

## Stereo Headphone

**PH-B541**

- Driver unit /  $\phi$ 41 mm , CCAW voice coil
- Impedance / 50 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 97 $\pm$ 3dB at 1000Hz
- Max. Input Rate / 30mW
- Frequency response / 20 - 20,000Hz
- Cable length / Approx. 3m, one-side OFC cord.
- Weight (Cable excluded) / 250g
- Plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug

**PH-S556**

- Driver unit /  $\phi$ 41 mm , CCAW voice coil
- Impedance / 50 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 102 $\pm$ 3dB at 1000Hz
- Max. Input Rate / 30mW
- Frequency response / 20 - 20,000Hz
- Cable length / Approx. 3m, one-side OFC cord.
- Weight (Cable excluded) / 270g
- Plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug

**PH-S560**

- Driver unit /  $\phi$ 41 mm , CCAW voice coil and Titanium-clad diaphragm.
- Impedance / 50 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 97 $\pm$ 3dB at 1000Hz
- Max. Input Rate / 30mW
- Frequency response / 20 - 20,000Hz
- Cable length / Approx. 3m, one-side OFC cord.
- Weight (Cable excluded) / 250g
- Plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug

**PH-U580**

- Driver unit /  $\phi$ 41 mm , CCAW voice coil and Titanium-clad diaphragm.
- Impedance / 50 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 102 $\pm$ 3dB at 1000Hz
- Max. Input Rate / 30mW
- Frequency response / 20 - 20,000Hz
- Cable length / Approx. 3.5m, one-side OFC cord.
- Weight (Cable excluded) / 270g
- Plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug

**PH-U585**

- Driver unit /  $\phi$ 41 mm , CCAW voice coil and Titanium-clad diaphragm.
- Impedance / 50 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 102 $\pm$ 3dB at 1000Hz
- Max. Input Rate / 30mW
- Frequency response / 20 - 20,000Hz
- Cable length / Approx. 3m, one-side OFC cord.
- Weight (Cable excluded) / 360g
- Plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug

## Stereo Headphone

**PH-B333B / PH-B333S**

- Driver unit /  $\phi$ 41 mm , CCAW voice coil
- Impedance / 50 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 97 $\pm$ 3dB at 1000Hz
- Max. Input Rate / 30mW
- Frequency response / 20 - 20,000Hz
- Cable length / Approx. 3m, one-side OFC cord.
- Weight (Cable excluded) / 250g
- Plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug



## Active Noise Cancelling Headphone with Amplifier

**NC-AH1**

- Active noise reduction /  $\geq$ 16dB at 150Hz - 250Hz
- Drive Unit /  $\phi$ 40mm
- Impedance / 50 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / Noise Cancelling on 94 $\pm$ 3dB / Amplifier on 99 $\pm$ 3dB / Noise Cancelling and Amplifier off 96 $\pm$ 3dB
- Maximum Power output / 30mW
- Frequency Response / 20 ~ 20,000Hz
- Cord Length / Approx. 1.5m
- Adaptor Plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug
- Airplane plug / 2x  $\phi$ 3.5mm
- Battery / AAA 1.5V x 2 (alkaline)
- Weight / Approx. 225g
- Accessories / Carrying case



Over-ear Headphone

OBO 한국 특점 대리점 **NEODIS CO.,LTD**

**Stereo Headphones**

**LIC-201**

- Driver unit /  $\phi$ 41mm
- Impedance / 32 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 102 $\pm$ 3dB at 1000Hz
- Maximum power input / 30mW
- Frequency response / 20-20,000Hz
- Cord length / Approx. 1.5m
- Adaptor plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug
- Airplane plug / 2x  $\phi$ 3.5mm
- Weight / Approx. 225g
- Accessories / Carrying case



**Active Noise Cancelling Headphone**



**NC-201**

- Active noise reduction /  $\geq$ 16dB at 150Hz-250Hz
- Driver unit /  $\phi$ 40mm
- Impedance / 32 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 95 $\pm$ 3dB at 1000Hz
- Maximum power input / 30mW
- Frequency response / 20-20,000Hz
- Cord length / Approx. 1.5m
- Adaptor plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug
- Airplane plug / 2x  $\phi$ 3.5mm
- Battery / AAA 1.5Vx2(alkaline)
- Weight / Approx. 225g
- Accessories / Carrying case

**Active Noise Cancelling Headphone**

**NC-202**

- Active noise reduction /  $\geq$ 16dB at 150Hz-250Hz
- Driver unit / Dual speakers, 40mm and 30mm
- Impedance / 32 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 104 $\pm$ 3dB at 1000Hz
- Maximum power input / 30mW
- Frequency response / 20-20,000Hz
- Cord length / Approx. 1.5m
- Adaptor plug /  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm 24K gold-plated plug
- Airplane plug / 2x  $\phi$ 3.5mm
- Battery / AAA 1.5Vx2(alkaline)
- Weight / Approx. 250g
- Accessories / Carrying case



[www.neodis.co.kr](http://www.neodis.co.kr)

