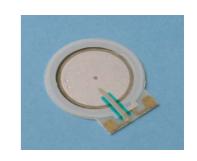
# HDK

# Multilayer Type Mini Speaker

Industry-thinnest contributes miniaturization of application.

#### **■**Featues

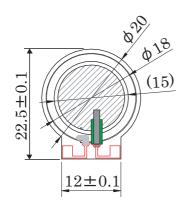
- •Mini, Ultra Thin ( $\phi$  20 × 0.6t), yet High Sound Pressure
- ·Solder-less Construction by HDK Printing Technology
- •Using High Reliability Multilayer Vibrating Plate by HDK-developed High-efficient LTC Piezo material



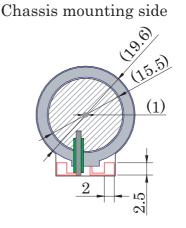
## ■Applications

•Digital Still Camera, Digital Video Camera, MD(Mini Disk), Cell Phone, Electronic Dictionary, Game, etc.

#### ■Outer Dimension







<sup>\*</sup> More than 0.5mm of open spaces in front of and rear of speaker is recommended to provide.

### ■ Rating

Model No. HAP-BME-20-13N01

Sound Pressure	72dB at 1Vrms Sine Wave, Mic. Distance 10cm, Sound Pressure averaging at 0.8k, 1k, 1.5k, 2kHz
Resonant Frequency	1,050Hz~1,450Hz
Static Capacitance	950nF±30%
Rated Input Voltage	1Vrms (2.8Vp-p)
Maximum Input Voltage	10Vp-p
Operating Temperature Range	-20°C ~ +60°C
Storage Temperature Range	-30°C ~ +70°C

### ■ Frequency Characteristics (Example)

Input Voltage 1Vrms Sine Wave Mic. Distance 10cm

