Dynamic Speaker Electroacoustic Characteristics

Sound Pressure Level
82±3dB SPL @ 2KHz 1.0V (Sine wave) 0.1m measured with baffler shown in Fig.1 (1CC BOX)

Measuring Diagram
Shown in Fig.1

Typical Frequency Response Curve
As shown in Figure 2

Resonance Frequency
850±20%Hz @ 1Vrms. (In 1CC BOX)

Input Power (Nominal and Maximum)
Rated Noise Power: 0.5W (In 1CC Box)
Short Term Max Power: 0.7W (In 1CC Box)

Operation Test
Must be free of audible noise (buzzes and rattles)
200 ~ 3400Hz frequency range, input level up to 2.0Vrms (In 1CC BOX)

Distortion
Less than 10% at 1KHz 1V

General Specifications

Operating Temperature Range
-25°C ~ +65°C

Storage Temperature Range
-40°C ~ +75°C

AC Impedance
8Ω±15% (@2KHz 1Vrms)

Dimension
16 x 9 x H4.2 mm Wire 20mm

IP Level
No rating
Reliability Tests

The sound pressure as specified will neither deviate more than ±3dB from the initial value, nor have any significant damage after any of following testing.

High Temperature Test
- High Temperature: +75±2°C
- Duration: 96 hours

Low Temperature Test
- Low Temperature: -25±2°C
- Duration: 96 hours

Heat Shock Test (See in Fig.3)
- High Temperature: +75±2°C
- Low Temperature: -40±2°C
- Changeover Time: <30 seconds
- Duration: 1 hour (high), 1 hour (low)
- Cycle: 10

Humidity Test
- Temperature: +40±2°C
- Relative Humidity: 90%~95%
- Duration: 48 hours

Temperature Cycle Test (See in Fig.4)
- Temperature: -40°C to +75°C
- Duration: 45 minutes 45 minutes
- Temperature gradient: 1~3°C/min
- Cycle: 10

Drop Test
- Mounted with dummy set mass: 100 g
- Height: 1.5 m
- Cycle: 6 (1 each plain) onto the concrete board

Load Test
- Speaker mode: White noise (EIA filter) for 96 hours @ 0.5W (1CC BOX) (2.37Vrms)
Measuring Method (Speaker Mode)

Standard Test Condition

Temperature 17 – 25°C
Relative humidity 45%–80%(RH)
Air pressure 860–1060 hPa

Frequency Measuring Circuit (Speaker Mode) (Fig. 1)
This document contains the technical specifications for the dynamic speaker unit.

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<th>Material</th>
<th>Quantity</th>
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<td>U-yoke</td>
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<td>Pole piece</td>
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<td>Voice coil</td>
<td>Copper</td>
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<td>Frame</td>
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<td>Gasket</td>
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