General Specifications

Electrical Capacity (Resistive Load)

Power Level (code W): 3A @ 125V AC
Logic Level (code G): 0.4VA maximum @ 28V AC/DC maximum
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
Logic/Power Level (code A): Combines W & G ratings
Note: See Supplement section to find explanation of operating range.

Other Ratings

Contact Resistance: 20 milliohms maximum for silver; 30 milliohms maximum for gold
Insulation Resistance: 1,000 megohms minimum @ 500V DC
Dielectric Strength: 1,000V AC minimum between contacts for 1minute minimum;
1,500V AC minimum between contacts & case for 1minute minimum
Mechanical Life: 200,000 operations minimum
Electrical Life: 25,000 operations minimum for silver; 100,000 operations minimum for gold
Nominal Operating Force: Single pole 2.45N; double pole 3.92N
Travel: Pretravel .024" (0.6mm); Overtravel .016" (0.4mm); Total Travel .039" (1.0mm)

Materials & Finishes

Plunger: Brass with nickel plating
Bushing: Brass with nickel plating
Mounting & Body Frames: Stainless steel
Support Bracket: Brass with tin plating
Case: Polybutylene terephthalate (PBT) (UL94V-0)
Base: Diallyl phthalate resin
Movable Contactor: Phosphor bronze with silver or gold plating
Movable Contacts: Silver alloy (code W); copper with gold plating (code G)
Stationary Contacts: Silver with silver plating (code W); copper or brass with gold plating (code G)
Terminals: Copper with silver plating; copper or brass with gold plating

Environmental Data

Operating Temp Range: –30°C through +85°C (–22°F through +185°F)
Humidity: 90 ~ 95% humidity for 100 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 5 shocks in each direction)

Installation

Mounting Torque: 1.5Nm (13 lb•in) for double nut; 0.7Nm (6 lb•in) for single nut
Cap Installation Force: 80N (18 lbf) maximum downward force on actuator

Processing

Soldering: Wave Soldering Recommended: See Profile B in Supplement section.
Manual Soldering: See Profile B in Supplement section.
Cleaning: These devices are not process sealed. Hand clean locally using alcohol based solution.

Standards & Certifications

Flammability Standards: UL94V-0 Case
UL : **File No. E44145 - Recognized only when ordered with marking on switch.**
Add "/U" or "/CUL" before dash in part number to order UL recognized switch.
All single & double pole models recognized at 3A @ 125V AC or 0.4VA max. @ 28V AC/DC max.
CSA: **File No. 023535_0_000 - Certified only when ordered with marking on switch.**
Add "/C" before dash in part number to order CSA certified switch.
Single pole & double pole models certified at 3A @ 125V AC or 0.4VA max. @ 28V AC/DC max.

Distinctive Characteristics

Short stroke and light touch.

Antijamming design protects contacts from damage due to excessive downward force on the actuator.

High torque bushing construction prevents rotation or separation from frame during installation.

Stainless steel frame resists corrosion.

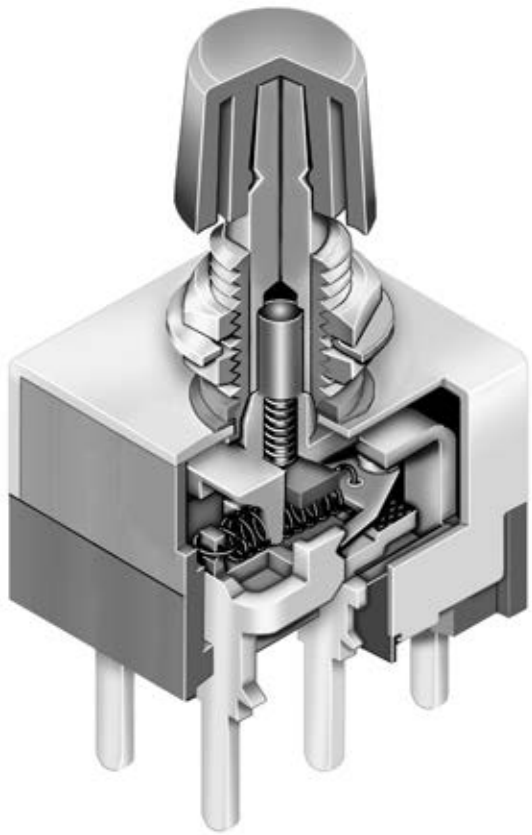
Longer center solder lug terminal simplifies wiring and soldering.