Over-ear Headphone

OBO 한국 특점 대리점 **NEODIS CO.,LTD**

**Wireless Headphone**

OBO 한국 특점 대리점

**DT-201K**

2.4GHz Digital Wireless Stereo Headphone Kit

**Headphone**

- Cord / Wireless Digital 2.4GHz Radio Frequency
- Driver unit /  $\phi$ 40mm
- Impedance / 32 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 100 $\pm$ 3dB at 1000Hz
- Maximum power input / 30mW
- Frequency response / 20-20,000Hz
- Effective range / 100ft (30m)
- Battery / AAA 1.5Vx2 (alkaline)
- Weight / Approx. 230g
- Accessories / Carrying case



● One Transmitter can connect with several DT-201 Headphones

**Transmitter**

- Cord / Wireless Digital 2.4GHz Radio Frequency
- Input / USB / Analog audio input
- Power supply / 3.7 V / 400mA DC rechargeable
- Battery / USB power supply
- Accessories / USB cable,  $\phi$ 3.5mm connecting cable, RCA connecting cable,  $\phi$ 3.5mm  $\rightarrow$   $\phi$ 6.3mm plug adaptor

**Wireless Active Noise Cancelling Headphone**

**BNC-204**

- Fit Style / Over-ear
- Driver Type / Dynamic
- Driver Unit / Dual speakers, 40mm and 30mm
- Impedance / 32 Ohms $\pm$ 15% (at 1kHz)
- Sensitivity / 103 $\pm$ 3dB at 1000Hz
- Active Noise reduction /  $\geq$ 16dB around 125Hz-250Hz  
>94% noise
- Bluetooth version / Bluetooth 4.1
- Bluetooth Profiles / A2DP1.2, AVRCP1.4, HSP1.2, HFP1.5
- Effective Distance / > 10 M (Line of sight)
- Battery Life (Continuous music playback) / Max. 30 hours  
Maximum Power Input / 30mW  
Battery Charge Time / Max. 2.5 hours



[www.neodis.co.kr](http://www.neodis.co.kr)



**OBO 한국 특점 대리점**  
PIEZOELECTRIC BUZZER

**NEODIS CO.,LTD**

| Model No.                       | Min.SPL@RESONANT FREQUENCY@10cm   | Dimension D(φ) x H(mm) |
|---------------------------------|-----------------------------------|------------------------|
| <b>SMD Piezo Buzzer</b>         |                                   |                        |
| OBO-10252SA ①                   | 70db at 5.2Khz/5Vp-p Square Wave  | 10.0 x 10.0 x 3.0      |
| OBO-11241SB ②                   | 70db at 4.1Khz/5Vp-p Square Wave  | 11.0 x 9.0 x 1.7       |
| OBO-13240SA ③                   | 75db at 4.0Khz/5Vp-p Square Wave  | 13.0 x 13.0 x 2.5      |
| OBO-14240SB ④                   | 80db at 4.0Khz/9Vp-p Square Wave  | 14.0 x 14.0 x 4.1      |
| OBO-15236SA ⑤                   | 85db at 3.65Khz/7Vp-p Square Wave | 14.8 x 14.8 x 7.4      |
| OBO-16240ST ⑥                   | 75db at 4Khz/5Vp-p Square Wave    | 16.0 x 16.0 x 2.5      |
| OBO-17240SB ⑦                   | 82db at 4.0Khz/9Vp-p Square Wave  | 17 x 5.0               |
| OBO-17240SA (with solder top) ⑧ | 82db at 4.0Khz/9Vp-p Square Wave  | 17 x 5.0               |

| Model No.                  | Min.SPL@RESONANT FREQUENCY@10cm    | Dimension D(φ) x H(mm) |
|----------------------------|------------------------------------|------------------------|
| <b>External Drive Type</b> |                                    |                        |
| OBO-11240WA ⑨              | 65db at 4.0Khz/3.3Vp-p Square Wave | 10.5 x 4.1             |
| OBO-11250PA/FB ⑩           | 80db at 5.0Khz/9Vp-p Square Wave   | 10.5 x 4.0             |
| OBO-11250WA ⑪              | 80db at 5.0Khz/9Vp-p Square Wave   | 10.5 x 3.0             |
| OBO-13240PA ⑫              | 80db at 4.0Khz/9Vp-p Square Wave   | 12.6 x 7.0             |
| OBO-14240PA/FB/PC ⑬        | 80db at 4.0Khz/9Vp-p Square Wave   | 14.0 x 7.5             |
| OBO-152 ⑭                  | 80db at 4.0Khz/9Vp-p Square Wave   | 16.5 x 4.0             |
| OBO-15230 ⑮                | 80db at 3.5Khz/9Vp-p Square Wave   | 14.0 x 7.5             |
| OBO-15240PA/FB ⑯           | 80db at 4.0Khz/9Vp-p Square Wave   | 17.0 x 8.0             |
| OBO-20205PA/FB ⑰           | 85db at 4.0Khz/9Vp-p Square Wave   | 22.0 x 8.0             |
| OBO-22240PA/FB ⑱           | 90db at 4.0Khz/12Vp-p Square Wave  | 22.0 x 12.0            |
| OBO-20235 ⑲                | 85db at 4.0Khz/9Vp-p Square Wave   | 24.0 x 5.5             |
| OBO-23220FB ⑳              | 85db at 2.0Khz/9Vp-p Square Wave   | 27.3 x 23 x 10         |
| OBO-25220 ㉑                | 80db at 2.0Khz/9Vp-p Square Wave   | 22.0 x 9.2             |
| OBO-27225 ㉒                | 85db at 2.5Khz/9Vp-p Square Wave   | 30.0 x 11.2            |
| OBO-27246 ㉓                | 90db at 4.4Khz/9Vp-p Square Wave   | 30.0 x 5.1             |

