M2BJ

CSM_M2BJ_DS_E_4_1

Buzzer Unit Series with Cylindrical $\textbf{22-mm} \times \textbf{16-dia. Body}$

• Lineup includes standard-volume models (80 phons, constant) and high-volume models (70 to 95 phons, variable). Intermittent or continuous sound can be selected.





Refer to "Safety Precautions for All Pushbutton Switches" and "Safety Precautions" on page 5.

List of Models

Buzzer

Appearance	Model
Rectangular standard-volume model	
	M2BJ-B
Rectangular high-volume model	
	M2BJ-BH

OMRON

Ordering Information

Ар	pearance		(((((())))				
			Standar	High sound *1			
w/jumper direction A *2		Intermittent	Intermittent (short)	Intermittent (high-pitched)	Intermittent (short, high-pitched)	Intermittent (high-pitched)	Intermittent (short)
w/jumper direction B *2 (w/o jumper)		Continuous	Intermittent (long)	Continuous (high-pitched)	Intermittent (long, high-pitched)	Continuous	Intermittent (long)
Supply voltage							
6 VAC/VDC		M2BJ-B06	M2BJ-B06A	M2BJ-B06B	M2BJ-B06C	M2BJ-BH06D	M2BJ-BH06E
12 to 24 VAC/VDC	Model	M2BJ-B24	M2BJ-B24A	M2BJ-B24B	M2BJ-B24C	M2BJ-BH24D	M2BJ-BH24E
12 to 24 VDC		M2BJ-B24-D		M2BJ-B24B-D		M2BJ-BH24D-D	M2BJ-BH24E-D

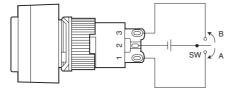
External Signal Selection Model (M2BJ-BH24D-DA)

• An external signal selection model is also available. With this model, it is possible to switch between continuous and intermittent sound using an external signal instead of the jumper.

M2BJ-BH24D-DA

• SW:

When A direction is ON (terminals 1, 2 ON): intermittent sound When B direction is ON (terminals 2, 3 ON): continuous sound



Note: 1. Ensure that voltage is not applied simultaneously between terminals 1, 2, and 3.

2. Check the power supply polarity. Connecting with the polarity reversed may result in damage.

^{*1.} High-sound models incorporate an LED, which lights when the Buzzer sounds.
*2. Refer to "Short-circuiting Jumper (M2BJ-BTH)" on page 5 for the insert direction of the jumper.

Specifications

Buzzer

	Model	Standard-sound Models						
Item		M2BJ-B06	M2BJ-B06A	M2BJ-B06B	M2BJ-B06C			
Operating voltage		6 VAC/VDC						
Sound pressure (at 0.1 m and r	ated voltage)	Continuous sound: 80 dB (phons) min.						
Driving frequency		2	2±0.5 kHz		4±0.5 kHz			
Intervals		100 times/minute±109/	*2 Long:55 times/minute±10%	100 times/minute : 109/	*4 Long:55 times/minute±10%			
intervals		190 times/minute±10%	*1 Short:700 times/minute±10%	190 times/minute±10%	*3 Short:700 times/minute±10%			
Current	Current DC		mA max.	20 mA max.				
consumption	AC							
Inrush current		1 A max.						
Life expectancy		1,000 hours min.						
Insulation resistance		100 M Ω min. (between ground and current-carrying parts)						
Dielectric strength		1,000 VAC for 1 minute (between grounds)						
Ambient operating temperating	erature	−10°C to 55°C (no icing or condensation)						
Ambient operating humic	dity		35% to 85%RH					
Ambient storage tempera	ature	−25°C to 65°C (no icing or condensation)						
Degree of protection		IP 40						
Weight		Approx. 9 g						

	Model	Standard-sound Models						
Item		M2BJ -B24	M2BJ-B24A	M2BJ -B24B	M2BJ-B24C	M2BJ-B24-D	M2BJ-B24B-D	
Operating voltage			12 to 24 '	12 to 24 VDC				
Sound pressure (at 0.1 m and rated voltage)		Continuous sound: 80 dB (phons) min.						
Driving frequency		2±0.5 kHz		4±0.5 kHz		2±0.5 kHz 4±0.5 kHz		
Intervals		190 times/	*2 Long:55 times/minute±10%	190 times/	*4 Long:55 times/minute±10%	190 times/minute±10%		
		minute±10%	*1 Short:700 times/minute±10%	minute±10%	*3 Short:700 times/minute±10%			
Current	Current DC		7 mA max. 20 mA max.			7 mA max.	20 mA max.	
consumption	AC	20 mA						
Inrush current			1 A max.					
Life expectancy		1,000 hours min.						
Insulation resistance		100 M Ω min. (between ground and current-carrying parts)						
Dielectric strength		1,000 VAC for 1 minute (between grounds)						
Ambient operating temperating	erature	−10°C to 55°C (no icing or condensation)						
Ambient operating humic	dity	35% to 85%RH						
Ambient storage tempera	ature	-25°C to 65°C (no icing or condensation)						
Degree of protection		IP 40						
Weight		Approx. 9 g						

