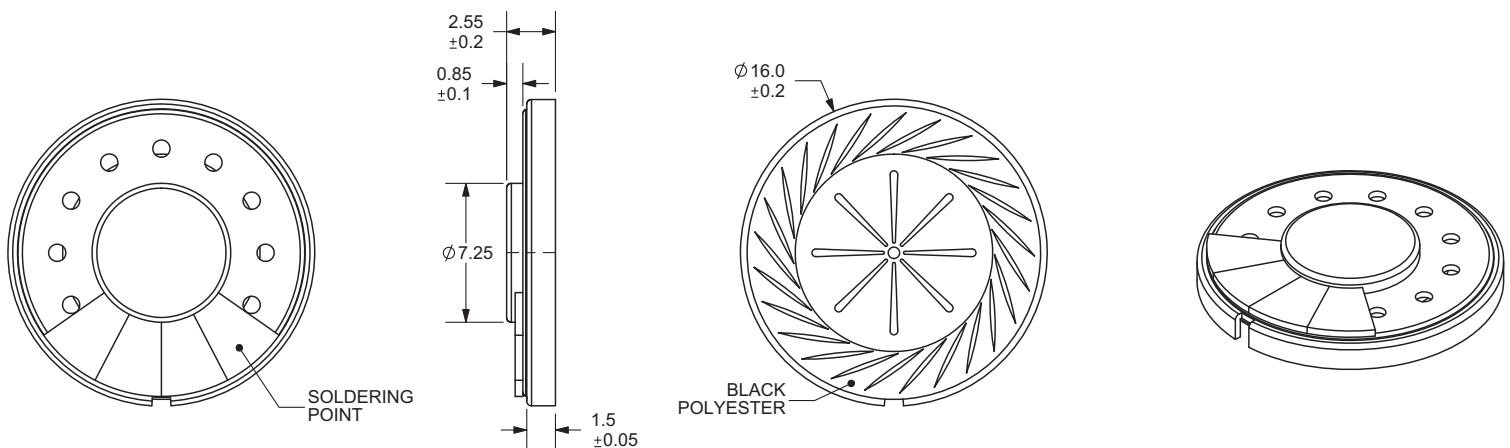


PART NUMBER: CDMG16008-03**DESCRIPTION: LOW PROFILE SPEAKER****SPECIFICATIONS**

| parameter | conditions/description | min | nom | max | units |
|-----------------------|--|-----|-----|--------|--------------------|
| input power | max. power: IEC-60268-5, filter 60 s on / 120 s off, 10 cycles at room temp | | 0.3 | 0.5 | W |
| impedance | at 1 kHz, 1 V | 6.8 | 8 | 9.2 | Ω |
| resonant frequency | at 1 V | 480 | 600 | 720 | Hz |
| sound pressure level | 0.3 W, 10 cm ave. at 1, 1.2, 1.5, 2 kHz | 79 | 82 | 85 | dB |
| | 1 W, 1 m ave. at 1, 1.2, 1.5, 2 kHz | 66 | 69 | 72 | dB |
| response | | 600 | | 20,000 | Hz |
| distortion | at 1 kHz, 0.3 W | | | 10 | % |
| buzz, rattle, etc. | must be normal at sine wave 1.55 V | | | | |
| operating temperature | | -20 | | 55 | $^{\circ}\text{C}$ |
| dimenstions | $\varnothing 16 \times 2.55$ mm | | | | |
| weight | | | 1.5 | | g |
| material | metal | | | | |
| RoHS | yes | | | | |

