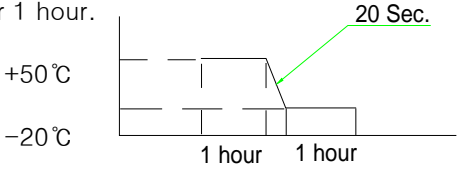


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| Specification for Speaker | | Page | 2/9 |
| Model No. : KP40X20SP2F450-5857 | | Revision No. | 1.0 |
| | | Drawing No. | KFC5857 |
| <h2>CONTENTS</h2> <ol style="list-style-type: none"> 1. Scope 2. General 3. Electrical and Acoustic Characteristics. 4. Reliability Test 5. Measurement Block Diagram & Response curve 6. Structure 7. Dimensions 8. Packing 9. Revision | | | |

| Specification for Speaker | | Page | 3/9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------|--|---------|----|-------|---------------|--|---|-----------|---------------------------|--|---|----------------------|--|--|---|---------------------|----------------|--|---|-----------------|------------|--|---|-------------|------------------------|--|---|------------|------------------------|--|---|-----------------|--|--|---|----------|---|--|
| Model No. : KP40X20SP2F450-5857 | | Revision No. | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Drawing No. | KFC5857 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <h2>1. Scope</h2> <p>This specification is applied to the dynamic speaker which is used all of the electrical acoustic product.</p> <p>-- compact, rich sound</p> <p>-- applications: mobile phone, PDA, notebook computer, etc. ..</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <h2>2. General</h2> <p>2.1 Out-Diameter : 40x20 mm</p> <p>2.2 Height : 8.2 mm</p> <p>2.3 Weight : 5.8 g</p> <p>2.4 Operating Temperature range:</p> <p>-20~+50℃ without loss of function</p> <p>2.5 Store Temperature range:</p> <p>-40~+60℃ without loss of function</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <h2>3. Electrical and Acoustic Characteristics.</h2> <p>Test condition : 15 ~ 35 ℃, 25% ~ 85% RH, 860~1060 mbar</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table> <tr> <th>No</th><th>Items</th><th colspan="2">Specification</th></tr> <tr> <td>1</td><td>Impedance</td><td colspan="2">8 Ω ± 15% (1Vrms at 1KHz)</td></tr> <tr> <td>2</td><td>Sound Pressure Level</td><td colspan="2">91 dB ± 3dB (0.1W/0.1M at 0.8, 1.0, 1.5, 2kHz)</td></tr> <tr> <td>3</td><td>Resonance Frequency</td><td colspan="2">450 Hz ± 150Hz</td></tr> <tr> <td>4</td><td>Frequency Range</td><td colspan="2">300 ~10KHz</td></tr> <tr> <td>5</td><td>Input Power</td><td colspan="2">Rated 1 W / Max. 1.5 W</td></tr> <tr> <td>6</td><td>Distortion</td><td colspan="2"><5% Max. at 1kHz/1Vrms</td></tr> <tr> <td>7</td><td>Buzz and Rattle</td><td colspan="2">Should not be audible buzzes,rattles when the 2.83V sine wave signal swept at frequency range.</td></tr> <tr> <td>8</td><td>Polarity</td><td colspan="2">When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.</td></tr> </table> | | | | No | Items | Specification | | 1 | Impedance | 8 Ω ± 15% (1Vrms at 1KHz) | | 2 | Sound Pressure Level | 91 dB ± 3dB (0.1W/0.1M at 0.8, 1.0, 1.5, 2kHz) | | 3 | Resonance Frequency | 450 Hz ± 150Hz | | 4 | Frequency Range | 300 ~10KHz | | 5 | Input Power | Rated 1 W / Max. 1.5 W | | 6 | Distortion | <5% Max. at 1kHz/1Vrms | | 7 | Buzz and Rattle | Should not be audible buzzes,rattles when the 2.83V sine wave signal swept at frequency range. | | 8 | Polarity | When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward. | |
| No | Items | Specification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Impedance | 8 Ω ± 15% (1Vrms at 1KHz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Sound Pressure Level | 91 dB ± 3dB (0.1W/0.1M at 0.8, 1.0, 1.5, 2kHz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Resonance Frequency | 450 Hz ± 150Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Frequency Range | 300 ~10KHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Input Power | Rated 1 W / Max. 1.5 W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Distortion | <5% Max. at 1kHz/1Vrms | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Buzz and Rattle | Should not be audible buzzes,rattles when the 2.83V sine wave signal swept at frequency range. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Polarity | When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Specification for Speaker | | Page | 4/9 |
|---|-----------------------|--|---------|
| Model No. : KP40X20SP2F450-5857 | | Revision No. | 1.0 |
| | | Drawing No. | KFC5857 |
| <h2>4. Reliability Test</h2> <p>After test(1~7item), the speaker S.P.L . difference shall be within $\pm 3\text{dB}$, and the appearance not exist any change to be harmful to normal operation (e.g. cracks,rusts,damages and especially distortion).</p> | | | |
| No | Items | Specification | |
| 1 | High Temperature Test | After being placed in a chamber with $+60\pm 3\text{ }^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured. | |
| 2 | Low Temperature Test | After being placed in a chamber with $-40\pm 3\text{ }^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured. | |
| 3 | Humidity Test | After being placed in a chamber with 85 to 90%R.H. at $+40\pm 2\text{ }^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured. | |
| 4 | Thermal Shock Test | <p>After being placed in a chamber at $+50^{\circ}\text{C}$ for 1 hour, then speaker shall be placed in a chamber at -20°C for 1 hour(1 cycle is the below diagram).</p> <p>After 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.</p>  | |
| 5 | Vibration Test | After being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 1 hour, then placed in natural condition for 1 hour, speaker shall be measured. | |
| 6 | Drop Test | The speaker when mounted in the jig which weight 85g~100g, shall with stand 15 times random drops from a height of 1.5 meter to a concrete floor faced with 5mm thick hard wood board.and be nothing mechanical damage. | |
| 7 | Load test | After being applied loading white noise with input power 1W(2.83Vrms.) for 96 hours, then placed in natural condition for 1 hour, speaker shall be measured. | |
| 8 | Insulation test | When they are measured with DC 100V the insulation resistance between v.c. terminal and frame must be more than 1 MΩ | |

