Prime

SPECIFICATION

TYPE	ＩＣＥＭ	DRAWN	A.Kumamoto	PRIMO COMPANY LIMITED ENGINEERING DEPARTMENT	Release No
MODEL NO	ＥＭ１７２	CHECKED			0 1 2 3 4
PUB. DATE	Ｓｅｐ－７－２００９	APPROVED		SPECIFICATION NO ２C-８５９０	5 6 7 8 9

1. This specification is applied to Primo back electret condenser microphone unit Model EM172-Z1.

2. Measuring conditions : Temperature 20 ℃ ±2 ℃ , humidity 60 % ～ 70 %.
Other condition is applied to JIS-C-5502.

3. Appearance and dimension : as per Fig.1

4. Electrical Specification :
- 4- 1) Directional Characteristic : Non-Directional
- 4- 2) Sensitivity····· －28 dB ±3 dB at 1 kHz (0 dB＝1 V/Pa) R_L＝3.9 kΩ V_{CC}＝5 V
- 4- 3) Impedance····· 2.4 kΩ ±30 % at 1 kHz (R_L＝3.9 kΩ)
- 4- 4) Frequency Response····· as per Fig.3
- 4- 5) S / N Ratio····· 80 dB Typ. at 1 kHz (1 Pa, A weighted network)
- 4- 6) Max Input Sound Level····· 122 dB S.P.L. Typ.
- 4- 7) Operating Voltage····· 5 V (3 V ～ 10 V)
- 4- 8) Circuit Current····· 600 μA max (V_{CC}＝5 V)
- 4- 9) Electrical Circuit····· as per Fig.2
- 4-10) Storage Temperature····· －40 ℃ ～ ＋85 ℃
- 4-11) Operating Temperature····· －20 ℃ ～ ＋60 ℃

5. Environmental Specification :
After any following tests,the sensitivity of the microphone unit shall not change more than ±3dB from initial value,and shall keep their initial operation and appearance.

- 5-1) High Temperature Test···The microphone unit must be subjected to ＋85 ℃ for 200 Hours, and expose to room temperature for 6 Hours.
- 5-2) Low Temperature Test····The microphone unit must be subjected to －40 ℃ for 200 Hours, and expose to room temperature for 6 Hours.
- 5-3) Temperature Cycle Test··The microphone unit must be subjected to following condition 【＋85 ℃ 1H ～ room temp 1H ～ －40 ℃ 1H ～ room temp 1H 】 at 5 cycle, and expose to room temp for 6 Hours.
- 5-4) Humidity Test·····The microphone unit must be subjected to ＋60 ℃,90 % RH for 200 Hours, and expose to room temp for 6 Hours.
- 5-5) Drop Test·····The microphone unit without package must be subjected to each 3 drops at three axes from the height of 1 meter to 20 mm thick hardwood board.
- 5-6) Vibration Test·····The microphone unit must be subjected to each 30 minutes vibrations at three axes 3 mm dynamic range, 1000 cycle／minute.

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TYPE	ICEM	DRAWN	A.Kumamoto	PRIMO COMPANY LIMITED ENGINEERING DEPARTMENT	Release No
MODEL NO	EM172	CHECKED			0 1 2 3 4
PUB. DATE	Sep-7-2009	APPROVED		SPECIFICATION NO 2C-8590	5 6 7 8 9

Fig. 1 : Appearance and dimension (Dimension : mm)

