

Providing the best solution of Haptic for touch panel.

Vibration Speaker VS-A1630

Multi-function Device,
Speaker / Earpiece / Vibration / Haptic



Vibration Speaker VS-A1630

Point **1** | **World's Thinnest**
3.1mm Thickness

Point **2** | **Quick Response**
Rise time: 30 millisecond

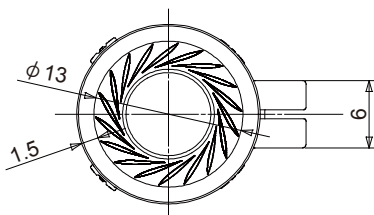
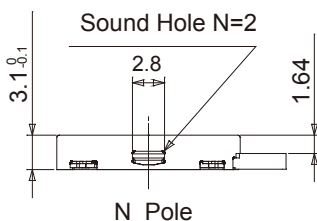
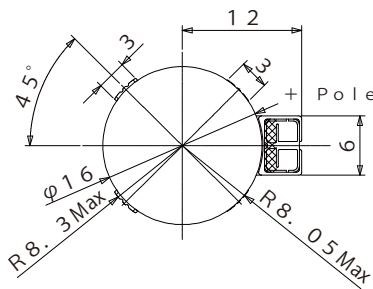
Point **3** | **Longer Operating Life**
48 million cycle durability

Point **4** | **Silent Vibration**
Less than 40dB

Point **5** | **Water Proof**
IPX5 IPX7 equivalent

Point **6** | **Space & Cost Saving**
4 functions combined into one component

Outline Specification

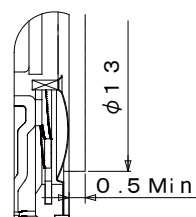


Products		VS-A1630
Dimensions	mm	φ 16 × 3.1
Weight	g	3.0
Sensitivity (0.1W/0.1m)	dB	85.5
DC Resistance	Ω	7.4
Resonant Frequency	Hz	1000
Rated Input	W	0.5
Maximum Input Power	W	0.8
Vibration Input Power	W	0.11
Acceleration (@160Hz)	G	0.44Min
Mechanical Noise (0.1m)	dBA	46.0Max

* Input power is calculated by 8 ohm of nominal impedance.

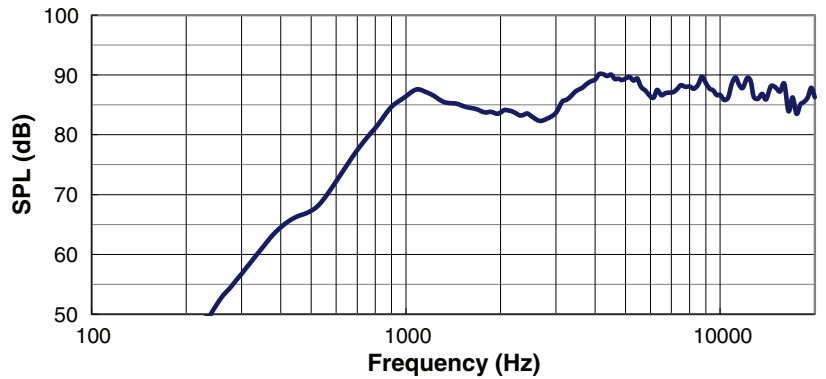
* Measurement Condition Back Volume : 2cc,
Sound hole : 19.8mm², Weight : 100g

Mounting

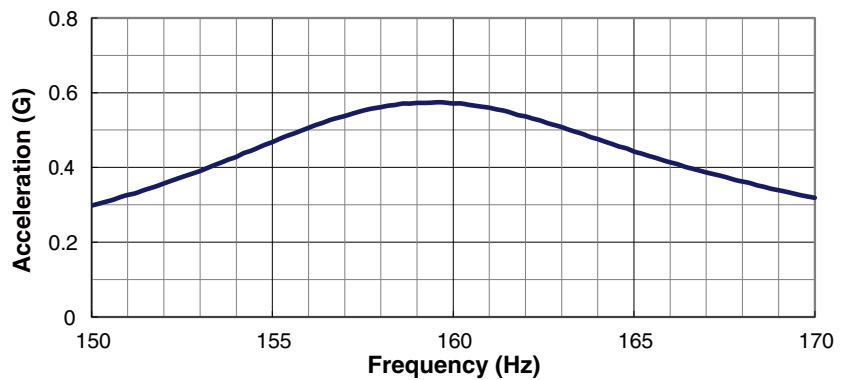


The clearance shown in figure is required for the mounting.

■ Frequency Response



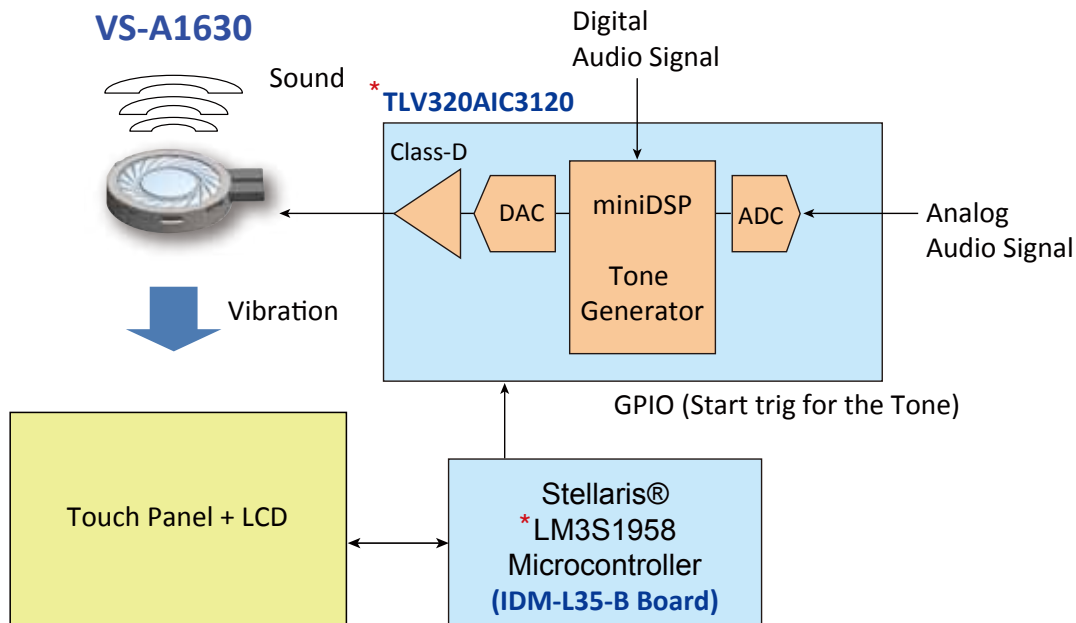
*Measurement Condition 4cc 10cm 0.1W



*Measurement Condition : 100g cube

Namiki recommends our customers Audio Codec IC developed by Texas Instruments Incorporated(TI). As an 4-in-1(Speaker, Earpiece, Vibration & Haptic) device controller for touch screen mobile phones, it can bring vibration speaker's optimum performance into play.

Block Diagram for Haptic Application & Touch Panel Mobile Phone



*Product of Texas Instruments. Stellaris is a registered trademark of Texas Instruments.



TI's logo is the trademark of Texas Instruments.