Specification for Speaker

Page

5/9

Model No. : KP40X20SP2F450-5857

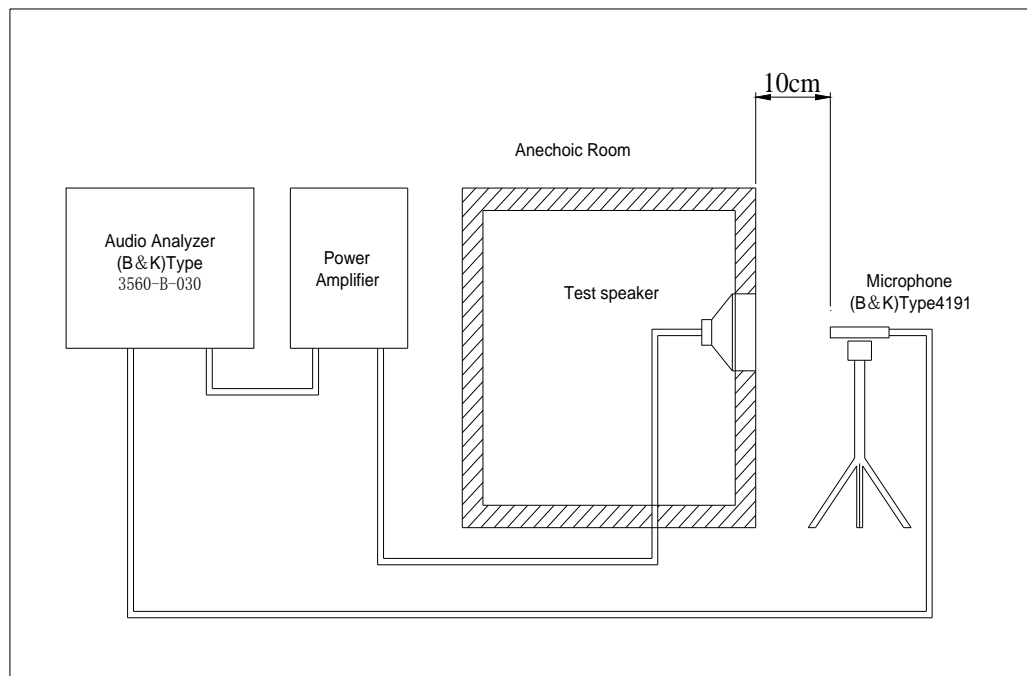
Revision No.

