

APB Series Backlit Pushbutton Switch

Pushbutton
A

Features/Benefits

- IP67 sealed
- 1,000,000 life cycle
- Illumination
- Threaded or snap-in mounting
- RoHS compliant

Typical Applications

- Harsh environments
- Off-Road
- Industrial
- Medical
- Transportation
- Joystick control modules
- Gaming
- Military



Specifications

FUNCTION: SPST Momentary

CONTACT ARRANGEMENT: N.O.

MOUNTING TYPE:

Snap-in (no panel seal)

Threaded body (hex nut, lock washer, and panel seal gasket provided)

Torque spec for threaded body: Do not exceed 8-9 in-lbs (0.9-1.0 N.m)

Mechanical

OPERATING LIFE: 1,000,000 cycles

TOTAL TRAVEL: 2.1 ± 0.2 mm

OPERATING POINT 1.55 ± 0.25 mm

OVER TRAVEL: 0.6 mm.

OPERATING FORCE: 4N ± 1N standard configuration; other force option 2N ± 0.5N

VIBRATION: 10-500 Hz 10g Max

SHOCK: 60g 11ms sawtooth wave

Electrical

CONTACT RATING:

200mA @ 24 V DC resistive (500,000 cycles)

100mA @ 50 V DC resistive (500,000 cycles)

400mA @ 32 V AC resistive (500,000 cycles)

125mA @ 125 V AC resistive (1,000,000 cycles)

DIELECTRIC STRENGTH: 1000 V AC min.

INSULATION RESISTANCE: 1 G Ω @ 500 VDC

INITIAL CONTACT RESISTANCE 50 mΩ max (without wire leads)

BOUNCE TIME: <5 ms

Materials

HOUSING: PBT

BASE: PBT

CAP: Painted polycarbonate

ACTUATOR:

Illuminated: Clear polycarbonate

INTERNAL SEAL: Silicone rubber

TERMINALS: Copper alloy, gold over silver plating

MOVABLE CONTACT: Copper alloy, gold over silver plating

TERMINAL SEAL: Epoxy

WIRE LEADS: UL1569 Black 22 AWG

Operating Environment

OPERATING TEMPERATURE: -40°C to 85°C

ESD PROTECTION: 20 KV min.

Process Environment

SEALING: IP67 for threaded body

IP65 for snap-in version (no panel seal)

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, please contact Customer Service.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box.



Designation _____

APB APB Series

Operating Force _____

2 2 Newtons

4 4 Newtons

Cap _____
E Extended Dome (600E)

Illumination _____
01 Super White
07 Super Blue

Bushing Style _____
S Snap-in plastic
T Threaded plastic

Cap Symbol
000 Painted black over white without symbol*

001 Plus

002 Locked

003 Engine stop

004 Park brake release

005 Engine start

006 Fast

007 Slow

008 Unlocked

009 Rock shaft lower

010 Minus

Terminal Seal

E Epoxy

Contact Material

B Gold

Termination

Z Solder Lug

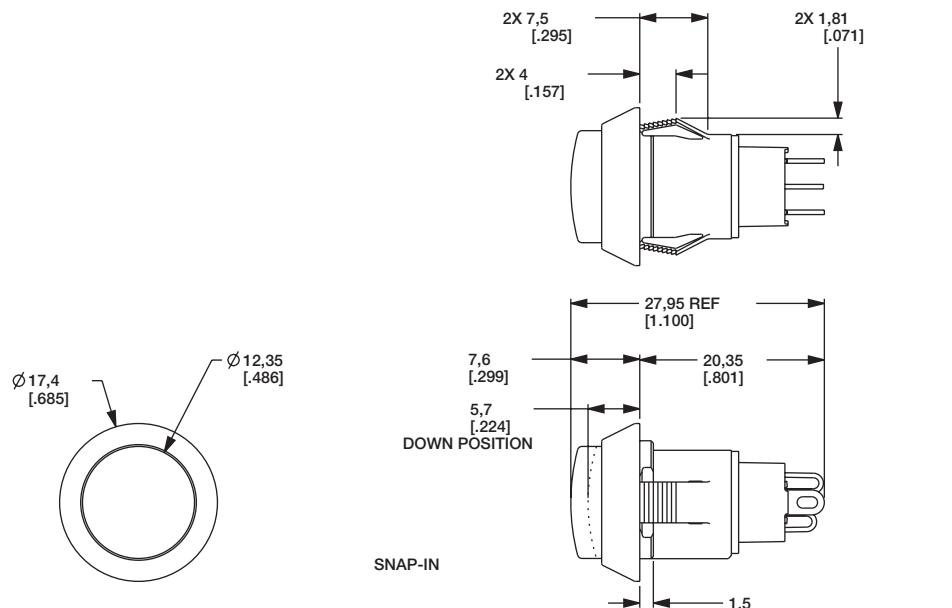
W 12" Wire Leads 22 AWG

* cap painted black over white to allow customer laser etching

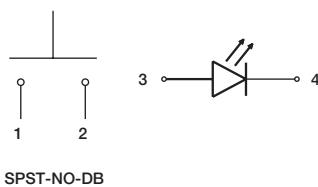
APB Series Backlit Pushbutton Switch



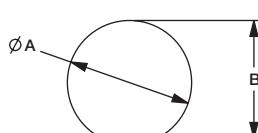
A
Pushbutton



ELECTRICAL SCHEMATIC

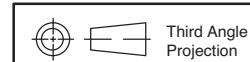


PANEL CUTOUT



PANEL THICKNESS	DIM A (±0.05 MM)	DIM B (±0.05 MM)
1 MM [0.039 IN]	13.70 MM [0.539 IN]	13.00 MM [0.512 IN]
2 MM [0.079 IN]	13.80 MM [0.539 IN]	13.00 MM [0.512 IN]
3 MM [0.118 IN]	13.90 MM [0.547 IN]	13.10 MM [0.516 IN]
THREADED BODY MIN PANEL THICKNESS 1 MM	13.70 MM [0.539 IN]	13.00 MM [0.512 IN]

A 0.1 MM MIN CHAMFER ON THE LEADING EDGE OF MOUNTING HOLE IS
RECOMMENDED FOR SNAP-IN VERSION.



Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

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Pushbutton

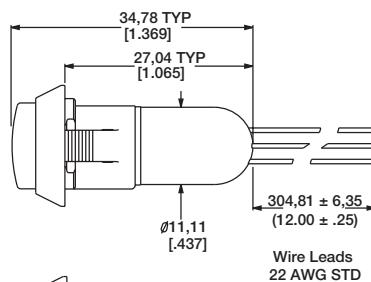
A

TERMINATION

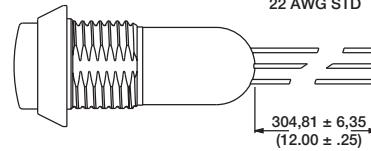
W 12" WIRE LEADS

Z SOLDER LUG

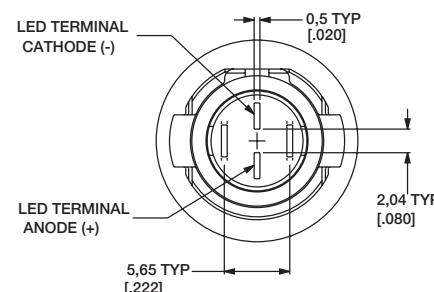
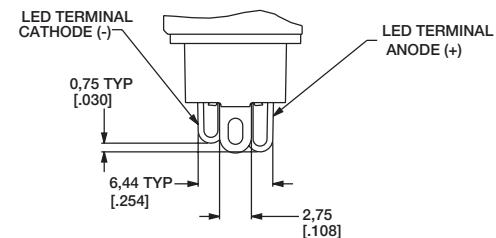
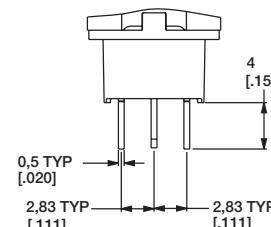
WIRE LEADS WITH
POTTED BASE,
SNAP-IN
ILLUMINATION



WIRE LEADS WITH
POTTED BASE,
THREADED
ILLUMINATION



WIRES:
BLACK - TERMINALS
RED - LED (+) POSITIVE
WHITE - LED (-) NEGATIVE



CONTACT MATERIAL

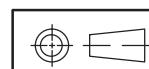
B GOLD

OPTION CODE	CONTACT MATERIAL
B	Gold

TERMINAL SEAL

E EPOXY

All models are epoxy sealed



Third Angle
Projection

APB Series Backlit Pushbutton Switch

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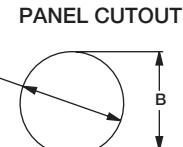
CAP SYMBOLS



-000		NO SYMBOL
-001		PLUS
-002		LOCKED
-003		ENGINE STOP
-004		PARK BRAKE RELEASE
-005		ENGINE START



-006		FAST
-007		SLOW
-008		UNLOCKED
-009		ROCK SHAFT LOWER
-010		MINUS



PANEL CUTOUT
Panel Orientation
Flat indicates bottom

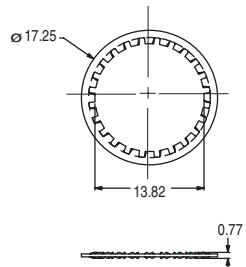
See chart on previous page
for dimensions

NOTES:
1. ALL GRAPHICS MUST BE POSITIONED AS SHOWN, PERPENDICULAR TO
ALIGNMENT FEATURE ON UNDERSIDE OF CAP.
2. GRAPHIC MARKING MUST BE ALIGNED WITH THE FLAT FEATURE ON THE
UNDERSIDE OF THE CAP AS SHOWN, TOLERANCE $\pm 3^\circ$

HARDWARE

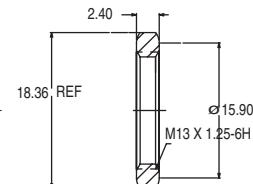
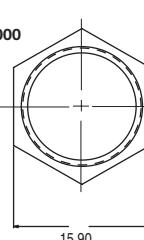
LOCK WASHER

Part Number 647D00A47



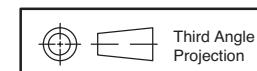
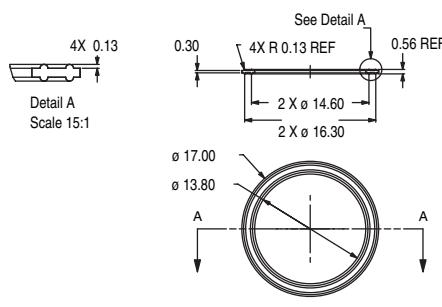
HEX NUT

Part number 515D00000



PANEL SEAL

Part Number 655D00000



Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Switches:

[APB4E01TZBE009](#) [APB4E01TZBE004](#) [APB4E01TZBE008](#) [APB4E01TZBE002](#) [APB4E01TZBE005](#)
[APB4E01TZBE003](#) [APB4E01TZBE001](#) [APB4E01TZBE010](#) [APB4E01TZBE007](#) [APB4E01TZBE006](#)