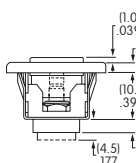
EB2061-B-J21A

CAP EXTENSIONS & BEZEL TYPES

Cap
Extension
with
Bezel

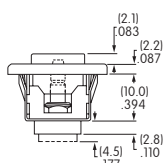
J22

Low Rise
Momentary



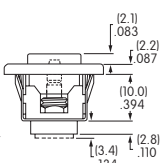
J32

Low Rise
Alternate



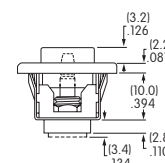
J42

High Rise
Momentary



J52

High Rise
Alternate

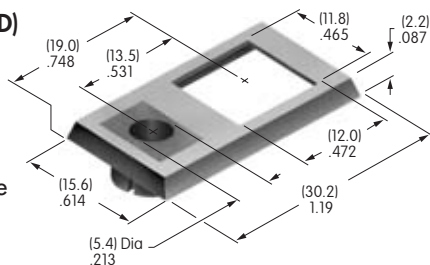


AT208 Bezel with
1 Round LED (AT070 LED)

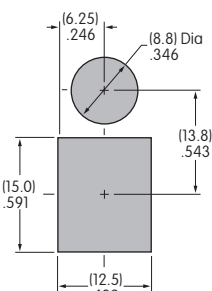
A

Black

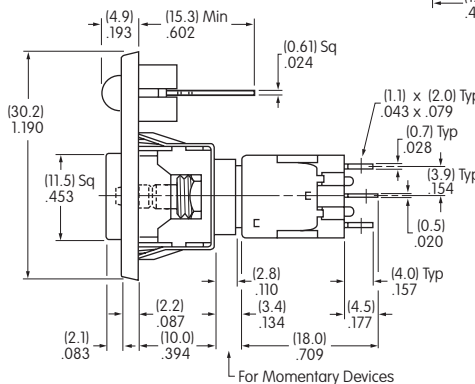
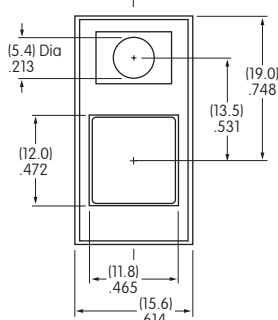
Material: Polycarbonate
Finish: Glossy



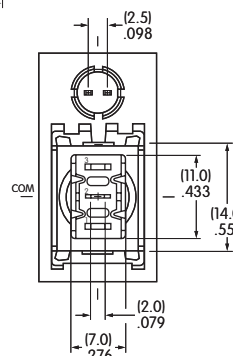
Maximum Panel Thickness
.039" ~ .126"
(1.0mm ~ 3.2mm)
Cutout applies to SP & DP



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



For Momentary Devices



EB2011-B-J42AC

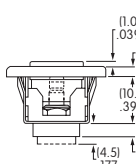
High Rise

Single Pole

Cap
Extension
with
Bezel

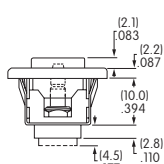
J23

Low Rise
Momentary



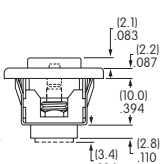
J33

Low Rise
Alternate



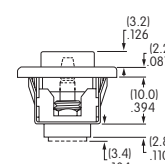
J43

High Rise
Momentary



J53

High Rise
Alternate

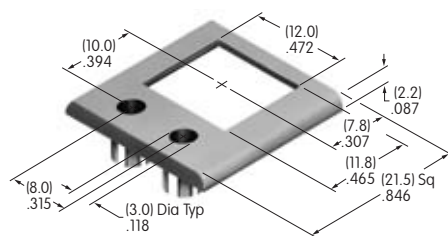


AT212 Bezel with
2 Round LEDs (AT617 LEDs)

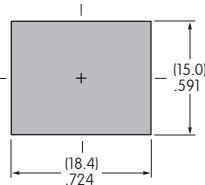
A

Black

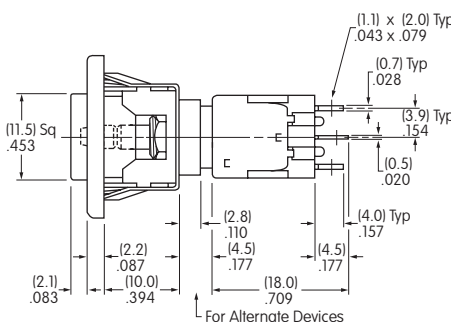
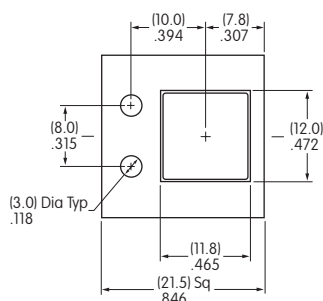
Material: Polycarbonate
Finish: Glossy