	Model	High-sound Models						
Item		M2BJ-BH06D	M2BJ-BH24D	M2BJ-BH06E	M2BJ-BH24E	M2BJ-BH24D-D	M2BJ-BH24E-D	
Operating voltage		6 VAC/VDC	12 to 24 VAC/VDC	6 VAC/VDC	12 to 24 VAC/VDC	C 12 to 24 VDC		
Sound pressure (The soun can be adjusted. The figure for pressure given above is for mat a distance of 0.1 m at the ra	70 to 95 dB (phons)							
Driving frequency		3±0.5 kHz						
Intervals		Approx. 190 times/min.		*6 Long: Approx. 55	times/min.	Approx.190 times/min.	*6 Long: Approx.55 times/min.	
intervals		Арргох. 130	times/min.	*5 Short: Approx. 70	0 times/min.	Approx. 190 times/min.	*5 Short: Approx.700 times/min.	
Current	DC		50 mA max.					
consumption	AC	10		00 mA max.				
Inrush current	1 A max							
Life expectancy				1	,000 hours min.			
Insulation resistance		100 MΩ min. (between ground and current-carrying parts)						
Dielectric strength		1,000 VAC for 1 minute (between grounds)						
Ambient operating temperature -10°C to 55°C (no icing or condensation)								
Ambient operating humic	lity	35% to 85%RH						
Ambient storage tempera	iture	-25°C to 65°C (no icing or condensation)						
Degree of protection		IP 40						
Weight		Approx. 12 g						

*Tone

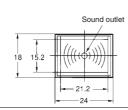
*1	Standard	High volume	Bird cry	
* 2		High volume	Telephone busy signal	
* 3	volume	Continuous (high pitch)	Short beeps	
*4		Continuous (night pitch)	Long beeps	
* 5	High volume	Intermittent	Alternating high-low pitch	
* 6	Tilgii volulile	memmem	Long beeps	

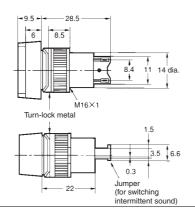
OMRON 3

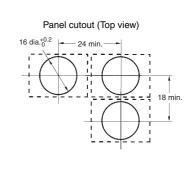
Dimensions (Unit: mm)

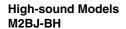
Standard-sound Models M2BJ-B



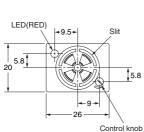


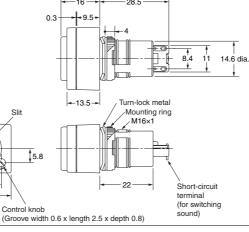


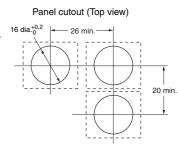






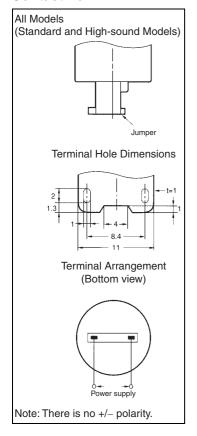






Note: The LED lights while the sound is produced. For intermittent sound, the LED flashes synchronized with the sound.

Contact Form



4

Safety Precautions

Refer to Safety Precautions for All Pushbutton Switches.

Precautions for Correct Use

Application Precautions

- When power is supplied, there is an inrush current of up to 1 A.
 Confirm that this will not adversely affect operation or damage any devices before using the M2BJ in application. There is no inrush current with DC-only models (M2BJ-□□□-D).
- With models that can use both AC and DC, residual energy in the internal capacitor may cause residual sound.

Wiring

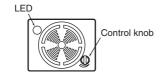
- Perform soldering promptly and correctly at a temperature of 350°C within 3 seconds. Wait for one minute after soldering before exerting any external force on the solder.
- If flux is required, use non-corrosive rosin liquid. Ensure that the flux does not penetrate the inside of the case.
- In order to improve the reliability of the soldering and to prevent pattern burnout, loop the wire through the terminal hole before soldering.
- In order to fit the terminal holes, use lead wires with a nominal cross sectional area of 0.25 mm² max.

Operating Environment

 Do not use the Buzzer in environments where foreign substances may enter the sound outlet. Otherwise, the Buzzer may not sound.

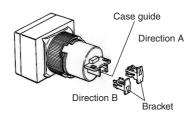
Volume Adjustment Mechanism (M2BJ-BH Only)

- Adjust the volume by turning the control knob on the face of the Buzzer using a screwdriver. Turn to the right to increase the volume and turn to the left to decrease the volume.
- Turn the control knob with a torque of 0.98 to 2.94 mN·m.

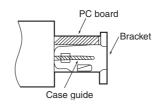


Short-circuiting Jumper (M2BJ-BTH)

- 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.
- The bracket is set in direction A when ship the product. If the bracket becomes lost, contact your OMRON representative. The model number to order is M2BJ-BTH.



Short-circuit Bracket Mounting Location



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- and (ii) Buyer has no past due amounts.

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