Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

General Specifications

Electrical Capacity (Resistive Load)

Power Level (silver): 1A @ 125/250V AC or 1A @ 30V DC
Logic Level (gold): 0.4VA maximum @ 28V AC/DC maximum (Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
Note: Find additional explanation of operating range in Supplement section.

Other Ratings

Contact Resistance: 50 milliohms maximum
Insulation Resistance: 1,000 megohms minimum @ 500V DC
Dielectric Strength: For Silver: 1,000V AC minimum between contacts for 1 minute minimum &
1,500V AC minimum between contacts & case for 1 minute minimum;
For Gold: 750V AC minimum between contacts for 1 minute minimum &
1,500V AC minimum between contacts & case for 1 minute minimum
Mechanical Life: 100,000 operations minimum
Electrical Life: 50,000 operations minimum for silver; 100,000 operations minimum for gold
Nominal Operating Force: Single pole 0.98 ~ 2.45N for maintained & 0.98 ~ 1.96N for momentary;
Double pole 1.47 ~ 3.43N for maintained & 1.47 ~ 2.94N for momentary
Contact Timing: Nonshorting (break-before-make)
Travel: Pretravel .087" (2.2mm); Overtravel .031" (0.8mm); Total Travel .118" (3.0mm)

Materials & Finishes

Housing: Polyamide (UL94V-0)
Movable Contactor: Silver for power circuit; copper with gold plating for logic level circuit
Stationary Contacts: Silver for power circuit; copper with gold plating for logic level circuit
Housing Base: Polyamide (UL94V-0)
Terminal Base: Polyester
Common Terminals: Phosphor bronze with silver flash plating for power circuit;
Phosphor bronze with gold flash plating for logic level circuit
End Terminals: Brass with silver flash plating for power circuit;
Brass with gold flash plating for logic level circuit
Lamp Terminals: Phosphor bronze with nickel flash plating

Environmental Data

Operating Temperature Range: –25°C through +50°C (–13°F through +122°F) for Illuminated
–25°C through +70°C (–13°F through +158°F) for Nonilluminated
Humidity: 90 ~ 95% humidity for 96 hours @ 40°C (104°F)
Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning
in 1 minute; 3 right angled directions for 2 hours
Shock: 50G (490m/s^2) acceleration (tested in 6 right angled directions, with 3 shocks in each direction)

Installation

Mounting Torque: 0.78Nm (6.9 lb•in) maximum
Cap Installation Force: 4.51N (1.0 lbf) maximum downward force on cap
Soldering Time & Temperature: Manual Soldering: See Profile A in Supplement section.

Standards & Certifications

Flammability Standards: UL94V-0 housing & housing base
UL: **File No. E44145 - Recognized only when ordered with marking on switch.**
Add "/U" or "/CUL" before first dash in part number to order UL recognized switch.
Single & double pole models recognized at 1A @ 125/250V AC, 1A @ 30V DC, & 0.4VA @ 28V DC.
CSA: **File No. 023535_0_000 - Certified only when ordered with marking on switch.**
Add "/C" before first dash in part number to order CSA certified switch.
Single & double pole models recognized at 1A @ 125/250V AC, 1A @ 30V DC, & 0.4VA @ 28V DC.

NKK SWITCHES

Distinctive Characteristics

Bright illumination with numerous color variations. Spot illumination available. Square, rectangular, and round shaped caps.

Front panel relamping.

Choice of bright or super bright LEDs in red, amber, green, white, and blue.

Latchdown feature gives indication of circuit status. Audible and tactile feedback with smooth and responsive operation.

Snap-action mechanism for long life.

Stainless steel frame on snap-in models has a specially designed projection, which prevents rotation and correctly orients switch in panel.

12mm body diameter.

Molded-in terminals lock out flux, dust, and other contaminants.

8mm panel thickness capability. Rear panel bushing or snap-in mounting.