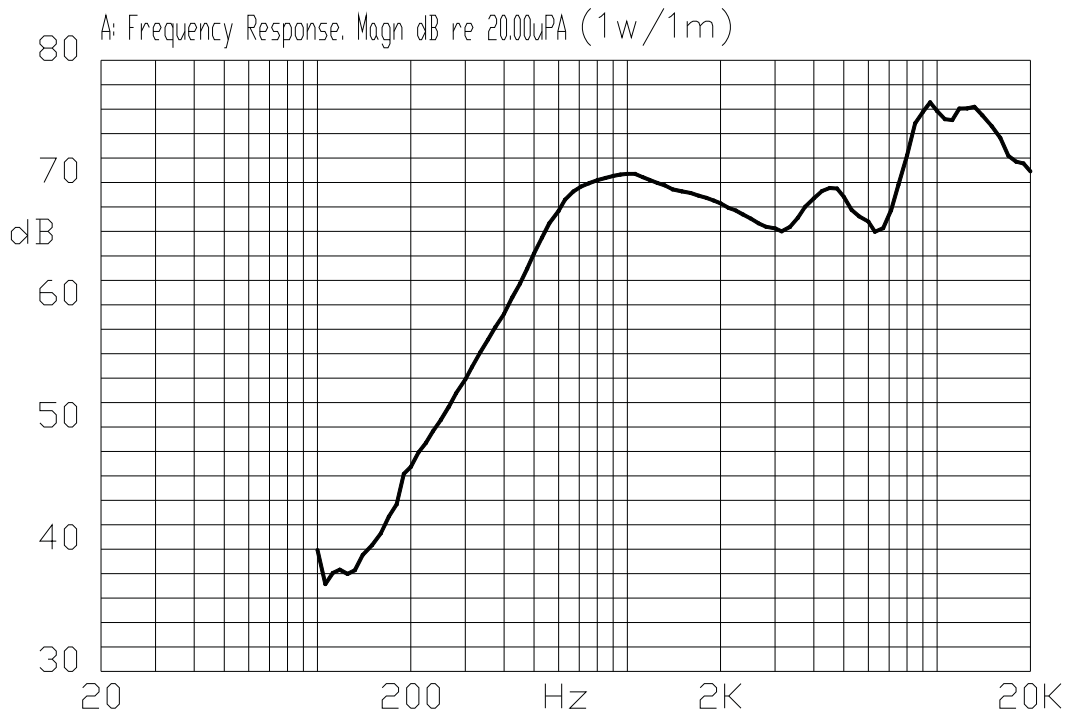
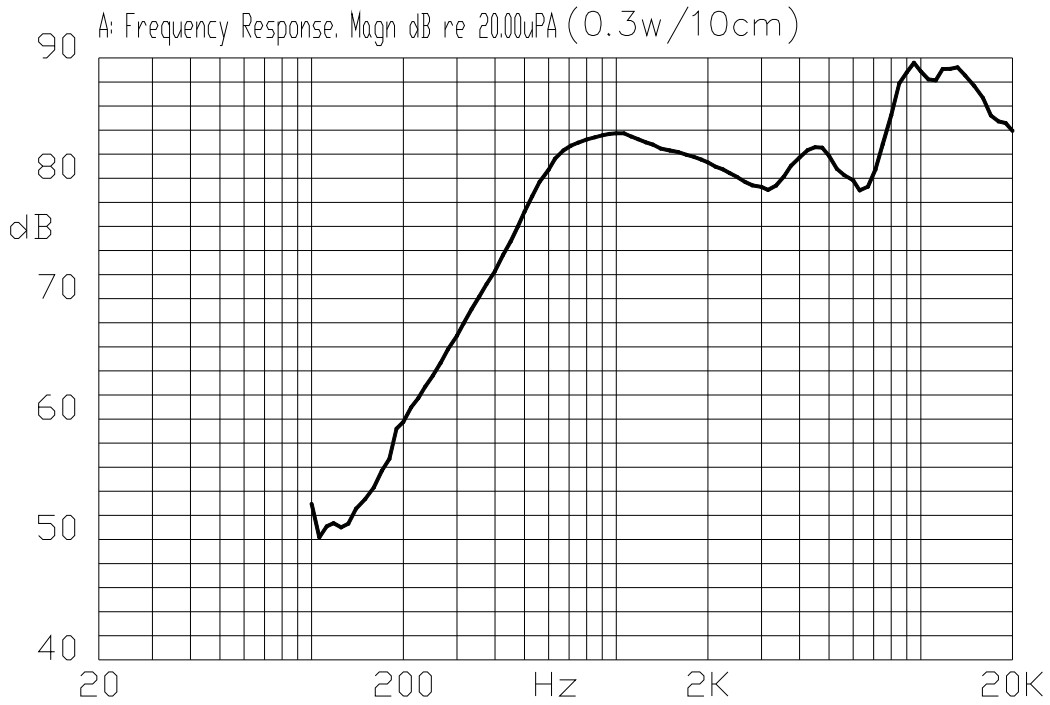
APPEARANCE DRAWING



