

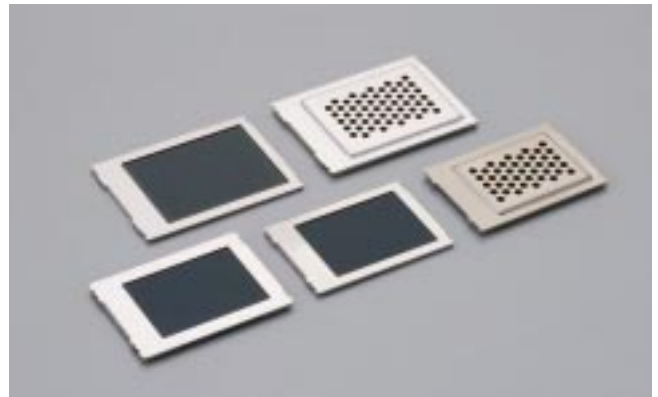
Piezoelectric Speaker



VSLBP/VSLBF Series

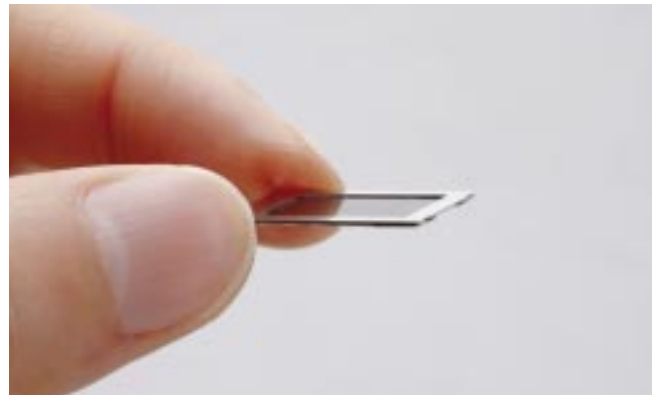
■ Features

- High Quality Sound & High Sound Pressure Level
- Ultra thin styling.
 VSLBP Series: Thickness=1.2mm
 VSLBF Series: Thickness=0.5mm
 Side ventilation housing enables ultimate thickness reduction.
- Save battery power.
- No magnet-free from iron sand inhalation problem.
- No electromagnetic noise.
- Available for waterproof (IPX7)*



■ Applications

Hand Held Phone / PDA / Solid State Audio / IC Recorder / DSC etc.



For more information contact:
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 Phone: +46 (8) 564 599 00

■ Standard Specifications

Item	Specifications	
	VSLBP1913E1400-T0/VSLBF1913E1400-T0	VSLBP2115E1200-T0/VSLBF2115E1200-T0
Rated Frequency Range	200Hz to 20kHz	200Hz to 20kHz
Sound Pressure Level	92.0dB±3.0dB * ¹	93.5dB±3.0dB * ²
Resonant Frequency	1400Hz±20%	1200Hz±20%
Capacitance	0.9µF±30%	1.5µF±30%
Maximum Sinusoidal Voltage	5.0Vrms	5.0Vrms
Operating Temperature Range	-20 to +70°C	-20 to +70°C
Storage Temperature Range	-30 to +85°C	-30 to +85°C

Measurement Condition of Sound Pressure Level: *¹ Input Signal=5.0Vrms, Sine Wave, at 100mm, Average at 1.5k, 2.0k, 2.5k, 3.0kHz

*² Input Signal=5.0Vrms, Sine Wave, at 100mm, Average at 1.0k, 1.25k, 1.5k, 2.0kHz