Patented silver contacts of specially composed alloy for hardness.

Epoxy sealed terminals prevent entry of solder flux and other contaminants.

Snap-acting mechanism gives smooth actuation and audible feedback.

Prominent external insulating barriers increase insulation resistance and dielectric strength.



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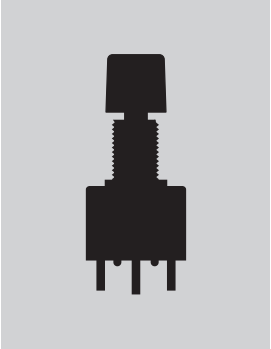
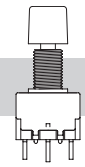
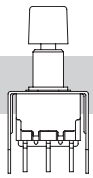
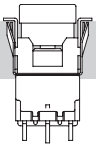




Bushing Mount Page C118



Bracket PC Mount Page C121



Snap-in Mount Page C124

TYPICAL SWITCH ORDERING EXAMPLE

MB25 | 11 | S2 | G | 13 — B | C

Poles & Circuits

11	SPDT	ON	(ON)
21	DPDT	ON	(ON)
( ) = Momentary			

Contact Materials & Ratings

W	Silver Rated 3A @ 125V AC
G	Gold Rated 0.4VA max @ 28V AC/DC max

Caps

B	.315″ (8.0mm) Diameter
C	.394″ (10.0mm) Diameter

Bushing

S2	.300″ (7.6mm) Smooth with Keyway

Terminals

13	.250″ (6.35mm) Straight PC with Bracket
30	Right Angle (Single Pole only)
45	Vertical PC

Cap Colors

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

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

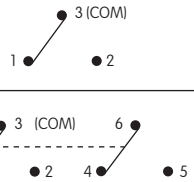
MB2511S2G13-BC

Series MB2500

Snap-Action Bracket PC Mount Pushbuttons

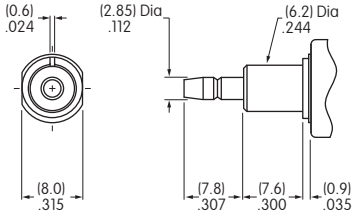
POLES & CIRCUITS

		Plunger Position ( ) = Momentary		Connected Terminals		Throw & Switch Schematics
Pole	Model	Normal (Keyway)	Down	Normal (Keyway)	Down	Note: Terminal numbers are not actually on the switch.
SP	**MB2511**	ON	(ON)	3-1	3-2	SPDT
DP	**MB2521**	ON	(ON)	3-1 6-4	3-2 6-5	DPDT

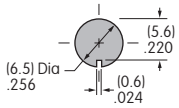


BUSHING

S2 **.300" (7.6mm) Smooth with Keyway**



Panel Cutout



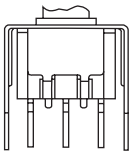
CONTACT MATERIALS & RATINGS

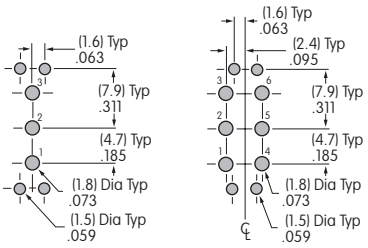
W	**Silver over Silver**	**Power Level**	**3A @ 125V AC**
G	**Gold over Brass or Copper**	**Logic Level**	**0.4VA maximum @ 28V AC/DC maximum**

Note: Complete explanation of operating range in Supplement section.