Optional PCB adaptors in straight and right angle types.
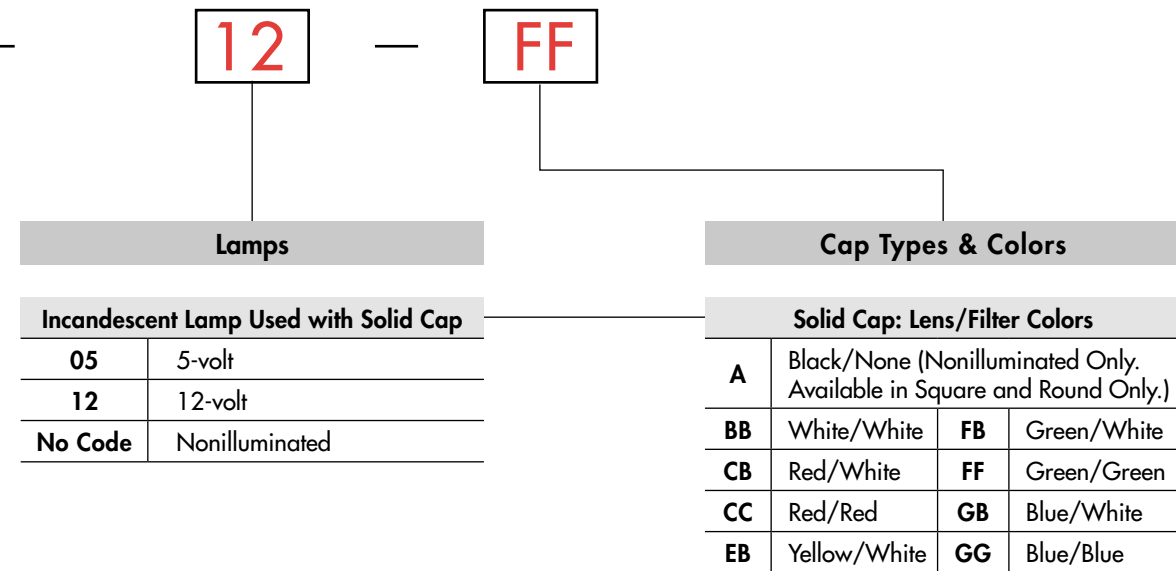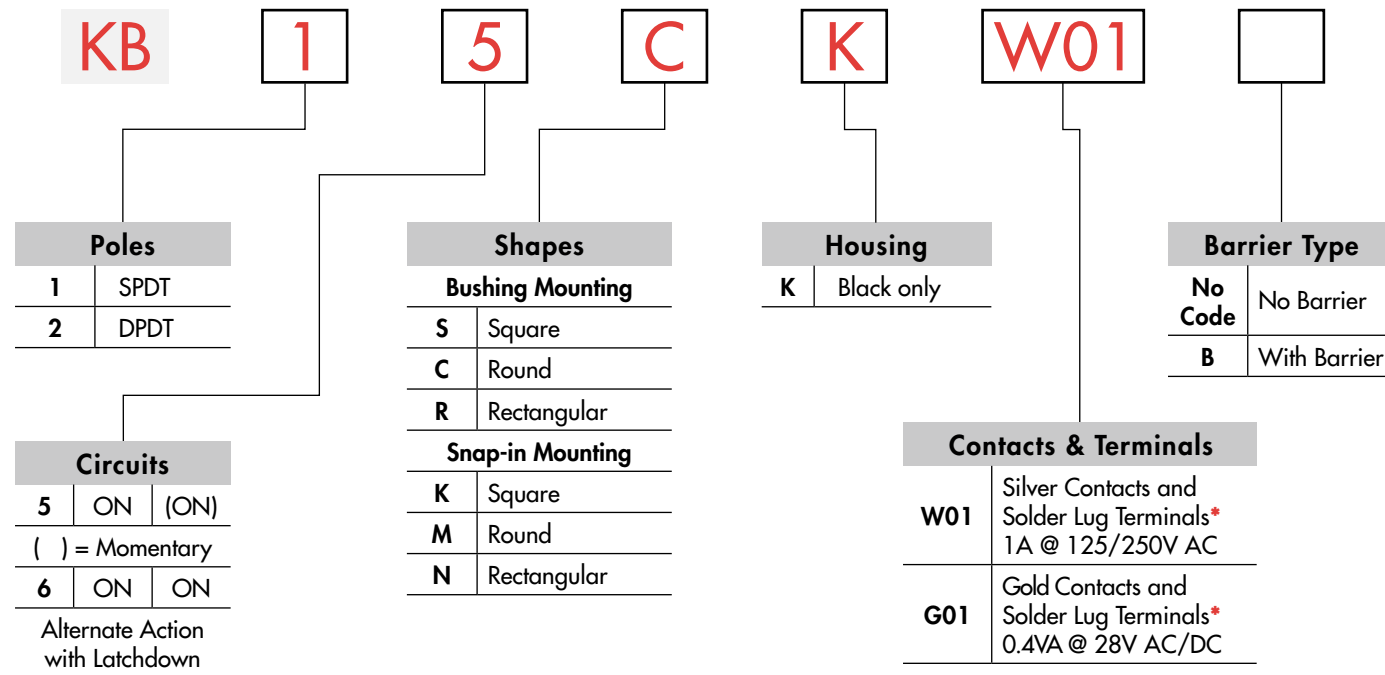
Matching indicators available.
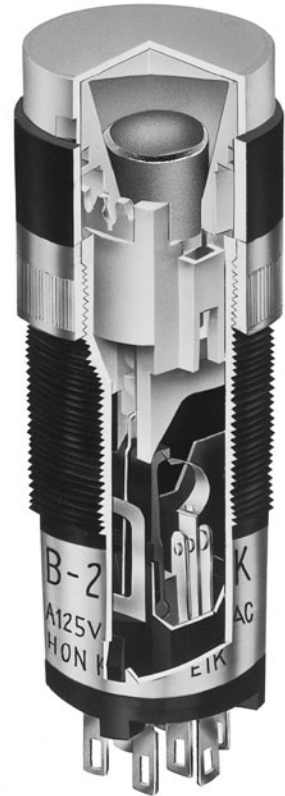
Actual Size

Toggles

Rockers

Pushbuttons

D   Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

NKK SWITCHES

Series KB

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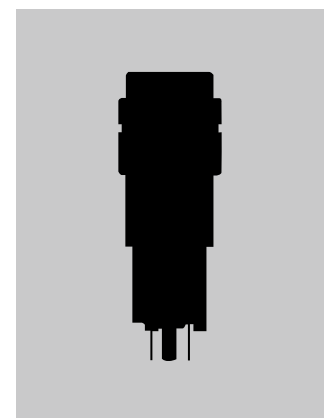
Toggles · Rockers · Pushbuttons · Illuminated PB · Programmable · Keylocks · Rotaries · Slides · Tactiles · Tilt · Touch · Indicators · Accessories · Supplement

D

TYPICAL SWITCH ORDERING EXAMPLE

KB	1	5	C	K	W01		–	12	–	FF

Poles

1	SPDT
2	DPDT

Circuits

5	ON	(ON)
	( ) = Momentary	
6	ON	ON
	Alternate Action with Latchdown	

Shapes

Bushing Mounting

S	Square
C	Round
R	Rectangular

Snap-in Mounting

K	Square
M	Round
N	Rectangular

Housing

K	Black only

Contacts & Terminals

W01	Silver Contacts and Solder Lug Terminals* 1A @ 125/250V AC
G01	Gold Contacts and Solder Lug Terminals* 0.4VA @ 28V AC/DC

Barrier Type

No Code	No Barrier
B	With Barrier

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 General Specifications page.