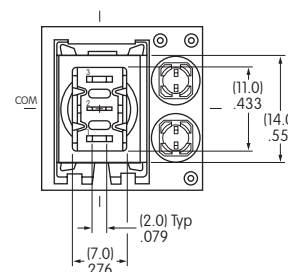
Maximum Panel Thickness
.039" ~ .126" (1.0mm ~ 3.2mm)
Cutout applies to SP & DP



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



For Alternate Devices



EB2065-B-J33ACF

Low Rise

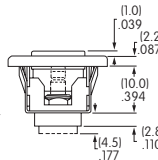
Single Pole

CAP EXTENSIONS & BEZEL TYPES

Cap Extension with Bezel

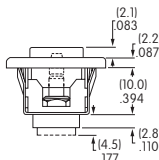
J24

Low Rise Momentary



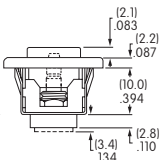
J34

Low Rise Alternate



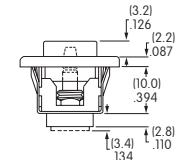
J44

High Rise Momentary



J54

High Rise Alternate

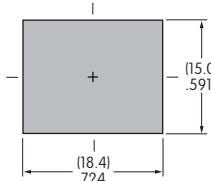
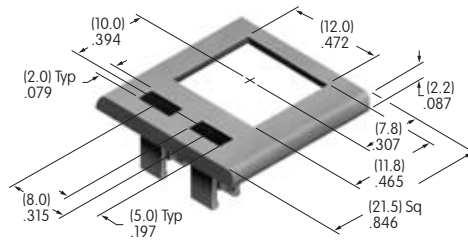


AT213 Bezel with 2 Rectangular LEDs (AT618 LEDs)

A

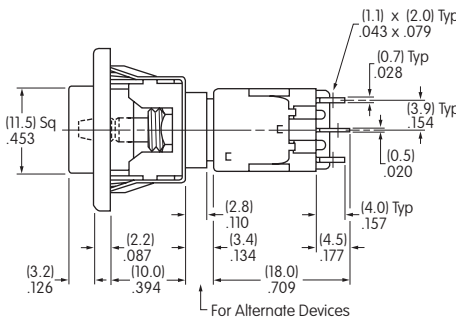
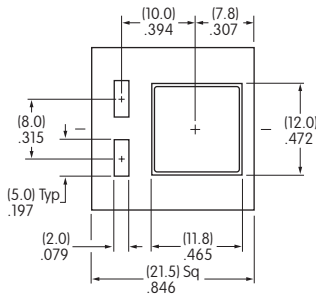
Black

Material: Polycarbonate
Finish: Glossy

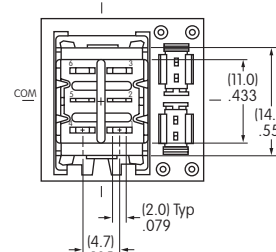


Maximum Panel Thickness
.039" ~ .126" (1.0mm ~ 3.2mm)
Cutout applies to SP & DP

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



High Rise



Double Pole

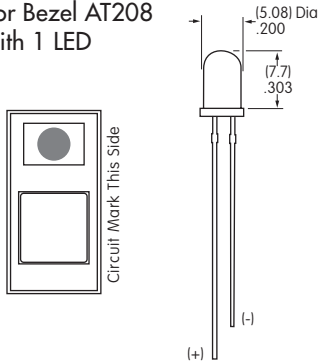


EB2085-B-J54ACF

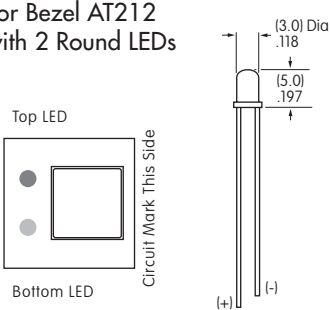
LED COLORS & SPECIFICATIONS

Bezel Orientation on Switch

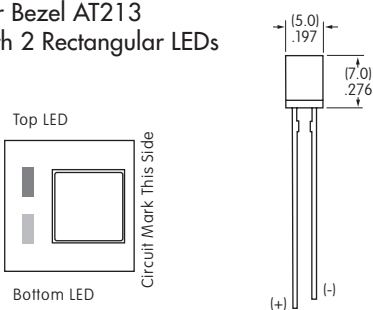
AT070 LED
For Bezel AT208
with 1 LED



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		

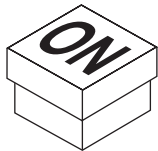
The electrical specifications shown are determined at a basic temperature of 25°C.
LED circuit is independent of switch operation. LED is colored in OFF state.

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.

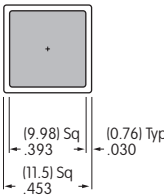
Suggested Printable Area for Cap



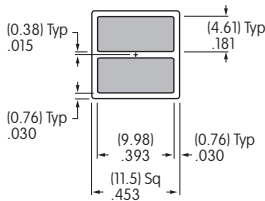
Recommended Print Method:

Screen Print or Pad Print

Epoxy based ink is recommended.



AT465



AT465

Shaded areas are printable areas.

Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9