| Model No.                          | Min.SPL@RESONANT FREQUENCY@10cm | Dimension D(φ) x H(mm) |
|------------------------------------|---------------------------------|------------------------|
| <b>Drive Circuit Built-in Type</b> |                                 |                        |
| OBO-14C40PA ㉔                      | 80db at 4.0±0.5Khz/9VDC         | 13.8 x 7.5             |
| OBO-14C45PA ㉕                      | 82db at 4.4±0.5Khz/9VDC         | 13.8 x 8.2             |
| OBO-15210 ㉖                        | 85db at 4.4±0.5Khz/9VDC         | 13.8 x 8.2             |
| OBO-20C1-15 ㉗                      | 90db at 3.4±0.5Khz/9VDC         | 24.5 x 12.0            |
| OBO-20C3 ㉘                         | 83db at 3.8±0.5Khz/9VDC         | 24.0 x 14.0            |
| OBO-20C4 ㉙                         | 83db at 3.4±0.5Khz/9VDC         | 24.0 x 14.0            |
| OBO-20C5 ㉚                         | 80db at 3.4±0.5Khz/9VDC         | 24.0 x 9.5             |
| OBO-20C6 ㉛                         | 80db at 3.4±0.5Khz/9VDC         | 24.0 x 9.5             |
| OBO-20C7 ㉜                         | 83db at 3.4±0.5Khz/9VDC         | 24.0 x 14.0            |
| OBO-20C9 ㉝                         | 93db at 3.4±0.5Khz/9VDC         | 24.5 x 16.0            |
| OBO-27C0 ㉞                         | 97db at 3.5±0.5Khz/9VDC         | 31.0 x 14.0            |
| OBO-27C1 ㉟                         | 83db at 2.5±0.5Khz/9VDC         | 30.0 x 15.5            |
| OBO-27C2 ㊱                         | 87db at 3.5±0.5Khz/9VDC         | 30.0 x 15.5            |
| OBO-27C3 ㊲                         | 80db at 2.5±0.5Khz/9VDC         | 31.0 x 10.0            |
| OBO-27C4 ㊳                         | 85db at 3.5±0.5Khz/9VDC         | 31.0 x 10.0            |
| OBO-27C8 ㊴                         | 87db at 3.5±0.5Khz/9VDC         | 30.0 x 15.5            |
| OBO-27C9 ㊵                         | 87db at 3.5±0.5Khz/9VDC         | 31.0 x 14.0            |
| OBO-27P2 ㊶                         | 87db at 3.4±0.5Khz/9VDC         | 30.0 x 15.5            |
| OBO-35C1 ㊷                         | 88db at 2.8±0.5Khz/9VDC         | 42.0 x 16.0            |
| OBO-35C2 ㊸                         | 97db at 2.8±0.5Khz/9VDC         | 42.0 x 16.0            |
| OBO-35C4 ㊹                         | 100db at 2.8±0.5Khz/9VDC        | 42.0 x 16.5            |
| OBO-35D1 ㊺                         | 97db at 2.9/3.05Khz/9VDC        | 42.0 x 16.0            |
| OBO-35P2 ㊻                         | 93db at 2.6±0.5Khz/9VDC         | 42.0 x 16.0            |

| Model No.                         | Min.SPL@RESONANT FREQUENCY@10cm  | Dimension D(φ) x H(mm) |
|-----------------------------------|----------------------------------|------------------------|
| <b>Piezo Speaker &amp; Ringer</b> |                                  |                        |
| OBO-RW220334 ㊼                    | 108±3db at 1.0Khz/1Vrms          | 22.4 x 3.4             |
| OBO-35T2 ㊽                        | 80db at 1.2Khz/9Vp-p Square Wave | 34.5 x 9.0             |
| OBO-50240 ㊾                       | 80db at 700Hz/9Vp-p Square Wave  | 50.0 x 2.0             |



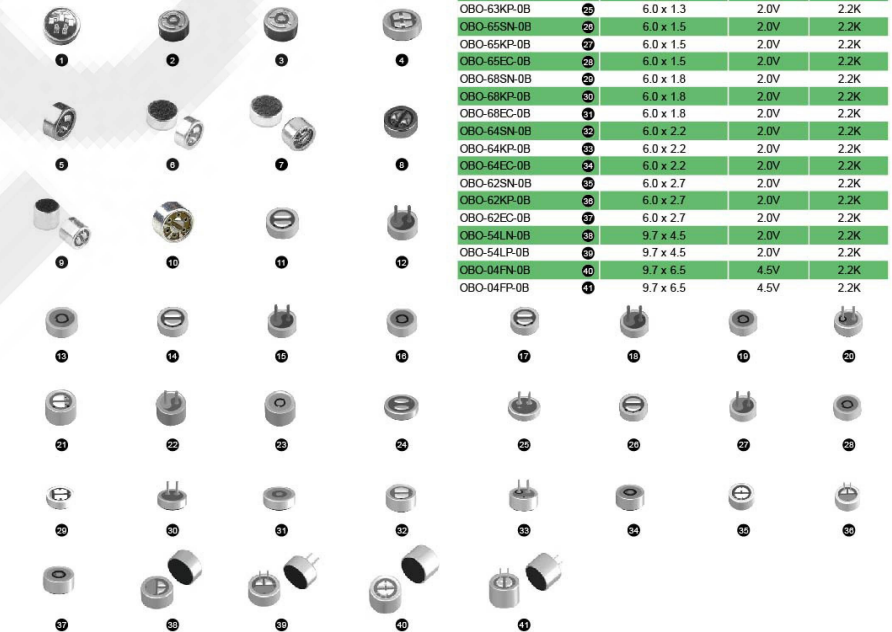
**OBO 한국 특점 대리점**  
PIEZOELECTRIC CERAMIC ELEMENT