* Wire harness & cable assemblies offered only in Americas

Lamps

Incandescent Lamp Used with Solid Cap

05	5-volt
12	12-volt
No Code	Nonilluminated

Incandescent or Neon Used with Insert Cap

05	5-volt
12	12-volt
01	110-volt Neon
No Code	Nonilluminated

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

A	Black/None (Nonilluminated Only. Available in Square and Round Only.)		
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

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

KB15CKW01-12-FF

- 12-volt Incandescent Lamp
- Round with Bushing Mounting
- SPDT ON-(ON) Circuit
- Solid Cap with Green Lens and Green Filter
- Black Housing
- Silver Contacts and Solder Lug Terminals; Rated 1A @ 125/250V AC

Series KB

Miniature Pushbuttons

POLES & CIRCUITS

Pole	Model	Plunger Position ( ) = Momentary		Connected Terminals		Throw & Switch/Lamp Schematics		
		Normal	Down	Normal	Down	Notes:	Switch is marked with "+" and "–". Lamp circuit is isolated and requires external power source.	
SP	KB15 *KB16	ON ON	(ON) ON	2-3	2-1	SPDT	2 (COM) 3 1	L (+) ● ─○─ ● (-) L
DP	KB25 *KB26	ON ON	(ON) ON	2-3 5-6	2-1 5-4	DPDT	2 (COM) 5 3 1 6 4	L (+) ● ─○─ ● (-) L

* When in latchdown position for the alternate circuit, cap position is .055" (1.4mm) above the built-in bezel.

MOUNTING TYPES & SHAPES

Bushing Mounting

S .551" (14.0mm) Square
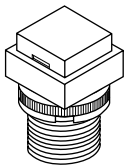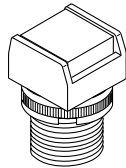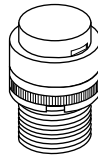
C .551" (14.0mm) Round

R .551" x .728" (14.0mm x 18.5mm) Rectangular

No barrier   With barrier
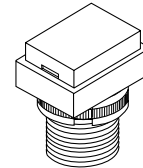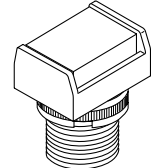
No barrier   With barrier

Bezel or barrier is an integral part of the switch body. One mounting nut AT057 supplied with each switch.

Snap-in Mounting

K .551" (14.0mm) Square
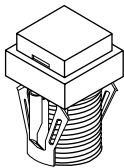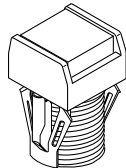
M .551" (14.0mm) Round
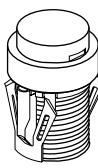
N .551" x .728" (14.0mm x 18.5mm) Rectangular

No barrier   With barrier
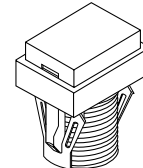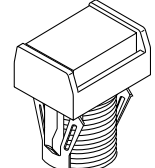
No barrier   With barrier

Bezel or barrier is an integral part of the switch body.

Panel Cutouts

Bushing Mounting

Snap-in Mounting

Without Keyway

(12.3) Dia .484
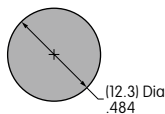
Panel Thickness: .020" ~ .315" (0.5 ~ 8.0mm)

(4.9) .193

With Keyway

(12.3) Dia .484
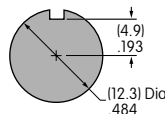
Panel Thickness: .039" ~ .138" (1.0 ~ 3.5mm)

(1.2) R .047

(12.3) Dia .484

(6.8) .268
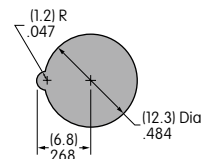
Panel thicknesses, when using optional accessories, are shown with the accessories at the end of this KB section.

HOUSING

K **Housing available in black only.** Bezel or barrier is an integral part of the switch body.

NKK SWITCHES

Series KB

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

CONTACT MATERIALS, RATINGS & TERMINALS

W Silver Contacts

Power Level
1A @ 125V AC & 250V AC
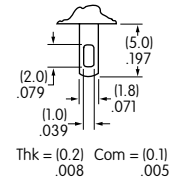
G Gold Contacts

Logic Level
0.4VA maximum @ 28V AC/DC

Complete explanation of operating range in Supplement section.

01 Solder Lug

(5.0) .197
(2.0) .079
(1.8) .071
(1.0) .039
Thk = (0.2) .008   Com = (0.1) .005

AT055 Crossover Guard

A partitioned plastic guard is supplied with each switch to provide insulation between terminals.

Installation steps:
1. Identify wire-to-terminal connections.
2. Thread wires through the guard.
3. Solder the connections.
4. Push the guard fully onto the switch body.

(12.4) Dia .488   (14.0) Dia .551
(17.0) .669
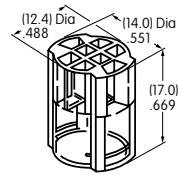
BARRIER TYPE

No Code No Barrier

Built-in bezel

B With Barrier

Built-in barrier only available for Square and Rectangular

LAMP 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 the bottom of the switch.
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.
Ambient Temperature Range for lamps below: −25°C ~ +50°C.

Incandescent & Neon Lamps

AT611 Incandescent

AT615 Neon

T-1 Bi-pin

		05	**12**	**01**
Voltage	V	5V AC	12V AC	110V AC
Current	I	115mA	60mA	1.5mA
Endurance	Hours	7,000 average		10,000

Recommended Resistors for Neon:
33K ohms for 110V AC;
100K ohms for 220V AC

No Code No Lamp

Bright LED with Resistor

AT634

LEDs are colored in OFF state.

T-1¼ Bi-pin

		Red	Amber	Green	Resistor Codes		
Color Codes:		**5C**	**5D**	**5F**	**05**	**12**	**24**
Forward Peak Current	I_{FM}				—	—	—
Typical Forward Current	I_F				25mA	20mA	10mA
Forward Voltage	V_F				5V	12V	24V
Reverse Peak Voltage	V_{RM}				4V	8V	16V
Current Reduction Rate Above 25°C	ΔI_F				—	—	—

AT634 5-volt 2-element with 1 Resistor

AT634 12-volt 4-element with 2 Resistors
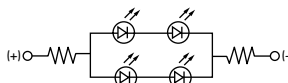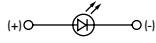
AT634 24-volt 4-element with 2 Resistors

Toggles
Rockers
Pushbuttons
Illuminated PB **D**
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement
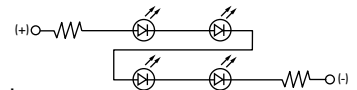
LAMP COLORS & SPECIFICATIONS

Bright LED without Resistor

AT635

LEDs are colored in OFF state.

