OMRON

Buzzer

M2BJ-B

16-mm Diameter Panel-Mounted Buzzer Unit

- Four models offer eight different types of sounds, plus two modes newly added to the high-sound type
- Intermittent or continuous sound selected by jumper setting
- Three supply voltages: 6 VAC/DC and 12 to 24 VAC/DC
- Jumper storage provided at bottom of unit
- Complements the A3G range of Pushbuttons, Selector Switches, and Key Switches.

Ordering Information

Item		Standard sound				High sound	
Sound	**w/jumper**	Intermittent	Intermittent (short)	Intermittent (high-pitched)	Intermittent (short, high-pitched)	Intermittent (high-pitched)	Intermittent (short)
	w/o jumper	Continuous	Intermittent (long)	Continuous (high-pitched)	Intermittent (long, high-pitched)	Continuous	Intermittent (long)
Supply voltage	**6 VAC/DC**	M2BJ-B06	M2BJ-B06A	M2BJ-B06B	M2BJ-B06C	M2BJ-BH06D	M2BJ-BH06E
	12 to 24 VAC/DC	M2BJ-B24	M2BJ-B24A	M2BJ-B24B	M2BJ-B24C	M2BJ-BH24D	M2BJ-BH24E
	12 to 24 DC	M2BJ-B24-D	---	M2BJ-B24B-D	---	M2BJ-BH24D-D	M2BJ-BH24E-D

Specifications

■ Standard-sound Type

Rated voltage	**6 VAC/DC**		**M2BJ-B06**	**M2BJ-B06A**	**M2BJ-B06B**	**M2BJ-B06C**
	12 to 24 VAC/DC		**M2BJ-B24**	**M2BJ-B24A**	**M2BJ-B24B**	**M2BJ-B24C**
Sound pressure (distance: 0.1 m, at rated voltage)			Continuous sound: 80 dB (phons) min.	Continuous: 80 dB (phons) min.	Continuous sound: 80 dB (phons) min.	Continuous: 80 dB (phons) min.
Driving frequency			2±0.5 k Hz		4±0.5 k Hz	
Intervals			190 times/minute±10%	Long: 55 times/minute±10% Short: 700 times/minute±10%	190 times/minute±10%	Long: 55 times/minute±10% Short: 700 times/minute±10%
Current consumption		**DC**	7 mA	7 mA	20 mA	20 mA
		AC	20 mA	20 mA	20 mA	20 mA
Life expectancy			1,000 hours min.			

■ High-sound Type

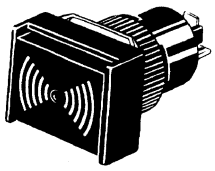
Item		High-sound type					
		M2BJ-BH06D	M2BJ-BH24D	M2BJ-BH06E	M2BJ-BH24E	M2BJ-BH24D -D	N2BJ-BH24E-D
Rated voltage		6 VAC/DC	12 to 24 VAC/DC	6 VAC/DC	12 to 24 VAC/DC	12 to 24 VDC	
Sound pressure (adjustable range) (rated voltage, distance of 0.1 m, A range)		70 to 100 dB (phons) (Adjustable range)					
Driving frequency		2.8±0.5 k Hz					
Intervals		Approx. 190 times/min.		Long: Approx. 55 times/min. Short: Approx. 700 times/min.		Approx. 190 times/min.	Long: Approx. 55 times/min. Short: Approx. 700 times/min.
Current consumption	DC	50 mA max.					
	AC	100 mA max.				---	
Inrush current		1 A max.					
Life expectancy		1,000 hours min.					