**NEODIS CO.,LTD**

| Model No.        | Resonant Frequency (Khz) | Resonant Impedance (max. Q) | Capacitance (pF) | Dimension D (Φ) d(Φ) T t | PLATE    |
|------------------|--------------------------|-----------------------------|------------------|--------------------------|----------|
| OBO-TE15241-16 ① | 4.1±0.6±0                | 500                         | 21,000±30%       | 15.00 11.30 0.17 0.10    | Brass    |
| OBO-TE15260-16 ② | 6.0±0.6                  | 500                         | 14,000±30%       | 15.00 11.30 0.22 0.10    | Brass    |
| OBO-TE18236-16 ③ | 3.6±0.5                  | 1000                        | 14,000±30%       | 18.00 11.30 0.23 0.10    | Brass    |
| OBO-TE20239-16 ④ | 3.9±0.5                  | 400                         | 25,000±30%       | 20.00 15.00 0.22 0.10    | Brass    |
| OBO-TE20265-16 ⑤ | 6.5±0.5                  | 350                         | 12,000±30%       | 20.00 14.80 0.40 0.20    | Brass    |
| OBO-TE21334-16 ⑥ | 3.4±0.5                  | 500                         | 18,000±30%       | 21.00 14.80 0.22 0.10    | Brass    |
| OBO-TE27226-16 ⑦ | 2.6±0.3                  | 300                         | 45,000±30%       | 27.00 19.80 0.28 0.15    | Brass    |
| OBO-TE27234-16 ⑧ | 3.4±0.5                  | 400                         | 24,000±30%       | 27.00 19.80 0.40 0.20    | Brass    |
| OBO-TE27241-16 ⑨ | 4.1±0.5                  | 300                         | 20,000±30%       | 27.00 19.80 0.45 0.22    | Brass    |
| OBO-TE27326-16 ⑩ | 2.6±0.4                  | 400                         | 33,000±30%       | 27.00 19.80 0.32 0.20    | Brass    |
| OBO-TE27335-16 ⑪ | 3.5±0.4                  | 400                         | 19,000±30%       | 27.00 19.80 0.42 0.20    | Brass    |
| OBO-TE27340-16 ⑫ | 4.0±0.5                  | 500                         | 17,000±30%       | 27.00 19.80 0.48 0.25    | Brass    |
| OBO-TE31213-26 ⑬ | 1.3±0.3                  | 500                         | 47,000±30%       | 31.00 19.80 0.22 0.10    | Ni-alloy |
| OBO-TE31216-16 ⑭ | 1.6±0.3                  | 1000                        | 40,000±30%       | 31.00 19.80 0.22 0.10    | Brass    |
| OBO-TE35229-16 ⑮ | 2.9±0.4                  | 300                         | 30,000±30%       | 35.00 24.80 0.58 0.30    | Brass    |
| OBO-TE50228-16 ⑯ | 2.8±0.5                  | 400                         | 35,000±30%       | 50.00 25.00 0.42 0.20    | Brass    |