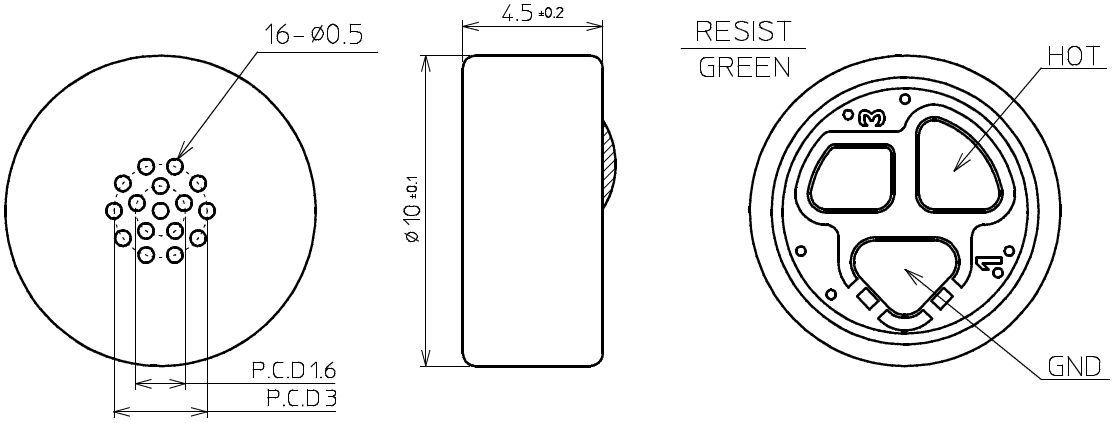


Fig. 2 : Electrical circuit

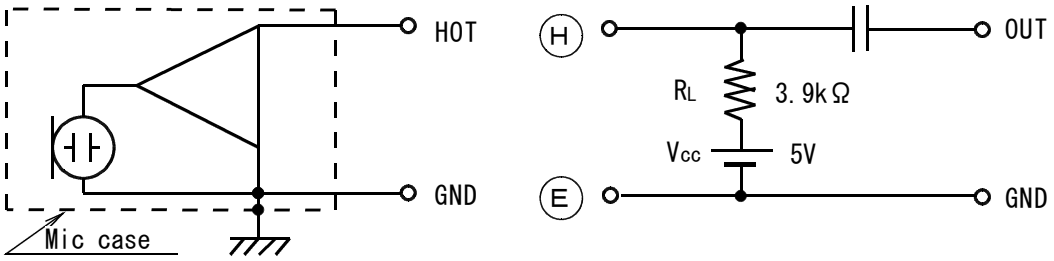
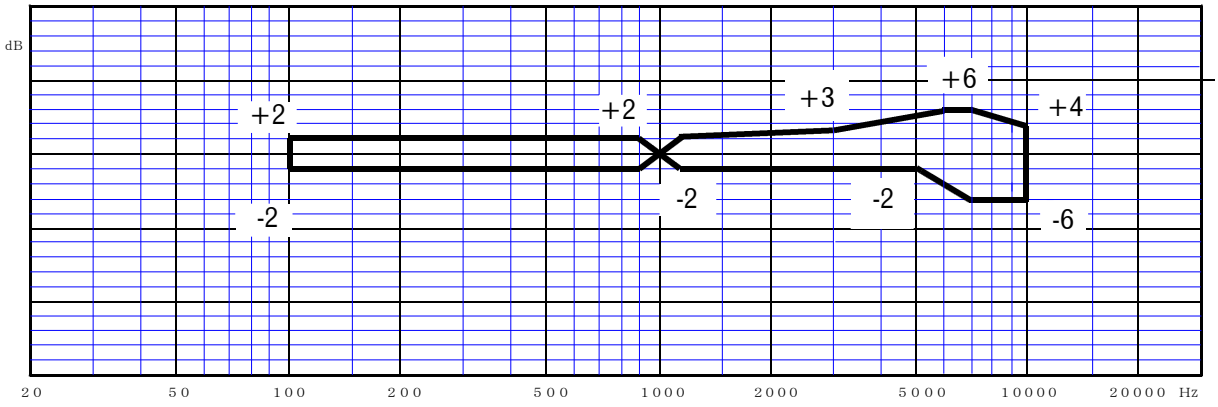


Fig. 3 : Frequency response



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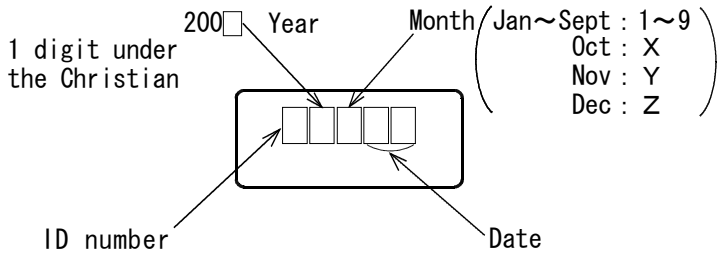
6. Production date number :



7. Packing : 500 pcs mic.units in one package box (BUA8).