1.0

Drawing No.

KFC5857

5. Measurement Block Diagram & Response curve



[dB/20.0u Pa]

Output Response (Signal) - Input (Magnitude)

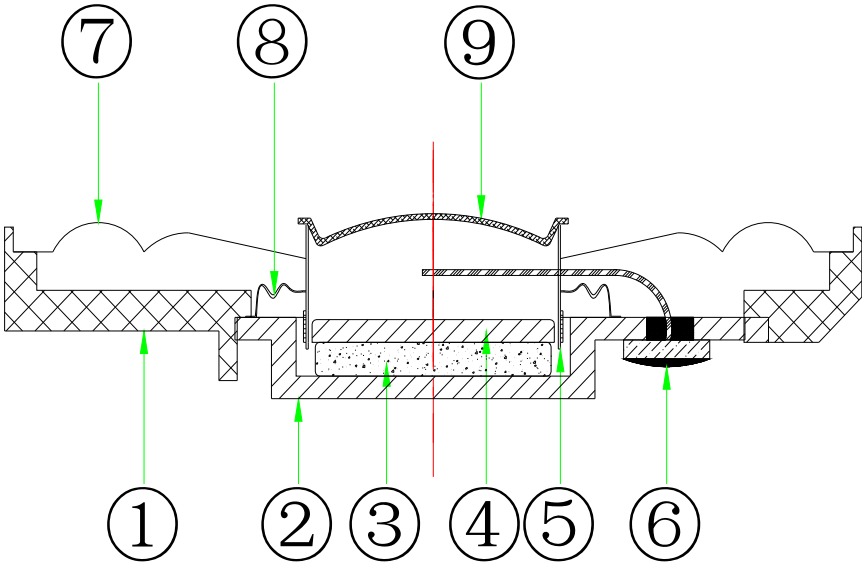
Working : Input : Input : SSR Analyzer



| | | |
|---------------------------|--------------|---------|
| Specification for Speaker | Page | 6/9 |
| | Revision No. | 1.0 |
| | Drawing No. | KFC5857 |

Model No. : KP40X20SP2F450-5857

6. Structure



| | | | | |
|-----|-----------|------|-------------|---------|
| 9 | Dust Cap | 1 | Kraft Paper | |
| 8 | Damper | 1 | Silk | |
| 7 | Diaphragm | 1 | Tetoron | |
| 6 | Terminal | 1 | White Fiber | |
| 5 | V-coil | 1 | Lock bobbin | |
| 4 | Plate | 1 | SPCC | |
| 3 | Magnet | 1 | Nd-Fe-B | |
| 2 | YOKE | 1 | SPCC | |
| 1 | Frame | 1 | ABS | |
| No. | Part Name | Q'ty | Material | Remarks |

Specification for Speaker

Page

7/9

Revision No.