**CONDENSER MICROPHONE**

| Model No.                           | Dimension (D(Φ) x H(mm)) | Testing Condition Vs RL(Ω) | Model No.                         | Dimension (D(Φ) x H(mm)) | Testing Condition Vs RL(Ω) |
|-------------------------------------|--------------------------|----------------------------|-----------------------------------|--------------------------|----------------------------|
| <b>Digital Microphone</b>           |                          |                            | <b>Omnidirectional Microphone</b> |                          |                            |
| OBO-D64SN-0B-10S ①                  | 6.0 x 2.2                | -                          | OBO-B41SN-0B ①                    | 4.0 x 1.0                | 2.0V 2.2K                  |
| <b>SMD Microphone</b>               |                          |                            | OBO-B41KP-0B ②                    | 4.0 x 1.0                | 2.0V 2.2K                  |
| OBO-M11EC-2B-012 ②                  | 4.0 x 1.5                | 2.0V 2.2K                  | OBO-B41EN-0B ③                    | 4.0 x 1.0                | 2.0V 2.2K                  |
| OBO-MK2EC-2B-012 ③                  | 6.0 x 2.2                | 2.0V 2.2K                  | OBO-B43SN-0B ④                    | 4.0 x 1.3                | 2.0V 2.2K                  |
| <b>xNoise Cancelling Microphone</b> |                          |                            | OBO-B43KP-0B ⑤                    | 4.0 x 1.3                | 2.0V 2.2K                  |
| OBO-B58DN-0C ④                      | 6.0 x 1.8                | 2.0V 2.2K                  | OBO-B43EN-0B ⑥                    | 4.0 x 1.3                | 2.0V 2.2K                  |
| OBO-64DN-0C ⑤                       | 6.0 x 2.2                | 2.0V 2.2K                  | OBO-45SN-0B ⑦                     | 4.0 x 1.5                | 2.0V 2.2K                  |
| OBO-08DN-0C ⑥                       | 6.0 x 2.7                | 2.0V 2.2K                  | OBO-45KP-0B ⑧                     | 4.0 x 1.5                | 2.0V 2.2K                  |
| OBO-20DN-0C ⑦                       | 9.7 x 5.0                | 1.5v 680Ω                  | OBO-45EN-0B ⑨                     | 4.0 x 1.5                | 2.0V 2.2K                  |
| <b>Uni-directional Microphone</b>   |                          |                            | OBO-48KP-0B ⑩                     | 4.5 x 1.8                | 2.0V 2.2K                  |
| OBO-B45BN-0B-017 ⑧                  | 4.0 x 1.5                | 2.0V 2.2K                  | OBO-40SN-0B ㉑                     | 4.5 x 3.0                | 2.0V 2.2K                  |
| OBO-16BN-0C-002 ⑨                   | 6.0 x 5.2                | 2.0V 2.2K                  | OBO-40KP-0B ㉒                     | 4.5 x 3.0                | 2.0V 2.2K                  |
| OBO-20BN-0C-0H7 ⑩                   | 9.7 x 5.0                | 1.5v 680Ω                  | OBO-40EN-0B ㉓                     | 4.5 x 3.0                | 2.0V 2.2K                  |



