

MAGNETIC TRANSDUCER



GS12A SERIES

SPECIFICATIONS

Type	GS12A-PN	GS12A-GPN	GS12A-PC
Rated Voltage (V)	1.5	1.5	5
⊗ Mean Current Consumption (mA)	MAX10(TYP8.5)	MAX35(TYP26)	MAX40(TYP31)
⊗ Coil Resistance (Ω)	50 ± 7.5	16 ± 4.5	50 ± 7.5
⊗ Coil Impedance (Ω)	140	40	140
⊗ Sound Output at 10cm (dB)	MIN82(TYP98)	MIN85(TYP92)	MIN88(TYP94)
Rated Frequency (Hz)	2048	2048	2000
Operating Voltage (V)	MAX2	MAX2	MAX5
Operating Temperature (°C)	-20~+60	-20~+60	-20~+60
Storage Temperature (°C)	-30~+70	-30~+70	-30~+70
Weight (g)	2	2	2

FEATURES

Compact, but rich sound

⊗ Value applying rated voltage(2734Hz, 1/2duty, square wave)

⊗ Value applying rated voltage(2048Hz, sine wave, measuring current 60 μA)

Note) Lead wire type is available on request. (Standard length: 110mm, 60mm, PN, GPN, type)

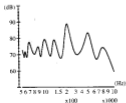
DIMENSIONS



unit:mm
housing material:NYLON SE1

FREQUENCY RESPONSE

(typical curve of type GS12A-PN)



applied voltage: 1.5V, square wave, 1/2 duty
distance for measurement: 10cm

GS12B SERIES

SPECIFICATIONS

Type	GS12B
Rated Voltage (V)	1.5
⊖ Mean Current Consumption (mA)	MAX10(TYP9.1)
Coil Resistance (Ω)	50 ± 7.5
∩ Coil Impedance (Ω)	140
⊖ Sound Output at 10cm (dB)	MIN75(TYP75)
Rated Frequency (Hz)	2048
Operating Voltage (V)	MAX2
Operating Temperature (°C)	-20~+60
Storage Temperature (°C)	-35~+70
Weight (g)	2

FEATURES

Ultra thin ($\varnothing 12 \times h5.4$)

⊖ Value applying rated voltage(2048Hz, 1/2 duty, square wave)

∩ Value applying rated voltage(2048Hz, sine wave, measuring current 50 μ A)

Note) Lead wire type is available on request. (Standard length 100mm/60mm)

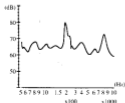
DIMENSIONS



unit:mm
housing material:NORYL SE1

FREQUENCY RESPONSE

(typical curve of type GS12B)



applied voltage : 1.5V, square wave, 1/2 duty

distance for measurement: 10cm

MAGNETIC TRANSDUCER



GS12C SERIES

SPECIFICATIONS

Type	GS12C
Rated Voltage (V)	1.5
± Mean Current Consumption (mA)	MAX70(TYP51)
Coil Resistance (Ω)	6.5 ± 1
φ Sound Output at 10cm (dB)	MIN85(TYP92)
Rated Frequency (Hz)	2743
Operating Voltage (V)	MAX2
Operating Temperature (°C)	-20~+60
Storage Temperature (°C)	-30~+70
Weight (g)	2

① Value applying rated voltage(2743Hz, 1/2duty, square wave)

FEATURES

Rated frequency:2.7Hz

thin (Ø12 × h7.5)

DIMENSIONS



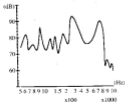
unit size

housing material:NORYL SE1

NORYL SE1-GPN2

FREQUENCY RESPONSE

(typical curve of type GS12C)



applied voltage : 1.5V, square wave, 1/2 duty
distance for measurement: 10cm

GS12D SERIES

SPECIFICATIONS

Type	GS12B
Rated Voltage (V)	1.5
⊕ Mean Current Consumption (mA)	MAX3(TPY20)
⊖ Coil Resistance (Ω)	16 ± 2
⊖ Coil Impedance (Ω)	40
⊕ Sound Output at 10cm (dB)	MIN92(TPY30)
Rated Frequency (Hz)	2048
Operating Voltage (V)	MAX2
Operating Temperature (°C)	-20→+60
Weight (g)	2