(+) ○──▷|──○ (−)

T-1½ Bi-pin

		Red	Amber	Green	No Code	No Resistor	
Color Codes		5C	5D	5F		Red	Amber	Green
Forward Peak Current	I_{FM}	30mA	30mA	30mA		30mA	30mA	30mA
Typical Forward Current	I_F	20mA	20mA	20mA		20mA	20mA	20mA
Forward Voltage	V_F	1.9V	2.0V	2.1V		1.9V	2.0V	2.1V
Reverse Peak Voltage	V_{RM}	5V	5V	5V		5V	5V	5V
Current Reduction Rate Above 25°C	ΔI_F			0.42mA/°C				
Ambient Temperature Range				−25° ~ +50°C				

Super Bright Single Element LED

AT625G Blue

AT631B White

AT632F Green

(+) ○──▷|──○ (−)

T-1 Bi-pin

ATTENTION
ELECTROSTATIC
SENSITIVE DEVICES

			6B	6F	6G
		Color	White	Green	Blue
Forward Peak Current	I_{FM}		30mA	30mA	30mA
Typical Forward Current	I_F		20mA	20mA	20mA
Forward Voltage	V_F		3.6V	3.5V	3.6V
Reverse Peak Voltage	V_{RM}		5V	5V	5V
Current Reduction Rate Above 25°C	ΔI_F		0.50mA/°C	0.50mA/°C	0.50mA/°C
Ambient Temperature Range			−25° ~ +50°C		

CAP TYPES & COLOR COMBINATIONS

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

Solid Cap for Incandescent Lamp & Nonilluminated

Lens/Filter Colors Available:

| A | Nonilluminated Only; Square & Round Only |

BB	FB
CB	FF
CC	GB
EB	GG

AT485 Square

(11.6) Sq .457
(4.5) .177
(6.2) .244

AT486 Round

(11.6) Dia .457
(4.5) .177
(6.2) .244
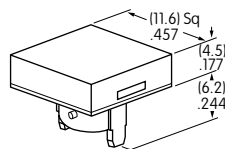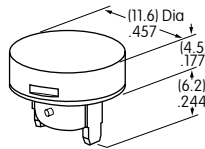
AT4021 Rectangular

(11.6) .457
(16.1) .634
(4.5) .177
(6.3) .248
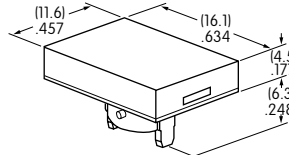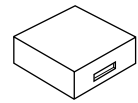
Translucent Colored Lens

Translucent Colored Filter

Lamp AT611

Material: Polycarbonate   Finish: Glossy

Insert Cap for Incandescent or Neon Lamp & Nonilluminated

Lens/Filter Colors Available:

JB	JF
JC	JG
JE	

JF and JG not suitable with neon lamp.

AT487 Square

(11.6) Sq .457
(4.5) .177
(6.2) .244

AT488 Round

(11.6) Dia .457
(4.5) .177
(6.2) .244
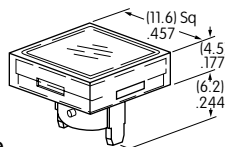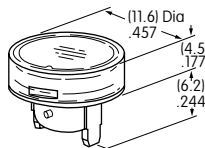
AT4022 Rectangular

(11.6) .457
(16.1) .634
(4.5) .177
(6.3) .248
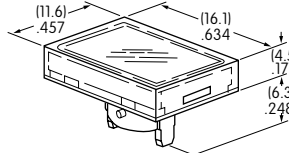
Transparent Clear Lens

Translucent Colored Filter

Lamp AT611   Lamp AT615

Material: Polycarbonate   Finish: Glossy

NKK SWITCHES

Series KB

Toggles

Rockers

Pushbuttons

D Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

CAP TYPES & COLOR COMBINATIONS

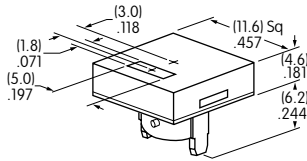**Color Codes:** **A** Black **B** White **C** Red **D** Amber **E** Yellow **F** Green **G** Blue **J** Clear

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 |
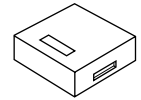
(3.0) .118
(1.8) .071
(5.0) .197
(11.6) Sq .457
(4.6) .181
(6.2) .244

Material: Polycarbonate   Finish: Matte

Bright LED AT635

Bright LED AT634

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 Square | AT4132 Round | AT4134 Rectangular |

Transparent Clear Lens

JC	AT4158	AT4160	AT4159
JD			
JF			

Translucent Diffuser
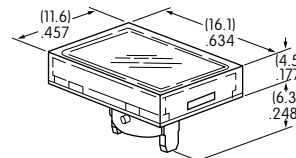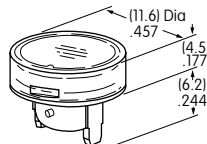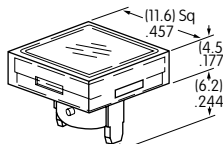
(11.6) Sq .457
(4.5) .177
(6.2) .244

(11.6) Dia .457
(4.5) .177
(6.2) .244

(11.6) .457
(16.1) .634
(4.5) .177
(6.3) .248

Material: Polycarbonate   Finish: Glossy

Bright LED AT635

Bright LED AT634

Cap for Super Bright LED

Lens/Diffuser Colors Available:

Translucent Clear Lens

| JB | AT4133 Square | AT4132 Round | AT4134 Rectangular |
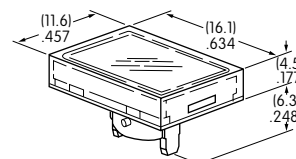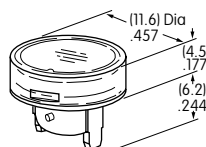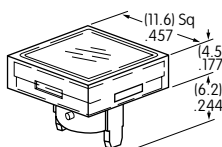
Translucent White Diffuser
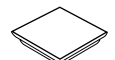
(11.6) Sq .457
(4.5) .177
(6.2) .244

(11.6) Dia .457
(4.5) .177
(6.2) .244

(11.6) .457
(16.1) .634
(4.5) .177
(6.3) .248

Material: Polycarbonate   Finish: Glossy

Super Bright LEDs AT625 AT631 AT632

Toggles

Rockers

Pushbuttons

Illuminated PB

D

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

TYPICAL SWITCH DIMENSIONS

Square • Bushing Mount   Single & Double Pole
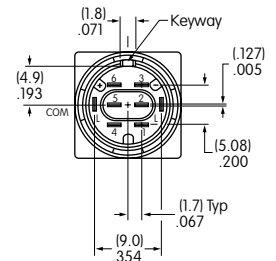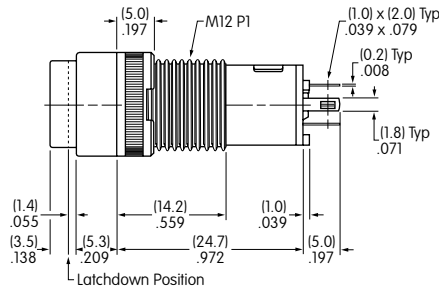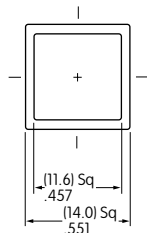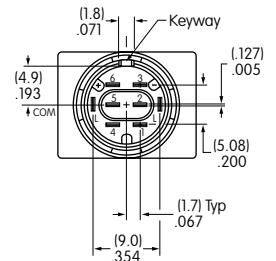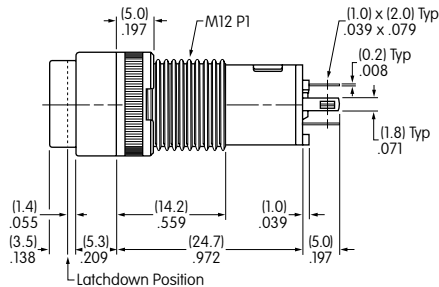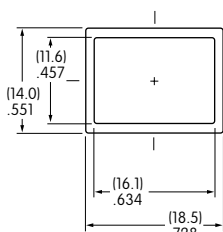

KB15SKW01-05-GG   Single pole models do not have terminals 4, 5, & 6.

Round • Bushing Mount   Single & Double Pole
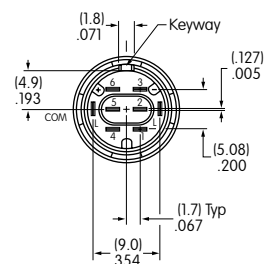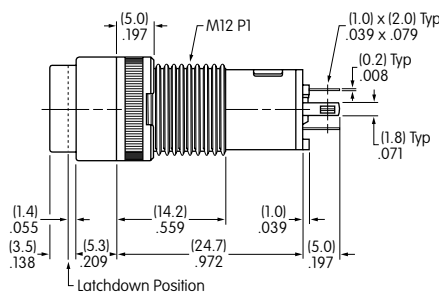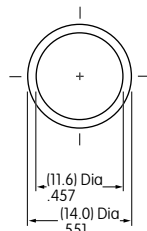
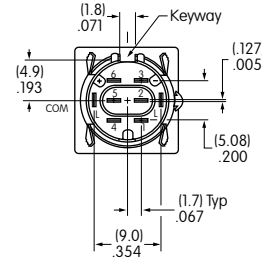**KB25CKW01-05-GG**   Single pole models do not have terminals 4, 5, & 6.

Rectangular • Bushing Mount   Single & Double Pole

KB15RKW01-05-GG   Single pole models do not have terminals 4, 5, & 6.

NKK SWITCHES

Miniature Pushbuttons

Series KB

TYPICAL SWITCH DIMENSIONS

Single & Double Pole — Square • Snap-in Mount
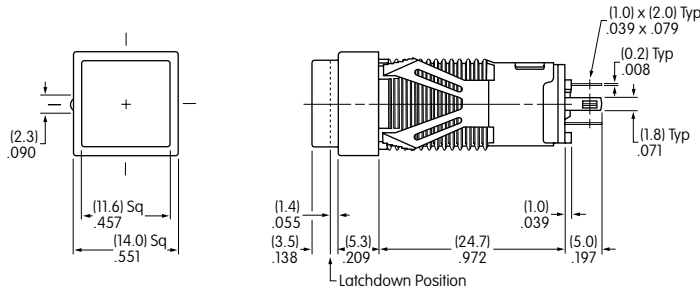
Single pole models do not have terminals 4, 5, & 6.   **KB16KKW01-05-CB**

