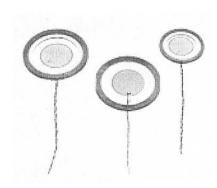
PIEZO ELEMENTS FOR TELEPHONE APPLICATIONS



VSB Series



Recent advances in manufacturing technology have enabled Murata Electronics to mass produce piezoelectric ceramic elements as thin as 0.1mm. This capability has permitted the use of these devices in a variety of applications including speech synthesis and telecommunications.

The Model VSB41D25-07ARO piezo speaker unit has been designed to accurately reproduce speech patterns. Due to its small size, rugged construction and wide response curve,

this element is suitable for voice synthesis applications such as clocks, vending machines, automobiles, toys and translating machines.

FEATURES

- High efficiency compared to electro-magnetic devices
- Ultra-thin and lightweight
- High impedance, low power consumption requirements
- High reliability and durability
- No electric noise or EMI
- Can be driven directly by an IC

Part Number	*VSB35EW-0701B	*VSB50EW-0301B	*VSB41D25-07AR0
Frequency Range	600Hz to 20kHz	250Hz to 20kHz	500Hz to 20kHz
Allowable Input	75mW	150mW	30Vp-p
Free Resonance	950Hz	400Hz	900Hz
Operating Temp. Range	-20°C to +70°C	-20°C to +70°C	–20°C to +70°C
Storage Temp. Range	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C
Capacitance	340nF @ 120kHz ± 35%	600nF @ 120kHz ± 35%	140nF @ 120kHz ± 30%
Leads	32AWG	32AWG (UL-1685)	32AWG (UL-1685)
	Resinous ring Support ring Metallic Plate 35.0 D.	Resinous ring Support ring Metallic Plate 39.0 D. 50.0 D.	50.00 Black Wire Red Wire Case (ABS) Metal (Brass) Ceramic (NI-Electrode) 41.0 D. 1.0 2.0
SOUND PRESSURE LEVEL VS. FREQUENCY	100 90 90 90 90 90 90 90 90 90 90 90 90 9	(RD) 90 90 90 90 90 90 90 90 90 90 90 90 90	0.1 0.30.5 1.0 2.0 4.0 10 Frequency (kHz)