⊕ Value applying rated voltage(2048Hz, 1/2duty, square wave)

⊖ Value applying (2048Hz, sine wave, measuring current 60 μA)

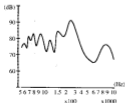
DIMENSIONS



unit:mm
housing material: NORYL SE1

FREQUENCY RESPONSE

(typical curve of type GS12D)



applied voltage : 1.5V, square wave, 1/2 duty
distance for measurement: 10cm

MAGNETIC TRANSDUCER



GST12A SERIES

SPECIFICATIONS

Type	GST12A-04A	GST12A-04B	GST12A-04C
Rated Voltage (V)	1.5	1.5	1.5
⊕ Mean Current Consumption (mA)	MAX70(TPY57)	MAX66(TPY51)	MAX10(TPY9.1)
Coil Resistance (Ω)	4.5 ± 1	4.5 ± 1	50 ± 5
⊕ Coil Impedance (Ω)	16	22	140
⊕ Signal Output at 10cm (dB)	MP80(TPY90)	MP85(TPY95)	MIN70(TPY70)
Operating Voltage (V)	MAX2	MAX2	MAX2
Rated Frequency (Hz)	2048	2731	2048
Operating Temperature (°C)	-20~+60	-20~+60	-20~+60
Weight (g)	2	2	2

⊕ Value applying rated voltage/Resonant Frequency, 1/2duty, square wave

⊕ Value applying rated voltage/Resonant Frequency, sine wave, measuring current 60 μA

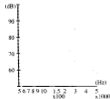
DIMENSIONS



unit:mm
housing material:2004YL, SE1-GP92

FREQUENCY RESPONSE

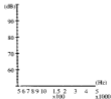
(typical curve of type GST12A-04A)



applied voltage : 1.5V, 1/2 duty, square wave ,
distance for measurement: 10cm

FREQUENCY RESPONSE

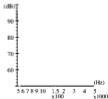
(typical curve of type GST12A-04B)



applied voltage : 1.5V, 1/2 duty, square wave ,
distance for measurement: 10cm

FREQUENCY RESPONSE

(typical curve of type GST12A-04C)



applied voltage : 1.5V, 1/2 duty, square wave ,
distance for measurement: 10cm

GST12B SERIES

SPECIFICATIONS

Type	GSTB	
Rated Voltage (V)	1.5	
⊕ Mean Current Consumption (mA)	MAX96	
⊖ Coil Resistance (Ω)	50 ± 7.5	
∠ Coil Impedance (Ω)	140	
⊕ Sound Output at 10cm (dB)	MIN85	
Rated Frequency (Hz)	2731	
Operating Voltage (V)	MAX2	
Operating Temperature (°C)	-20~+60	
Weight (g)	2	

⊕ Value applying rated voltage (Resonant Frequency, 1/2 duty, square wave)

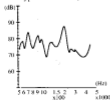
∠ Value applying rated voltage (Resonant Frequency, sine wave, measuring current 60 μA)

DIMENSIONS



FREQUENCY RESPONSE

(typical curve of type GST12B-06)



applied voltage : 1.5V, 1/2 duty, square wave,
distance for measurement: 10cm

MAGNETIC TRANSDUCER



GS14A SERIES

SPECIFICATIONS

FEATURES

Ultra thin ($\varnothing 14 \times h5$)

Type	GS1401A	GS1403A
Rated Voltage (V)	1.5	3
⊕ Mean Current Consumption (mA)	MAX70(TYP52)	MAX58(TYP26)
Coil Resistance (Ω)	6.5 ± 1	40 ± 6
⊕ Sound Output at 10cm (dB)	MIN85(TYP93)	MIN85(TYP90)
Rated Frequency (Hz)	2670	2000
Operating Voltage (V)	MAX2	MAX4
Operating Temperature (°C)	-20~+60	-20~+60
Storage Temperature (°C)	-30~+70	-30~+70
Weight (g)	2	2

