SPECIFICATION



| Product | Micro speaker | Issued date | 29-Jul-03 |
|----------|------------------|--------------------|-----------|
| Part No. | Part No. U208S20 | | 1 of 3 |

1. Physical dimension.

| Diameter | 20 mm (Refer to drawing) | |
|-----------|-----------------------------|--|
| Thickness | 3.0 mm (Refer to drawing) | |
| Weight | $2.4g \pm 0.3g$ | |

2. Electric characteristics.

| Impedance | 8 $\Omega \pm 15$ % at 1.0V 1KHz. | | |
|--------------------------|--|--|--|
| S.P.L. | 86 dB \pm 3 dB at 0.8, 1.0, 1.2, 1.5 KHz. | | |
| | Average figures / 4 Pts. | | |
| Power | Nor.: 0.5 W (2.0V) | | |
| | Max.: 1.0 W (2.83V) | | |
| Resonant Frequency (Fo) | 700 Hz ± 20% at 1.0 V | | |
| Effective Frequency band | Fo ~ 4 KHz. | | |
| Distortion | Less than 5% at 1 KHz 0.5 W. | | |
| Buzz & rattle, etc. | Not be audible at 2.0 V sine wave, Fo $\sim 4 \text{ KHz}$. | | |
| Load Test | Must be normal with program source 0.5 W. / (2.0V) | | |
| | White noise / 96 Hrs. | | |
| Magnet | 8.0 mm × 1.0 mm (Rare Earth Permanent Magnet) | | |
| | Flux density 4,300 Gauss (SURFACE). | | |

3. Environment Test

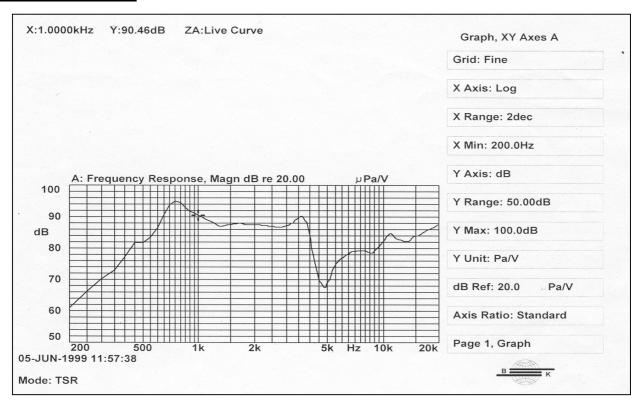
| High Temperature | $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$ 96 Hrs and keep 6 Hrs in a room. | | |
|-----------------------------|--|--|--|
| Low Temperature | -20 $^{\circ}$ C ± 3 $^{\circ}$ C 96 Hrs and keep 6 Hrs in a room. | | |
| Humidity Resistance | +80 °C ± 3 °C 90 % ± 5% 96 Hrs. | | |
| Operation Temperature Range | $-40^{\circ}\text{C} \pm 3^{\circ}\text{C} \sim +60^{\circ}\text{C} \pm 3^{\circ}\text{C}$ | | |
| Storage Temperature Range | -40 °C ± 3 °C ~ +70 °C ± 3 °C | | |

SPECIFICATION

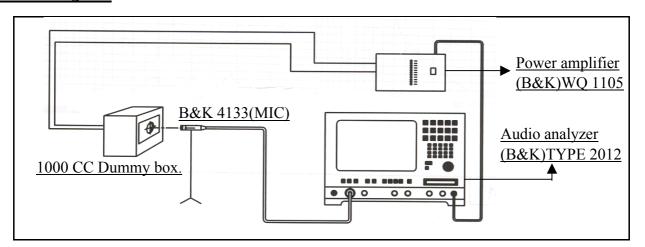


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4. Frequency curve.



5. Test diagram.



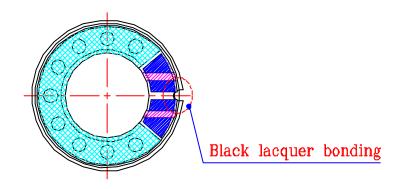
6. Measurement condition.

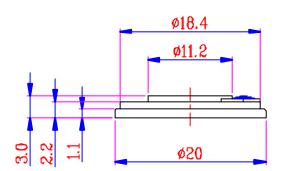
| Microphone | B&K 4311 | Zero level | 50 dB |
|--------------|----------|-------------|--------|
| Mode | TSR | Input power | 0.5 W |
| Mic distance | 0.1m | Sweep time | 0.5Sec |

| REV. NO | DATE | DESCRIPTION | DRAW.BY | CHKD.BY | APP.BY |
|---------|------|-------------|---------|---------|--------|
| | | | | | |
| | | | | | |

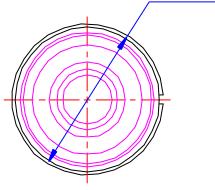
MARKING







Baffle Size ø19.2



| UNIT | mm | DRAW. BY | CHKD.BY | APP.BY | DATE | JUL. 29. 2003 |
|---------|---|----------|----------|----------|--------------|-----------------|
| SCALE | 2:1 | J.M.KIM | I.G.SONG | E.S.CHOI | MODEL NO. | U208S20 |
| TOL | ± 0.15 | 03.07.29 | 03.07.29 | 03.07.29 | NOMENCLATURE | MODEL DIMENSION |
| FRM. UA | FRM.UA-G-004-03 Rev.1 UNISON ACOUSTICS CO., LTD. A4(297 X 210)mm | | | | | |