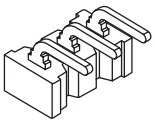
TERMINALS

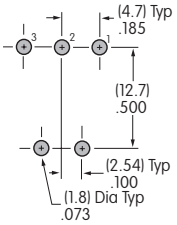
13 **.250" (6.35mm) Terminal with .465" (11.8mm) Bracket**



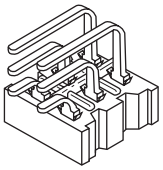


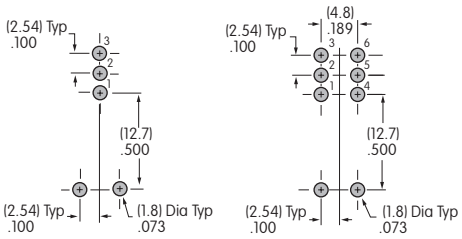
30 **Right Angle PC** Single Pole only





45 **Vertical PC**



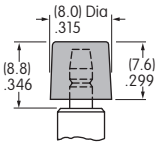


CAPS & CAP COLORS

B **AT443**
.315" (8.0mm) Diameter Cap

Material: Polycarbonate

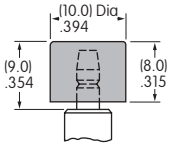
Finish: Glossy



C **AT442**
.394" (10.0mm) Diameter Cap

Material: Polycarbonate

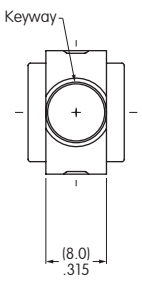
Finish: Glossy

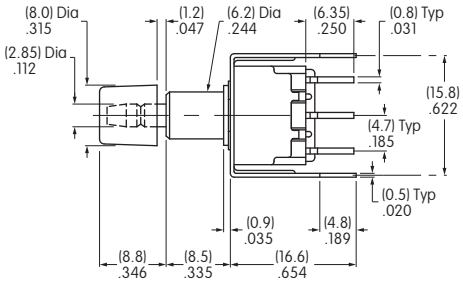


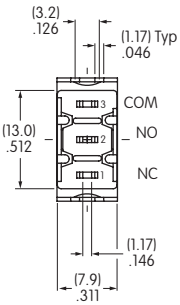
Cap Colors Available: A Black, B White, C Red, E Yellow, F Green, G Blue

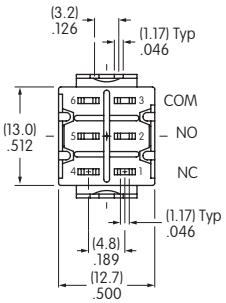
TYPICAL SWITCH DIMENSIONS

Single Pole / Double Pole / Straight PC • Bracket



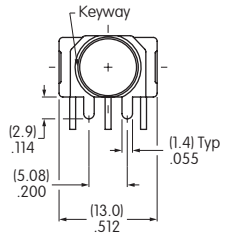


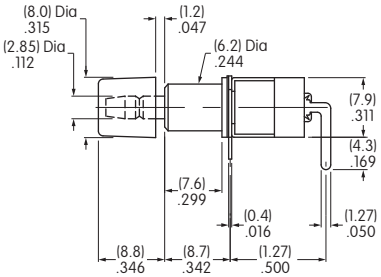


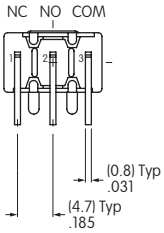


MB2511S2G13-BC

Single Pole / Right Angle PC

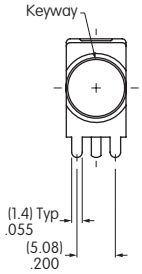


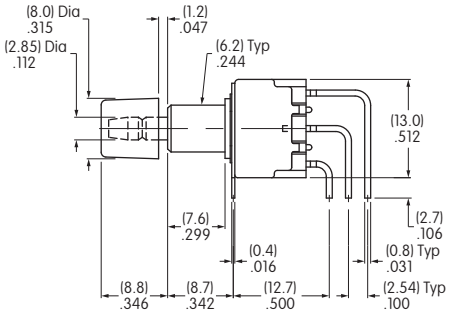


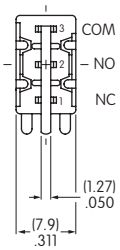


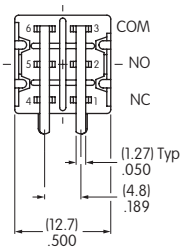
MB2511S2G30-BC

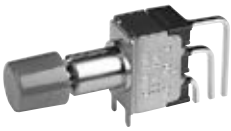
Single Pole / Double Pole / Vertical PC











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