MYLAR SPEAKER

OBO 한국 특점 대리점 **NEODIS CO.,LTD**

| Model No.       | Impedance<br>(Ω±15%) | Power Rating<br>(mW) |      | Fo<br>(Hz±20%) | SPL<br>(+/-3db) | Frequency<br>(Hz) | Dimensions<br>(mm) | Weight<br>(gms) |
|-----------------|----------------------|----------------------|------|----------------|-----------------|-------------------|--------------------|-----------------|
|                 |                      | Normal               | Max. |                |                 |                   |                    |                 |
| OBO-13008F-0603 | 8                    | 300                  | 500  | 1050           | 88              | 700 ~ 7000        | 13.0 x 2.75        | 1.0             |
| OBO-10032F-05   | 32                   | 10                   | 20   | 700            | 98              | 400 ~ 6,000       | 10.0 x 3.3         | 1.7             |
| OBO-15032F-02   | 32                   | 30                   | 50   | 680            | 103             | 680 ~ 20000       | 15.0 x 4.2         | 1.7             |
| OBO-23032F-0301 | 32                   | 200                  | 500  | 780            | 81              | 500 ~ 5000        | 23.0 x 4.2         | 3.5             |
| OBO-28008F-65   | 8                    | 1500                 | 2000 | 500            | 95              | 500 ~ 20000       | 28.0 x 5.1         | 7.0             |
| OBO-28008G-02   | 8                    | 500                  | 800  | 600            | 80              | 340 ~ 10000       | 28.0 x 4.0         | 2.9             |
| OBO-30150F-01   | 150                  | 500                  | 1000 | 400            | 78              | 400 ~ 20000       | 30.0 x 5.3         | 5.8             |
| OBO-36004F-01   | 4                    | 500                  | 1000 | 600            | 85              | 350 ~ 7000        | 36.0 x 4.8         | 8.3             |
| OBO-36008F-02   | 8                    | 200                  | 500  | 550            | 81              | 350 ~ 6,000       | 36.0 x 4.8         | 8.1             |
| OBO-36008F-03   | 8                    | 500                  | 1000 | 530            | 86              | 350 ~ 6,800       | 36.0 x 4.8         | 8.3             |
| OBO-36008G-05   | 8                    | 1000                 | 2000 | 680            | 84              | 680 ~ 20000       | 36.0 x 6.0         | 5.8             |
| OBO-36016F-02   | 16                   | 500                  | 1000 | 530            | 85              | 350 ~ 11000       | 36.0 x 4.8         | 8.5             |
| OBO-36032F-01   | 32                   | 100                  | 200  | 400            | 80              | 300 ~ 5000        | 36.0 x 4.8         | 8.1             |
| OBO-36025F-01   | 25                   | 200                  | 500  | 500            | 81              | 320 ~ 7200        | 36.0 x 4.8         | 8.5             |
| OBO-36100F-03   | 100                  | 200                  | 500  | 500            | 81              | 380 ~ 6500        | 36.0 x 4.8         | 8.3             |
| OBO-40008F-01   | 8                    | 200                  | 500  | 500            | 80              | 400 ~ 12000       | 40.0 x 5.0         | 9.45            |
| OBO-40008F-03   | 8                    | 500                  | 1000 | 550            | 84              | 350 ~ 5800        | 40.0 x 5.0         | 9.45            |
| OBO-40008F-04   | 8                    | 1000                 | 2000 | 550            | 87              | 350 ~ 5000        | 40.0 x 5.0         | 9.2             |
| OBO-40008F-22   | 8                    | 1000                 | 2000 | 680            | 89              | 350 ~ 4500        | 40.0 x 5.0         | 9.6             |
| OBO-40008F-2502 | 8                    | 500                  | 1000 | 480            | 118             | 480 ~ 12000       | 40.0 x 5.0         | 9.4             |
| OBO-40008K-09   | 8                    | 1000                 | 2000 | 550            | 80              | 300 ~ 20000       | 40.0 x 20.0 x 5.7  | 7.5             |
| OBO-40016F-05   | 16                   | 500                  | 1000 | 500            | 86              | 350 ~ 5000        | 40.0 x 5.0         | 9.8             |
| OBO-40016F-12   | 16                   | 500                  | 1000 | 500            | 86              | 350 ~ 8000        | 40.0 x 5.0         | 9.8             |
| OBO-40032F-01   | 32                   | 200                  | 500  | 560            | 80              | 320 ~ 6,500       | 40.0 x 5.0         | 9.5             |
| OBO-40032F-08   | 32                   | 500                  | 1000 | 800            | 87              | 500 ~ 10,000      | 40.0 x 5.0         | 9.5             |
| OBO-40050F-01   | 50                   | 200                  | 500  | 530            | 80              | 320 ~ 6,000       | 40.0 x 5.0         | 9.2             |
| OBO-50004F-01   | 4                    | 1500                 | 2000 | 550            | 88              | 350 ~ 20,000      | 50.0 x 7.5         | 13.2            |
| OBO-50008F-01   | 8                    | 250                  | 500  | 500            | 82              | 350 ~ 8,500       | 50.0 x 7.5         | 13.0            |
| OBO-50008G-01   | 8                    | 200                  | 500  | 400            | 82              | 280 ~ 11,000      | 50.0 x 8.1         | 11.0            |
| OBO-50050G-01   | 50                   | 200                  | 500  | 400            | 82              | 250 ~ 11,000      | 50.0 x 8.1         | 11.0            |
| OBO-57008F-01   | 8                    | 500                  | 1000 | 500            | 88              | 350 ~ 13,000      | 57.0 x 8.4         | 16.8            |
| OBO-57032F-01   | 32                   | 500                  | 1000 | 500            | 86              | 500 ~ 20000       | 57.0 x 8.4         | 17.0            |
| OBO-25008K-01   | 8                    | 1000                 | 2000 | 800            | 81              | 800 ~ 20,000      | 25.0 x 14.0 x 4.5  | 1.7             |
| OBO-35004K-01   | 4                    | 1000                 | 2000 | 600            | 81              | 600 ~ 20,000      | 35.0 x 16.0 x 5.0  | 2.6             |
| OBO-35008K-01   | 8                    | 1000                 | 2000 | 600            | 81              | 450 ~ 20,000      | 35.0 x 16.0 x 5.0  | 2.6             |
| SPS0916N-J-01   | 8                    | 1000                 |      | 850            | 94.5            |                   | 9.0 x 16.0         | 1.5             |
| SPS1115G-J-02   | 8                    | 1000                 |      | 870            | 94.5            |                   | 11.0 x 15.0        | 1.5             |
| SPS1217H-04     | 8                    | 1000                 |      | 850            | 95              |                   | 12.0 x 17.0        | 1.5             |
| SLS1216B-01     | 7                    | 1000                 |      | 880            | 96              |                   | 12.0 x 16.0        | 1.5             |
| SPS1318D-J-03   | 8                    | 1000                 |      | 800            | 94              |                   | 13.0 x 18.0        | 1.5             |



MYLAR SPEAKER

OBO 한국 특점 대리점 **NEODIS CO.,LTD**

| Model No.        | Impedance<br>(Ω±15%) | Power Rating<br>(mW) |      | Fo<br>(Hz±20%) | SPL<br>(+/-3db) | Frequency<br>(Hz) | Dimensions<br>(mm) | Remark   |
|------------------|----------------------|----------------------|------|----------------|-----------------|-------------------|--------------------|----------|
|                  |                      | Normal               | Max. |                |                 |                   |                    |          |
| <b>2 in 1</b>    |                      |                      |      |                |                 |                   |                    |          |
| OBO-40204F-01    | 4                    | 5000                 | 8000 | 1000           | 84              | 300~12000         | 42.0 x 23.0        | Speaker  |
| SLS0815A-03      | 7                    | 20                   | 1000 | 550            | 91              |                   | 8 x 12 x 2.5       | Speaker  |
|                  |                      | 20                   | 1000 | 475            | 121             |                   |                    | Receiver |
| <b>Receiver</b>  |                      |                      |      |                |                 |                   |                    |          |
| NFR0612A-J-01-02 | 30                   | 20                   |      | 390            | 119             |                   | 6 x 12 x 2.0       |          |
| NFR0612A-J-04    | 28                   | 50                   |      | 480            | 123             |                   | 6 x 12 x 2.0       |          |