Single & Double Pole — Round • Snap-in Mount
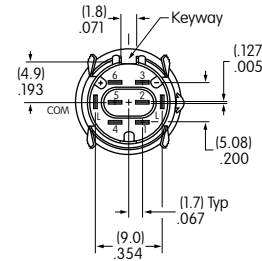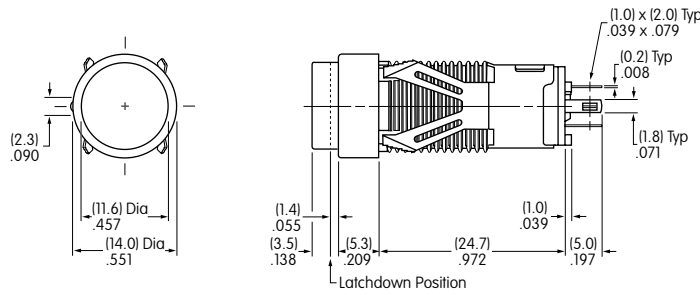
Single pole models do not have terminals 4, 5, & 6.   **KB26MKW01-05-CB**
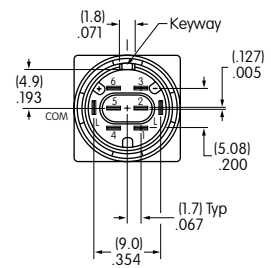
Single & Double Pole — Rectangular • Snap-in Mount
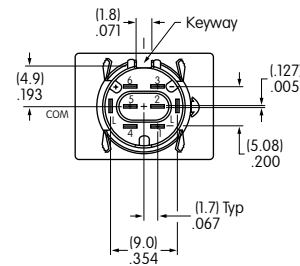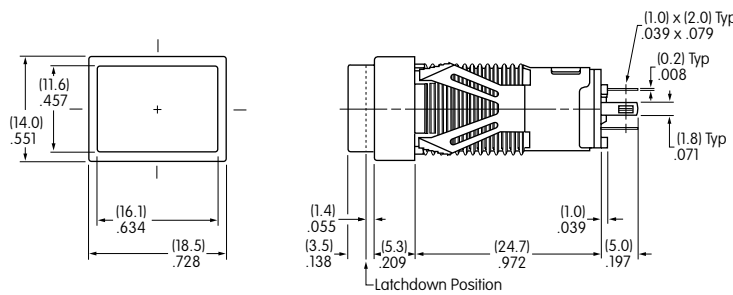
Single pole models do not have terminals 4, 5, & 6.   **KB16NKW01-05-CB**

Toggles

Rockers

Pushbuttons

Illuminated PB   D

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

TYPICAL SWITCH DIMENSIONS

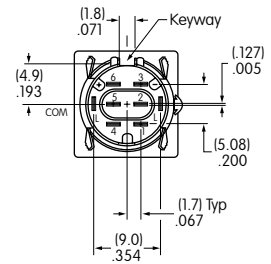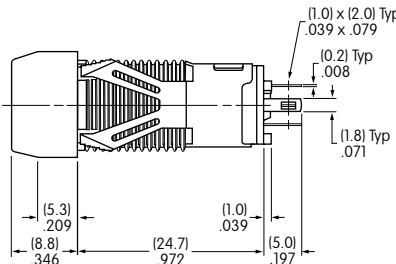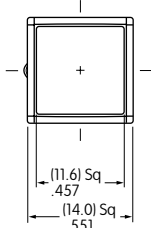### Square • Barrier • Bushing Mount
Single & Double Pole
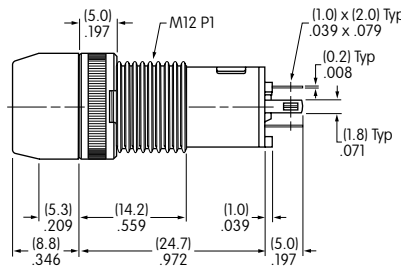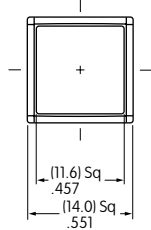
KB15SKW01B-6G-JB

Single pole models do not have terminals 4, 5, & 6.

Square • Barrier • Snap-in Mount
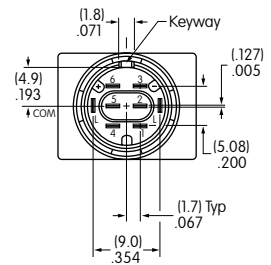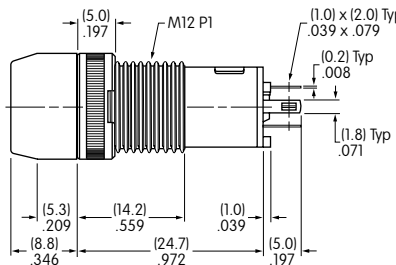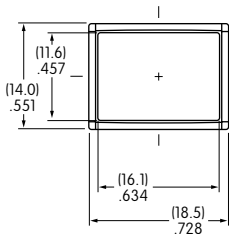### Single & Double Pole

KB15KKW01B-5C-JC

Single pole models do not have terminals 4, 5, & 6.

Rectangular • Barrier • Bushing Mount
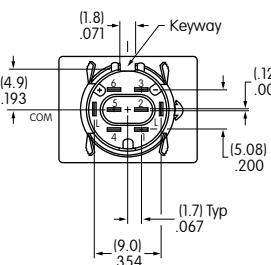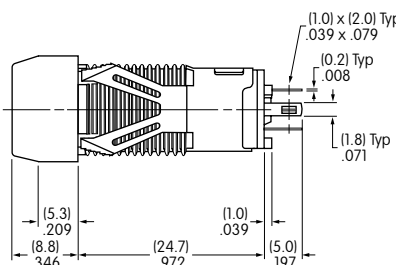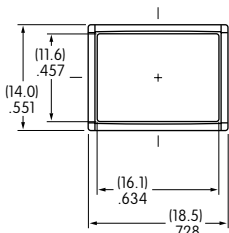### Single & Double Pole

KB15RKW01B-5F-JF

Single pole models do not have terminals 4, 5, & 6.

Rectangular • Barrier • Snap-in Mount
Single & Double Pole

KB15NKW01B-5D-JD

Single pole models do not have terminals 4, 5, & 6.