⊕ Value applying rated voltage/Rated frequency, 1/2duty, square wave

DIMENSIONS

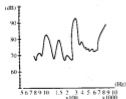


unit:mm
housing material:NYLON SE1

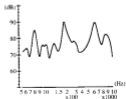
FREQUENCY RESPONSE

(typical curve of type GS1401A)

(typical curve of type GS1403A)



applied voltage :1.5V, square wave, 1/2 duty
distance for measurement:10cm



applied voltage :3V, square wave, 1/2 duty
distance for measurement:10cm

GST9632S SERIES

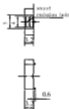
SPECIFICATIONS

Type	GS12A-PN	GS12A-GPN	GS12A-PC
Rated Voltage (V)	1.5		
Mean Current Consumption (mA)	MAX80		
Coil Resistance (Ω)	6 \pm 1		
Sound Output at 10cm (dB)	MIN80		
Rated Frequency (Hz)	2731	3100	3200
Operating Voltage (V)	MAX2		
Operating Temperature ($^{\circ}$ C)	-20 \rightarrow +60		
Operating Temperature ($^{\circ}$ C)	-30 \rightarrow +70		
Weight (g)	0.5		

FEATURES

Ultra thin ($\varnothing 9.6 \times h 3.2$)

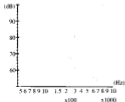
DIMENSIONS



unit:mm
housing material:PPS

FREQUENCY RESPONSE

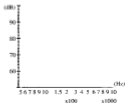
(typical curve of type GST9632S-BS)



applied voltage :1.5V, 1/2 duty, square wave
distance for measurement:10cm

FREQUENCY RESPONSE

(typical curve of type GST9632S-CS)



applied voltage :1.5V, 1/2 duty, square wave
distance for measurement:10cm

MAGNETIC TRANSDUCER



GST964 SERIES

SPECIFICATIONS

Type	GS12A-PN	GS12A-GPN	GS12A-PC
Operating Voltage (V)	1-2		
Rated Voltage (V)	1.5		
Mean Current Consumption (mA)	MAX80		
Coil Resistance (Ω)	6 \pm 1		
Sound Output at 10cm (dB)	MIN85		
Rated Frequency (Hz)	2731	3100	3200
Operating Temperature ($^{\circ}$ C)	-20 \rightarrow +60		
Operating Temperature ($^{\circ}$ C)	-30 \rightarrow +70		
Weight (g)	0.7		

FEATURES

Ultra thin ($\varnothing 9.6 \times h 4.0$)

DIMENSIONS

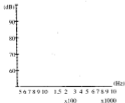


unit:mm

housing material:NORYL SEI
PPS

FREQUENCY RESPONSE

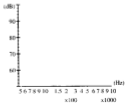
(typical curve of type GST964BP)



applied voltage :1.5V, 1/2 duty, square wave
distance for measurement:10cm

FREQUENCY RESPONSE

(typical curve of type GST964CP)



applied voltage :1.5V, 1/2 duty, square wave
distance for measurement:10cm

GS964 SERIES

SPECIFICATIONS

Type	GS964BP	GS964CP	GS964DP
Operating Voltage (V)	1-2		
Rated Voltage (V)	1.5		
Mean Current Consumption (mA)	MAX90		
Coil Resistance (Ω)	6 \pm 1		
Sound Output at 10cm (dB)	MIN85		
Resonant Frequency (Hz)	2730	3100	3200
Operating Temperature ($^{\circ}$ C)	-20 \rightarrow +60		
Operating Temperature ($^{\circ}$ C)	-20 \rightarrow +70		
Weight (g)	0.7		

FEATURES

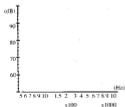
 Ultra thin ($\varnothing 9.6 \times h4.0$)