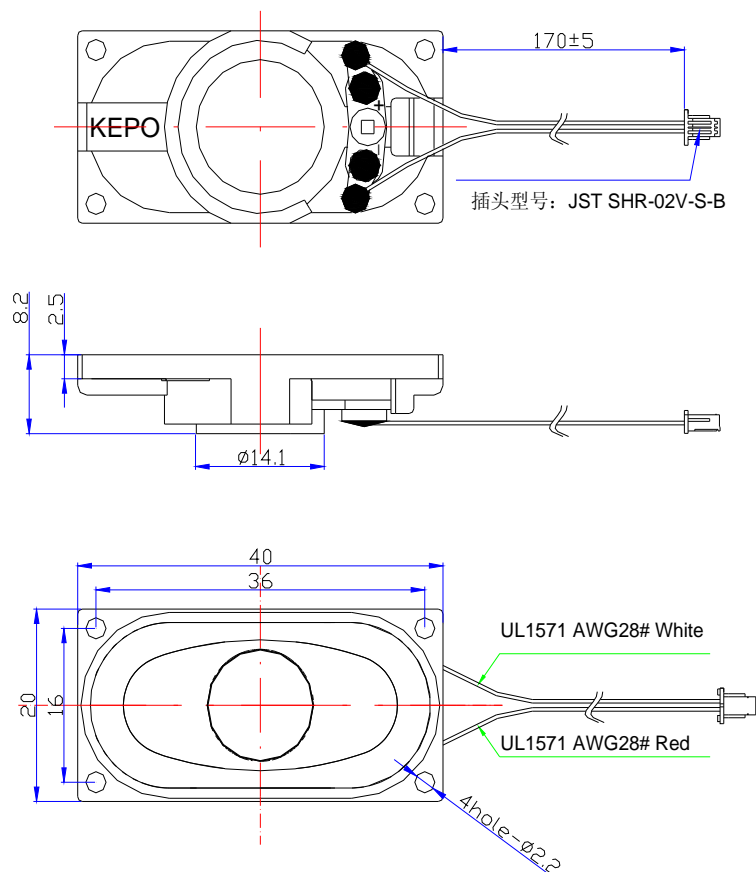
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Model No. : KP40X20SP2F450-5857

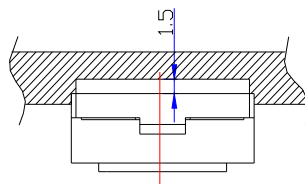
Drawing No.

KFC5857

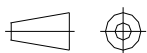
7. Dimensions



Speaker shall be free from striking the baffle when a 1.5mm gap is allowed between the baffle board and the speaker front
喇叭前必须保留1.5mm的间隙



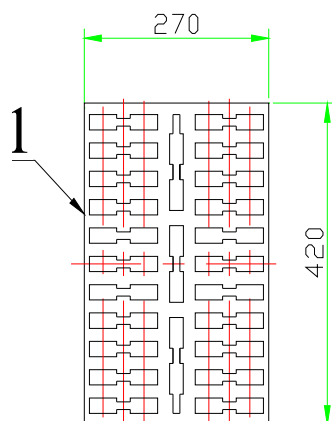
FIRST ANGLE PROJECTION



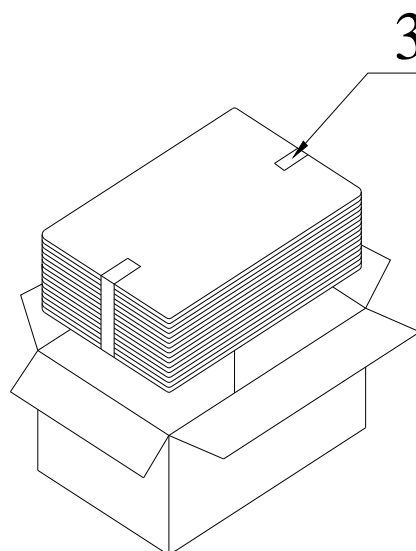
UNIT : mm

Tolerance : ± 0.2

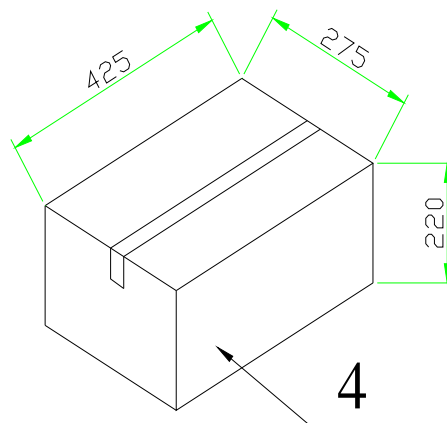
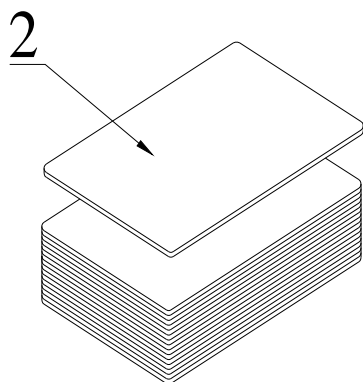
8. Packing



50Pcs



装入气泡袋后，
再装进CARTON BOX



QTY: 800Pcs
425 x275 x220