**OBO 한국 특점 대리점**  
**MAGNETIC TRANSDUCER**

**NEODIS CO.,LTD**

| Model No.                              | Dimensions (mm)       | Rated Voltage(V) | Operating Voltage(V) | Resistance (Ω) | Rated Frequency(Hz) | SPL at 10cm(dBA) | Current Consumption(Ma) |
|--|-----------------------|------------------|----------------------|----------------|---------------------|------------------|-------------------------|
| <b>SMD External Drive Type</b>         |                       |                  |                      |                |                     |                  |                         |
| OBO-30AX1                              | 1 5.0 x 5.0 x 3.0     | 3.0              | 2 ~ 5                | 12±2           | 4,000               | Min 70           | Max. 100                |
| OBO-30AL1                              | 2 8.5 x 8.5 x 3.0     | 3.0              | 2 ~ 4                | 16±3           | 2,300               | Min. 83          | Max. 100                |
| OBO-30AP1                              | 3 8.5 x 8.5 x 3.0     | 3.0              | 2 ~ 4                | 16±3           | 2,700               | Min. 85          | Max. 100                |
| OBO-40AL1                              | 4 8.5 x 8.5 x 4.0     | 3.0              | 2 ~ 4                | 16±3           | 2,300               | Min. 87          | Max. 80                 |
| OBO-40AP1                              | 5 8.5 x 8.5 x 4.0     | 3.0              | 2 ~ 4                | 16±3           | 2,700               | Min. 90          | Max. 80                 |
| OBO-40BS2                              | 6 Ø9.0 x 4.0          | 3.0              | 2 ~ 4                | 15±3           | 2,730               | Min. 85          | Max. 80                 |
| OBO-45AL1                              | 7 8.5 x 8.5 x 4.5     | 3.0              | 2 ~ 4                | 16±3           | 2,300               | Min. 87          | Max. 80                 |
| OBO-45AP1                              | 8 8.5 x 8.5 x 4.5     | 3.0              | 2 ~ 4                | 16±3           | 2,700               | Min. 87          | Max. 80                 |
| OBO-45BP1                              | 9 Ø9.0 x 4.5          | 3.0              | 2 ~ 4                | 16±3           | 2,700               | Min. 85          | Max. 100                |
| OBO-0903S-A2                           | 10 8.5 x 8.5 x 3.0    | 3.0              | 2 ~ 5                | 16±4           | 2,700               | Min. 87          | Max. 100                |
| OBO-0905S-A2                           | 11 8.5 x 8.5 x 3.0    | 5.0              | 4 ~ 7                | 30±4           | 2,700               | Min. 87          | Max. 100                |
| <b>SMD Drive Circuit Built-in Type</b> |                       |                  |                      |                |                     |                  |                         |
| OBO-50UP1                              | 12 9.6 x 9.6 x 5.5    | 5.0              | 4 ~ 7                | 2,700±300      |                     | Min. 82          | Max. 30                 |
| OBO-65UN1                              | 13 12.8 x 12.8 x 7.0  | 5.0              | 4 ~ 7                | 2,400±300      |                     | Min. 85          | Max. 30                 |
| OBO-100UN1                             | 14 12.8 x 12.8 x 10.0 | 12.0             | 8 ~ 16               | 2,400±300      |                     | Min. 85          | Max. 30                 |
| <b>Drive Circuit Built-in Type</b>     |                       |                  |                      |                |                     |                  |                         |
| OBO-1206C-A2                           | 15 12.0 x 9.5         | 6.0              | 3 ~ 8                | 2,300±300      |                     | Min. 85          | Max. 30                 |
| OBO-1212C-A2                           | 16 12.0 x 9.5         | 12.0             | 8 ~ 16               | 2,300±300      |                     | Min. 85          | Max. 30                 |
| OBO-1203D-A2                           | 17 12.0 x 7.5         | 3.0              | 2 ~ 5                | 2,300±400      |                     | Min. 83          | Max. 30                 |
| OBO-1205D-A2                           | 18 12.0 x 7.5         | 5.0              | 3 ~ 7                | 2,300±400      |                     | Min. 83          | Max. 30                 |
| OBO-1212D-A2                           | 19 12.0 x 7.5         | 12.0             | 9 ~ 15               | 2,300±400      |                     | Min. 83          | Max. 30                 |
| <b>External Drive type</b>             |                       |                  |                      |                |                     |                  |                         |
| OBO-0901A-A2                           | 20 9.0 x 4.0          | 1.5              | 1 ~ 2                | 5.5±1          | 2,730               | Min. 85          | Max. 80                 |
| OBO-0903A-A2                           | 21 9.0 x 4.0          | 3.0              | 2 ~ 4                | 15±3           | 2,730               | Min. 85          | Max. 80                 |
| OBO-0905A-A2                           | 22 9.0 x 4.0          | 5.0              | 4 ~ 6                | 30±5           | 2,730               | Min. 85          | Max. 80                 |
| OBO-1001R-A201                         | 23 9.6 x 5.0          | 1.5              | 1 ~ 3                | 5.5±2          | 2,730               | Min. 85          | Max. 80                 |
| OBO-1005R-A201                         | 24 9.6 x 5.0          | 5.0              | 4 ~ 6                | 30±5           | 2,730               | Min. 85          | Max. 100                |
| OBO-1201G-A1                           | 25 12.0 x 8.5         | 1.5              | 1 ~ 2                | 16±2           | 2,048               | Min. 85          | Max. 55                 |
| OBO-1201G-B1                           | 26 12.0 x 8.5         | 1.5              | 1 ~ 3                | 42±6           | 2,048               | Min. 85          | Max. 15                 |
| OBO-1206G-C1                           | 27 12.0 x 8.5         | 6.0              | 4 ~ 8                | 73±6           | 2,048               | Min. 82          | Max. 30                 |
| OBO-1201M-A3                           | 28 12.0 x 5.5         | 1.5              | 1 ~ 3                | 16±2           | 2,048               | Min. 75          | Max. 30                 |
| OBO-1201M-B3                           | 29 12.0 x 5.5         | 1.5              | 1 ~ 3                | 42±6           | 2,048               | Min. 70          | Max. 15                 |
| OBO-1203M-A3                           | 30 12.0 x 5.5         | 3.0              | 1 ~ 5                | 16±2           | 2,048               | Min. 85          | Max. 70                 |
| OBO-1205M-B3                           | 31 12.0 x 5.5         | 5.0              | 3 ~ 8                | 42±6           | 2,048               | Min. 85          | Max. 50                 |
| OBO-1205A-D2                           | 32 12.0 x 9.0         | 5.0              | 3 ~ 7                | 42±5           | 2,048               | Min. 82          | Max. 50                 |
| OBO-1212A-D2                           | 33 12.0 x 9.0         | 12.0             | 7 ~ 16               | 140±14         | 2,400               | Min. 85          | Max. 40                 |
| OBO-1201A-A2                           | 34 12.0 x 9.0         | 1.5              | 1 ~ 2                | 6.5±1          | 2,400               | Min. 75          | Max. 70                 |
| OBO-1206A-A2                           | 35 12.0 x 9.0         | 6.0              | 4 ~ 8                | 45±6           | 2,400               | Min. 85          | Max. 50                 |
| OBO-1212A-A2                           | 36 12.0 x 9.0         | 12.0             | 6 ~ 15               | 140±14         | 2,400               | Min. 85          | Max. 40                 |