DIMENSIONS

 unit:mm
 housing material:NORYL SE1
 PPS

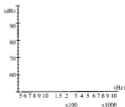
FREQUENCY RESPONSE

(typical curve of type GS964BP)


 applied voltage :1.5V, 1/2 duty, square wave
 distance for measurement:10cm

FREQUENCY RESPONSE

(typical curve of type GS964CP)


 applied voltage :1.5V, 1/2 duty, square wave
 distance for measurement:10cm

MAGNETIC TRANSDUCER



GS965 SERIES

SPECIFICATIONS

Type	GS965BP	GS965CP	GS965DP
Rated Voltage (V)	1.5		
Mean Current Consumption (mA)	MAX20		
Coil Resistance (Ω)	6 ± 1		
Sound Output at 10cm (dB)	MIN90		
Resonant Frequency (Hz)	273±	310±	330±
Operating Voltage (V)	MAX1		
Operating Temperature (°C)	-20~+60		
Operating Temperature (°C)	-30~+70		
Weight (g)	0.7		

FEATURES

Ultra thin (Ø9.6 × h5.0)

DIMENSIONS

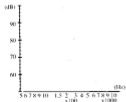


unit: mm

housing material: NORYL SEI
PPS

FREQUENCY RESPONSE

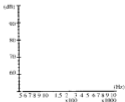
(typical curve of type GS965BP)



applied voltage: 1.5V, 1/2 duty, square wave
distance for measurement: 10cm

FREQUENCY RESPONSE

(typical curve of type GS965CP)



applied voltage: 1.5V, 1/2 duty, square wave
distance for measurement: 10cm

GS12 SERIES

SPECIFICATIONS

Type	GS1205	GS1212
Rated Voltage (V)	5	12
⊗ Mean Current Consumption (mA)	MAX40(TYP33)	MAX40(TYP28)
⊗ Coil Resistance (Ω)	47 ± 5	140 ± 14
⊗ Coil Impedance (Ω)	80	280
⊗ Sound Output at 10cm (dB)	MIN85(TYP91)	MIN85(TYP92)
Rated Frequency (Hz)	2400	2400
Operating Voltage (V)	MAX5	MAX12
Operating Temperature (°C)	-40~+85	-40~+85
Storage Temperature (°C)	-40~+85	-40~+85
Weight (g)	2	2

FEATURES

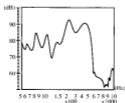
Dip-solderable and washable wide voltage and temperature range

DIMENSIONS



FREQUENCY RESPONSE

(typical curve of type GS1205A)



applied voltage :5V, square wave, 1/2 duty
distance for measurement: 10cm

⊗ Value applying rated voltage(2400Hz, 1/2duty, square wave)

⊗ Value applying (2048Hz, sine wave, measuring current 60 μ A)

MAGNETIC TRANSDUCER



GS16A SERIES

SPECIFICATIONS

Type	GS1601A	GS1606A	GS1612A
Rated Voltage (V)	1.5	6	12
⊖ Mean Current Consumption (mA)	MAX15(TYP11)	MAX40(TYP15)	MAX80(TYP32)
Coil Resistance (Ω)	30 ± 4.5	45 ± 7	115 ± 17
⊘ Coil Impedance (Ω)	80	110	200
⊖ Sound Output at 10cm (dB)	MIN42(TYP99)	MIN52(TYP99)	MIN62(TYP99)
Rated Frequency (Hz)	2048	2048	2048
Operating Voltage (V)	MAX3	MAX12	MAX18
Operating Temperature (°C)	-40~+85	-40~+85	-40~+85
Storage Temperature (°C)	-40~+85	-40~+85	-40~+85
Weight (g)	5	5	5

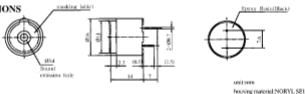
FEATURES

Dip-solderable and washable

⊖ Value applying rated voltage(2048Hz, 1/2duty, square wave)

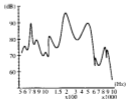
⊘ Value applying (2048Hz, sine wave, maximum current 60 μA)