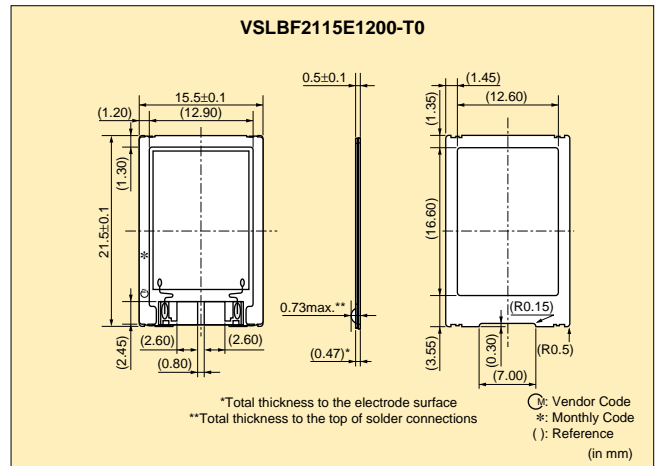
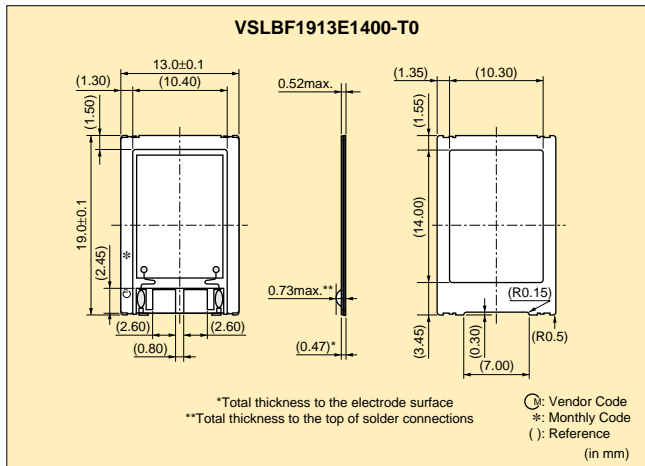
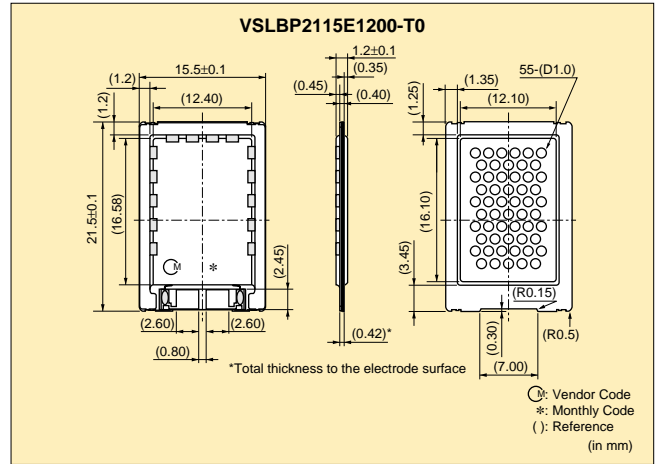
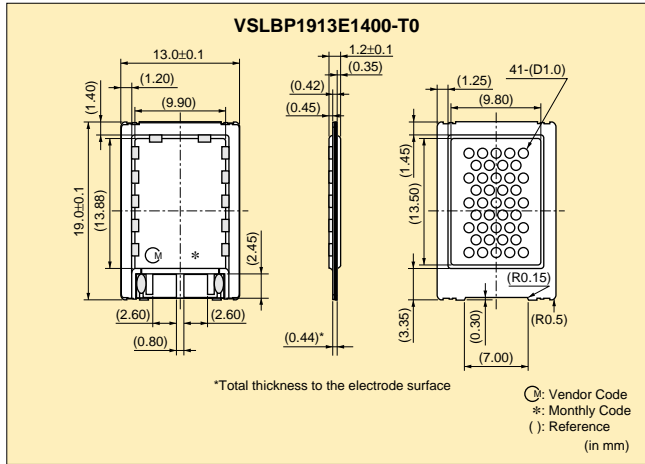
Measurement Condition of Capacitance: 0.1Vrms, at 120Hz

Maximum sinusoidal signal voltage continuously - for 240 hours - applicable to the speaker.

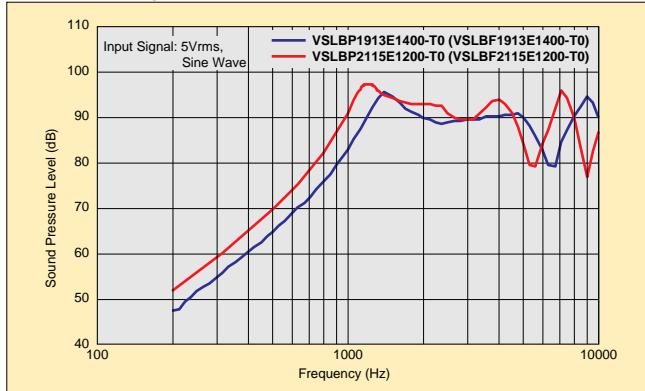
* A Water proof type: VSLBG Series is also available.

Please contact your most convenient Murata window for more information.

■ Dimensions



■ Frequency Characteristics of Sound Pressure Level



Measurement Condition of Sound Pressure Level: Input Signal: 5.0Vrms, Sine Wave, at 100mm

Back Cavity: VSLBP1913E1400-T0 (VSLBF1913E1400-T0)=0.7cc, VSLBP2115E1200-T0 (VSLBF2115E1200-T0)=1.0cc

for EU RoHS Compliant

- All the products in this catalog comply with EU RoHS.
- EU RoHS is "the European Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment".
- For more details, please refer to our website 'Murata's Approach for EU RoHS' (<http://www.murata.com/info/rohs.html>).

△Note:

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No Murata products should be used or sold, through any channels, for use in the design, development, production, utilization, maintenance or operation of, or otherwise contribution to (1) any weapons (Weapons of Mass Destruction [nuclear, chemical or biological weapons or missiles] or conventional weapons) or (2) goods or systems specially designed or intended for military end-use or utilization by military end-users.

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- | | |
|-----------------------------|------------------------------------------------------------------------------------------------------|
| ① Aircraft equipment | ② Aerospace equipment |
| ③ Undersea equipment | ④ Power plant equipment |
| ⑤ Medical equipment | ⑥ Transportation equipment (vehicles, trains, ships, etc.) |
| ⑦ Traffic signal equipment | ⑧ Disaster prevention / crime prevention equipment |
| ⑨ Data-processing equipment | ⑩ Application of similar complexity and/or reliability requirements to the applications listed above |

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