NKK SWITCHES

Series KB

OPTIONAL ACCESSORIES

PCB Adaptors

AT701
Single Pole
Straight PC
Terminals

Switch Depth (2.8) .110 — (0.3) .012

(12.0) Dia .472

(0.6) Typ .024

(9.8) .386 — (3.1) .122

Keyway — (0.2) Typ .008

(2.54) Typ .100

6 NC 3
5 COM 2
4 NO 1

(0.2) Typ .008
(2.54) Typ .100

(10.16) .400

(2.54) Typ .100 — (2.54) Typ .100

3 NC
2 COM
1 NO

(0.8) Dia Typ .031

(10.16) .400

AT702
Double Pole
Straight PC
Terminals

Switch Depth (2.8) .110 — (0.3) .012

(12.0) Dia .472

(0.6) Typ .024

(9.8) .386 — (3.1) .122

Keyway — (0.2) Typ .008

(2.54) Typ .100

6 NC 3
5 COM 2
4 NO 1

(0.2) Typ .008
(2.54) Typ .100

(10.16) .400

(2.54) Typ .100 — (2.54) Typ .100

3 NC 6
2 COM 5
1 NO 4

(0.8) Dia Typ .031

(10.16) .400

Material: Glass fiber reinforced polyamide   Note: Order adaptors separately

Dust Covers

Panel Thickness Range: .020 ~ .268" (0.5 ~ 6.8mm) for Bushing Mounting; .020 ~ .079" (0.5 ~ 2.0mm) for Snap-in Mounting
Dust Covers reduce the depth of switch behind panel by .047" (1.2mm).

AT495
For Square & Round
(not for Barrier type)

Assembled Cap Height

(13.0) Sq .512

(6.5) .256

(11.8) .465

(7.0) .276 — (1.2) R .047

(12.3) Dia .484

(5.1) .201

(1.6) .063

(21.0) Sq .827

AT4025
For Rectangular
(not for Barrier type)

Assembled Cap Height

(13.0) Sq .512

(6.5) .256

(11.8) .465

(1.2) R .047

(12.3) Dia .484

(21.0) .827

(7.0) .276

(25.4) 1.004

Material: Lid: PVC   PVC loses pliability below 0°C (32°F).   Base: Polyamide

Toggles

Rockers

Pushbuttons

D Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement
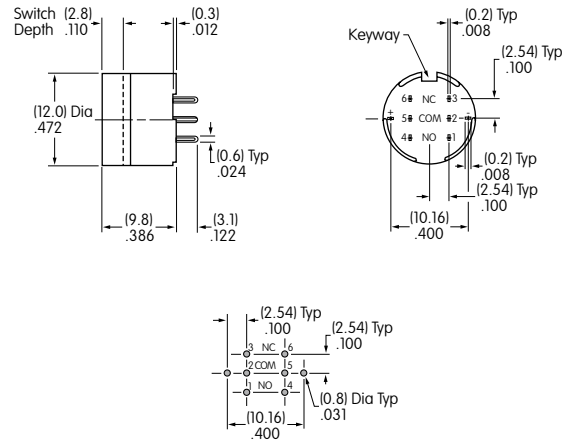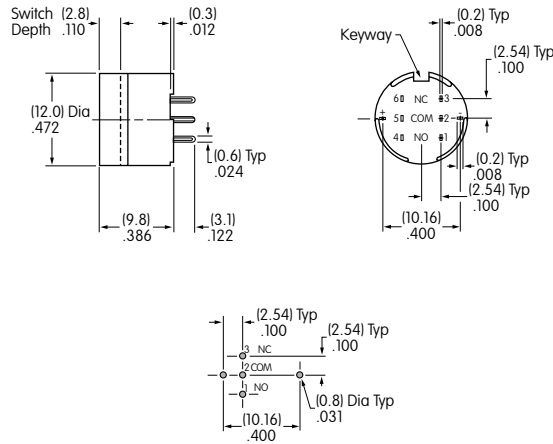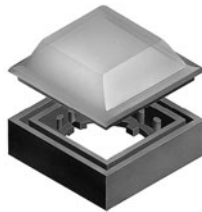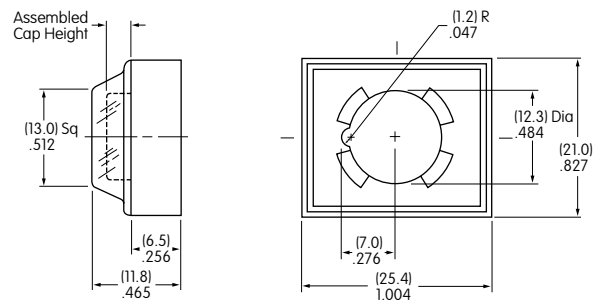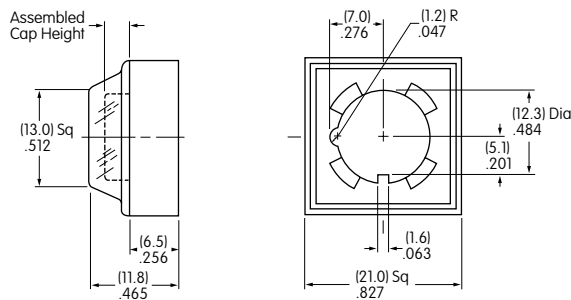
NKK SWITCHES

OPTIONAL ACCESSORIES

Protective Guards

AT494
For Square & Round
(not for Barrier type)

AT4024
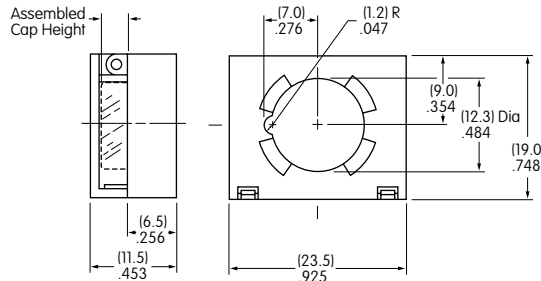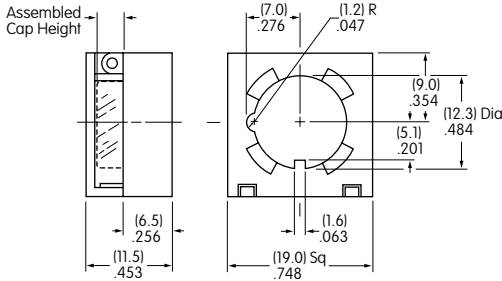**For Rectangular**
(not for Barrier type)

Panel Thickness
Range:

.020" ~ .268"
(0.5 ~ 6.8mm)
for Bushing Mounting

.020" ~ .091"
(0.5 ~ 2.3mm)
for Snap-in Mounting

Protective Guards reduce
the depth of switch
behind panel by
.047" (1.2mm).