Acoustic Analyzer for Consumer Product



**OBO-3022**

- Support digital microphone channels
- Support 4 channels digital microphone, 2 data path L/R channel (switching)
- Power for digital microphone / 1.5V~4.5V DC
- Clock for digital microphone / 2.4M Hz



**OBO-3055**

- 10 power input channels
- Provide bias voltage supply (24V) or constant current supply (4 mA) for reference microphone or ear simulator
- 2 analog input channels / For Headset SPK
- 5 amplifier channels / provide power amplify for mouth simulator or speaker
- 3 analog output channels / For Headset Mic.

Acoustic Analyzer for Microphone Module/ Speaker



**OBO-1014**

- AI/AO Channels / 4 AI for analog or digital microphone  
1 AO for sound source with 10W power amplifier
- Sample Rate / 96KS / sec
- ADC Resolution / 24 bits
- Test Items / Sensitivity, Response, THD, THDN, Phase(\*1)

\*1 It must have reference microphone

Microphone Module Jig

**OBO-AC190**

Chamber Specification

- Outside Dimension / L: 190mm \* W: 190mm \* H: 180mm
- Net Weight / ~ 4Kg
- Construction / Phenolic Plastics
- Sound Pressure Level / 102dB SPL @1Vrms
- Sound Insulation Ability / >20dB(A-Weighting) SPL ref.20uPa
- Frequency Response / 100~20KHz
- Total Harmonic Distortion / <1% at 94dB SPL ref.20uPa



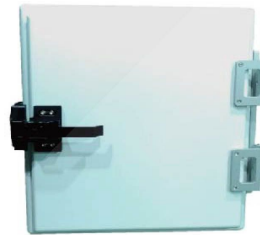
Acoustic Chamber for Consumer Product (1)

Acoustic Chamber for Consumer Product (2)

### OBO-AC420

#### Chamber Specification

- Outside Dimension / L:521mm \* W:420mm \* H:420mm
- Inside Dimension / L: 470mm \* W: 363mm \* H: 355mm
- Net Weight / ~ 25Kg
- Construction / Aluminum
- Sound Insulation Ability / >30dB(A-Weighting)SPL ref.20uPa
- Operating Working Space / ~ 1000mm (L) X 1000mm (W)
- Power Request / N/A



### OBO-AC800

#### Chamber Specification

- Outside Dimension / L: 935mm \* W: 910mm \* H: 590mm
- Inside Dimension / L: 650mm \* W: 650mm \* H: 380mm
- Net Weight / ~ 85Kg
- Construction / Aluminum
- Sound Insulation Ability / >30dB(A-Weighting)SPL ref.20uPa
- Operating Working Space / ~ 1000mm (L) X 1000mm (W)
- Operation / Manual



### OBO-PB4

#### Chamber Specification

- Outside Dimension / L: 89.5cm \* W: 82.2cm \* H: 118cm
- Inside Dimension / L: 41cm \* W: 41cm \* H: 41cm
- Net Weight / ~ 150Kg
- Construction / Aluminum
- Sound Insulation Ability / >40dB(A-Weighting) SPL ref.20uPa
- Operating Working Space / ~ 800mm (L) X 850mm (W)
- Operation / Air Cylinder Automatic Control