PART NUMBER: CDMG16008-03

DESCRIPTION: LOW PROFILE SPEAKER

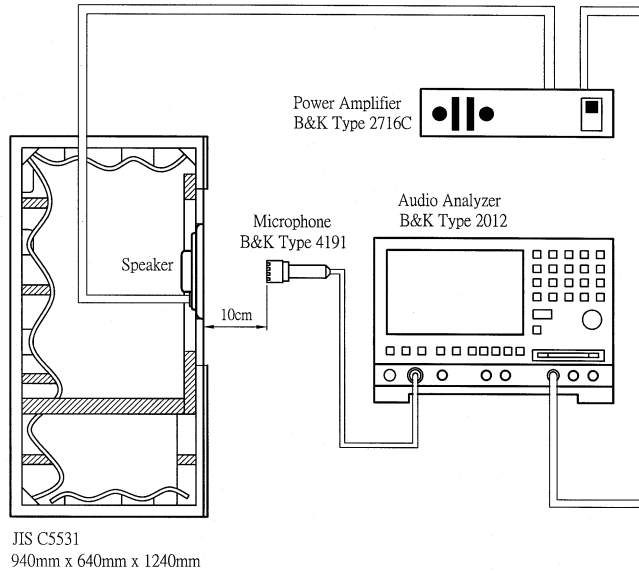
FREQUENCY RESPONSE



PART NUMBER: CDMG16008-03

DESCRIPTION: LOW PROFILE SPEAKER

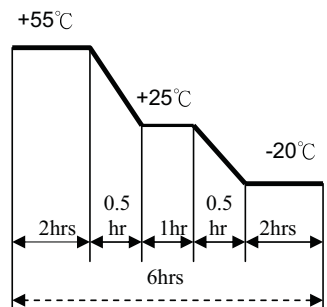
MEASUREMENT METHOD



MECHANICAL CHARACTERISTICS

| item | test condition | evaluation standard |
|------------------------|--|--|
| PCB wire pull strength | The pull force will be applied to double lead wire: horizontal 3.0 N (0.306 kg) for 30 seconds | No damage or cutting off |
| vibration test | The buzzer should be measured after a vibration amplitude of 1.5 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours. | No obstacle will be harmful to normal operation; damages, cracks, rust, and distortions. Should not be audible at 1.55 V sine wave between Fo ~ 20KHz. |
| drop test | The buzzer without packaging is subjected to 10 drops on each axis from the height of 75 cm onto a 40 mm thick wooden board. | |

ENVIRONMENT TEST

| item | test condition | evaluation standard |
|------------------------|--|---|
| high temperature test | After being placed in a chamber at +55°C for 96 hours. | The speaker will be measured after being placed at +25°C for 6 hours. No obstacle will be harmful to normal operation; damages, cracks, rust, and distortions. Should not be audible at 1.55 V sine wave between Fo ~ 20KHz. The Fo should meet initial measurements. SPL should be within ±3dB compared to the initial measurements. |
| low temperature test | After being placed in a chamber at -20°C for 96 hours. | |
| humidity test | After being placed in a chamber at +40°C and 90 ±5% RH for 240 hours. | |
| temperature cycle test | The part will be subjected to 10 cycles. One cycle will consist of:  | |

PART NUMBER: CDMG16008-03

DESCRIPTION: LOW PROFILE SPEAKER

RECOMMENDED TEMPERATURE PROFILE FOR HAND SOLDERING

370±10°C / 3±1 Sec

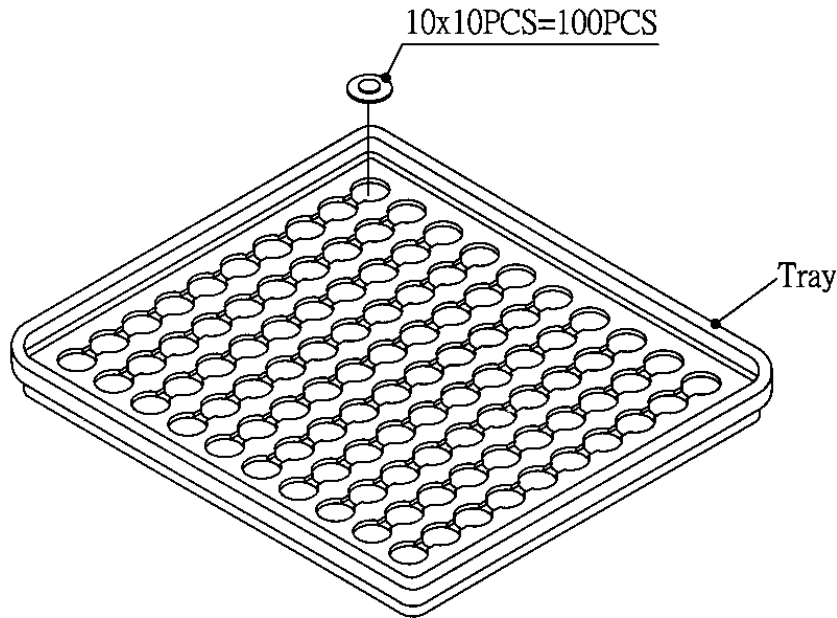
RELIABILITY TEST

| item | test condition | evaluation standard |
|-----------------------|---|---|
| operating (life test) | 1. Load test: The part will be subjected to 24 hours of continuous white noise at 0.3 W at room temperature. | The speaker will be measured after being placed at +25°C for 6 hours. No obstacle will be harmful to normal operation; damages, cracks, rust, and distortions. Should not be audible at 1.55 V sine wave between Fo ~ 20KHz. The Fo should meet initial measurements. SPL should be within ±3dB compared to the initial measurements. |

TEST CONDITIONS

| | | | |
|---------------------------|----------------------------|-----------------------|------------------------------|
| standard test conditions | a) Temperature: +5 ~ +35°C | b) Humidity: 45 ~ 85% | c) Pressure: 860 ~ 1060 mbar |
| judgement test conditions | a) Temperature: +25 ±2°C | b) Humidity: 60 ~ 70% | c) Pressure: 860 ~ 1060 mbar |

PACKAGING



| | | |
|------|--------------------|-----------------|
| Tray | 216mmx196mmx20.4mm | 1x100PCS=100PCS |
|------|--------------------|-----------------|