Assembled
Cap Height

(7.0) .276   (1.2) R .047

(9.0) .354
(5.1) .201
(12.3) Dia .484

(6.5) .256
(1.6) .063
(11.5) .453
(19.0) Sq .748

Assembled
Cap Height

(7.0) .276   (1.2) R .047

(9.0) .354
(12.3) Dia .484
(19.0) .748

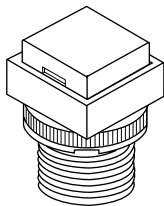(6.5) .256
(11.5) .453
(23.5) .925

Material: Cover: Polycarbonate   Base: Polyamide

ASSEMBLY INSTRUCTIONS

Cap Removal & Installation

For alternate action models
cap must be in UP position
for cap removal. Indentations
on opposite sides of the cap
provide an easy way to lift
the cap out of the holder,
using either the finger nails,
or cap extractor AT109.

LED Polarity & Orientation in Lamp Socket

Super Bright LEDs AT625,
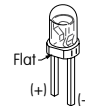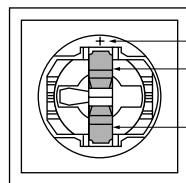AT631, & AT632 are
electrostatic sensitive.

ATTENTION
ELECTROSTATIC
SENSITIVE DEVICES

LEDs
AT625
AT631
AT632

LED
AT635

LED
AT634

Flat
(-)   (+)

Flat
(-)   (+)

Flat
(+)   (-)

Top
View of
Switch

(+) Marking
Positive Lamp Socket

Negative Lamp Socket

Cap Replacement

Note that the cap has a pair of
round tabs and a pair of long tabs
which should be used for correctly
replacing the cap in its holder.
Using the long tabs as guides, slide
the cap with the long tabs moving
into the slots on opposite sides of
the cap holder. Then, the round
tabs will snap into notches on the
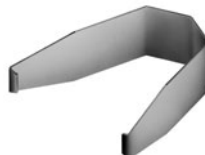other two sides of the holder.

Cap
Indentation
Long Tab
Round Tab
Notch
Slot
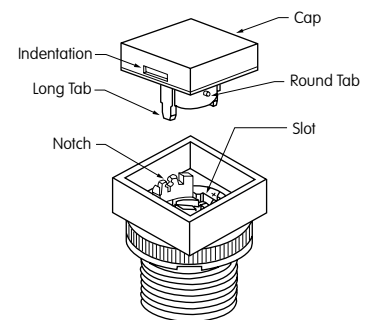
AT108 Socket Wrench
for Bushing Mounting
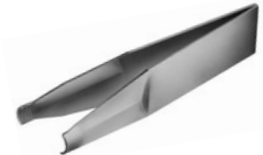
Overtightening the
mounting nut
may damage the
switch housing.

AT109 Cap Extractor

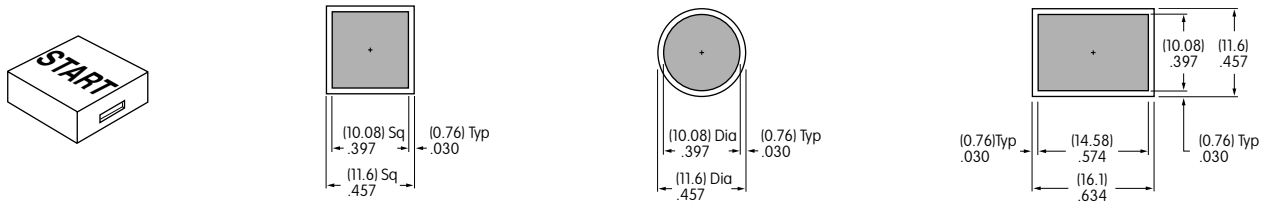### AT111 Lamping Tool

NKK
SWITCHES

Series KB

LEGENDS

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

Suggested Printable Area for KB Lens

Recommended Methods: Screen Print or Pad Print on Lens.
Epoxy based ink is recommended.

(10.08) Sq
.397
(11.6) Sq
.457
(0.76) Typ
.030

(10.08) Dia
.397
(11.6) Dia
.457
(0.76) Typ
.030

(10.08)
.397
(11.6)
.457
(0.76)Typ
.030
(14.58)
.574
(16.1)
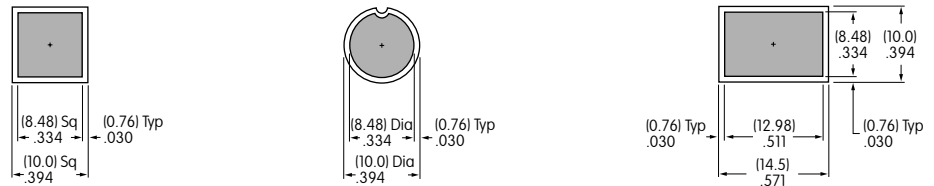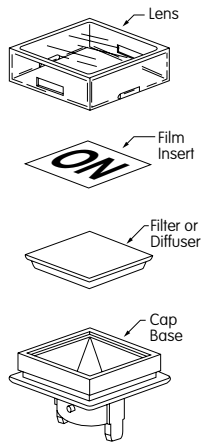.634
(0.76) Typ
.030

D Illuminated PB

Shaded areas are printable areas.

Suggested Printable Area for Film Insert

Recommended Print Method: Laser Print

Film Insert: Clear Polyester, 4 mil max. thickness

Lens

Film Insert

Filter or Diffuser

Cap Base

(8.48) Sq
.334
(10.0) Sq
.394
(0.76) Typ
.030

(8.48) Dia
.334
(10.0) Dia
.394
(0.76) Typ
.030

(8.48)
.334
(10.0)
.394
(0.76) Typ
.030
(12.98)
.511
(14.5)
.571
(0.76) Typ
.030

Shaded areas are printable areas.