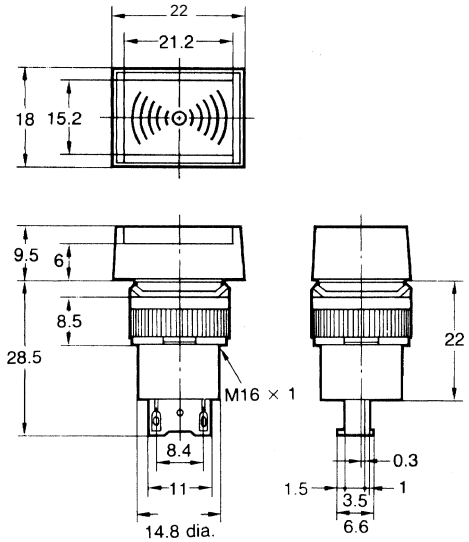
Characteristics

Insulation resistance	100 MΩ min. (between ground and current-carrying parts)
Dielectric strength	1,000 VAC for 1 minute (between grounds)
Ambient temperature	Operating: −10°C to 55°C (no icing or condensation) Storage: −25°C to 65°C (no icing or condensation)
Humidity	35% to 85% RH

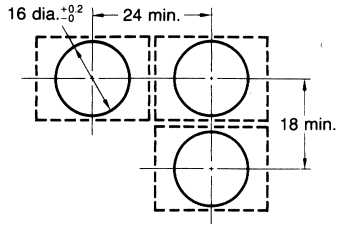
Dimensions

M2BJ-B

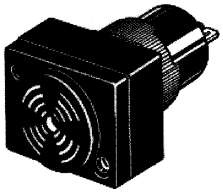


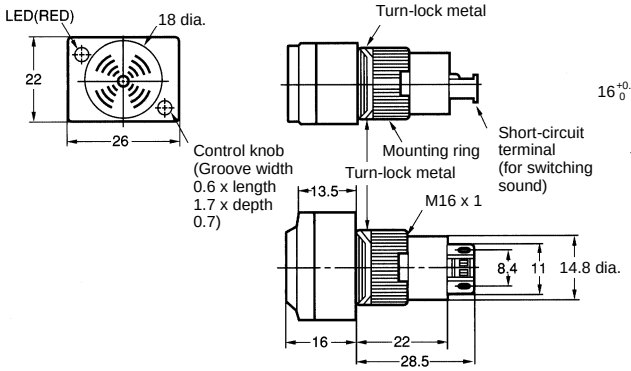


Panel cutout (Top view)

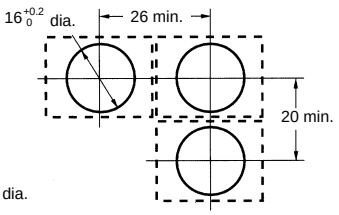


M2BJ-BH





Panel cutout*



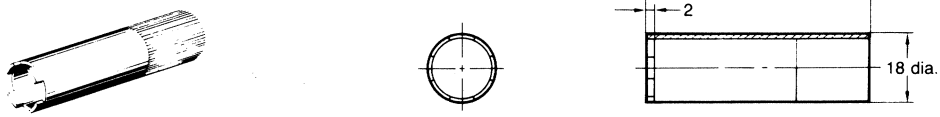
Note: Plate thickness of the panel should be 1.0 to 3.2 mm.

Accessories (Order Separately)

Name	Shape	Classification	Model	Remarks
Snap-in mounting leaf spring		---	A3B-3001	Cannot be used with mounting nut Panel cutout becomes 16.2 dia. +0.3, −0
Panel plug		Rectangular	A3BJ-3003	Reserves hole cut out on panel for future mounting
		Square	A3BA-3003	
		Round	A3BT-3003	
Tightening tool		---	A3B-3004	Useful for mounting buzzers one after another. Do not over-tighten.

Dimensions

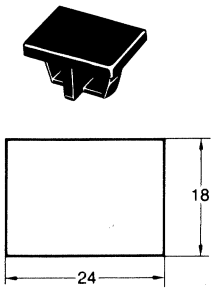
Tightening Tool



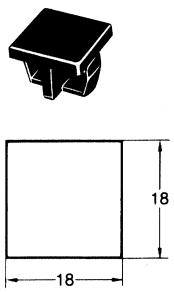
Panel Plug

Select a panel plug which best compliments the design of the mounting panel. The dimensions of the hole cutout for the panel plugs are the same as those of the buzzer unit.

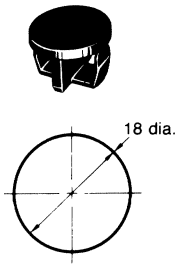
Rectangular



Square



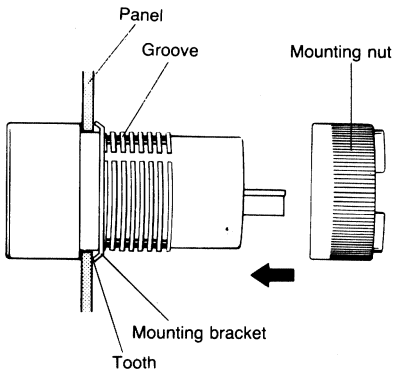
Round



Hints on Correct Use

Nut Mounting

- Insert the buzzer unit from the front of the panel and tighten the mounting nut inserted from the rear of the panel.
- Since a projection exists on the rear portion of the buzzer unit, if the mounting nut cannot be fitted into position, turn the nut slightly.
- The tightening torque of the mounting nut should be less than 5 kg-cm.
- Solder the terminals after mounting the nut. Otherwise, the terminals, when thickened by solder, may prevent the nut from being screwed down onto the buzzer unit.



Mounting

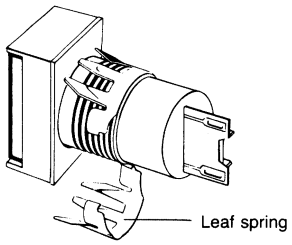
- Tighten the mounting nut at a torque of less than 5 kg-cm.

Wiring

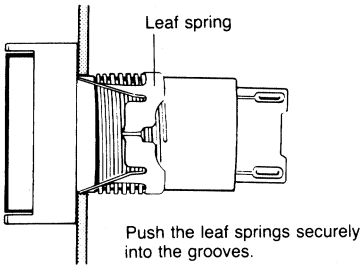
- Exercise caution that the input terminals are not short-circuited by the short-circuiting jumper.
- Finish soldering within 5 seconds with a 30 watt soldering iron, or within 3 seconds at a solder temperature of 240°C. For about a minute after soldering, do not apply any force to the buzzer unit, to avoid deforming the softened plastic buzzer unit base.
- Use an non-corrosive, resin-based soldering flux.

Snap-in Mounting

- Attach the mounting leaf spring to the buzzer. Engage the edges of the leaf spring in the two grooves on the threaded section of the buzzer. After inserting the leaf spring edges into the grooves, confirm that the leaf spring has seated. Be sure to attach both leaf springs.

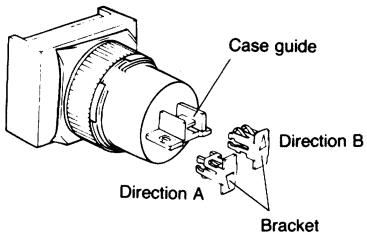


- Insert the buzzer assembly into the hole on the mounting panel from the front.

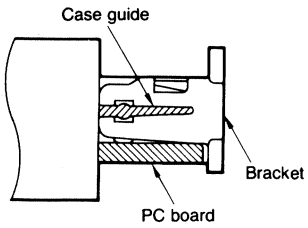


Short-circuiting Jumper

- The buzzer sounds continuously or intermittently depending on how the short-circuiting bracket is attached to the case guide. When the bracket is attached with the triangle on it facing direction A (PC board side), the buzzer sounds intermittently.



- To produce continuous sounds, attach the bracket to the case guide so that the triangle on the bracket faces direction B.



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. A046-E1-2A