DIMENSIONS



FREQUENCY RESPONSE

(typical curve of type GS1606A)



applied voltage: 6V, 1/2 duty, square wave.

distance for measurement: 10cm

GS16B SERIES

SPECIFICATIONS

Type	GS160B	GS162B
Rated Voltage (V)	6	12
⊕ Max Current Consumption (mA)	MAX40(TYP3)	MAX40(TYP5)
Coil Resistance (Ω)	45 ± 7	115 ± 17
⊖ Coil Impedance (Ω)	110	200
⊕ Sound Output at 10cm (dB)	MIN85(TYP94)	MIN85(TYP96)
Rated Frequency (Hz)	2048	2048
Reproduced Frequency (Hz)	2000-3000(MIN.80dB)	2000-3000(MIN.80dB)
Operating Voltage (V)	MAX12	MAX18
Operating Temperature (°C)	-40~+85	-40~+85
Storage Temperature (°C)	-40~+85	-40~+85
Weight (g)	5	5

⊕ Value applying rated voltage(2048Hz, 1/2duty, square wave)

⊖ Value applying rated voltage(2048Hz, sine wave, measuring current 60 μA)

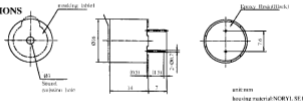
FEATURES

Wide frequency range

Dip-solderable and

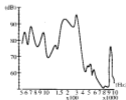
washable by any
cleaning solvents

DIMENSIONS



FREQUENCY RESPONSE

(typical curve of type GS1606B)



applied voltage: 6V, square wave, 1/2 duty, square wave
distance for measurement: 10cm

MAGNETIC TRANSDUCER



GS16C SERIES

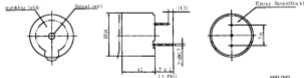
SPECIFICATIONS

Type	GS909C	GS1612C
Rated Voltage (V)	5	12
⊕ Meas Current Consumption (mA)	MAX70(TPY35)	MAX50(TPY30)
Coil Resistance (Ω)	28 ± 6	135 ± 20
⊕ Sound Output at 10cm (dB)	MIN85(TPY30)	MIN85(TPY30)
Rated Frequency (Hz)	1700-2200	1700-2200
Operating Voltage (V)	MAX8	MAX15
Operating Temperature (°C)	-40~+90	-40~+90
Storage Temperature (°C)	-40~+90	-40~+90
Weight (g)	4	5

FEATURES

- Dip-solderable and washable.
- Lower and Wide frequency Band.
- Min.85dB is specified for the band from 1700HZ to 2200HZ.

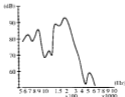
DIMENSIONS



⊕ Value applying rated voltage within reproduced frequency, 1/2 duty, square wave

FREQUENCY RESPONSE

(typical curve of type GS1612C)



applied voltage: 12V, square wave, 1/2 duty
distance for measurement: 10cm

unit:mm
housing material: PBT

GSF18 SERIES

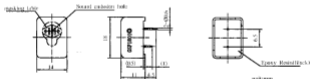
SPECIFICATIONS

Type	GSF1801	GSF1806	GSF1812
Rated Voltage (V)	1.5	6	12
⊗ Mean Current Consumption (mA)	MAX40(TP132)	MAX35(TP133)	MAX40(TP135)
Coil Resistance (Ω)	84 ± 2	60 ± 6	120 ± 10
⊘ Coil Impedance (Ω)	22	90	170
⊗ Sound Output at 10cm (dB)	MIN82(TP198)	MIN85(TP196)	MIN85(TP196)
Rated Frequency (Hz)	2048	2048	2048
Reproduced Frequency (Hz)	2000-2500(MIN3048)		
Operating Voltage (V)	MAX2	MAX10	MAX15
Operating Temperature (°C)	-30~+70	-40~+85	-40~+85
Storage Temperature (°C)	-30~+80	-40~+85	-40~+85
Weight (g)	4	4	4

FEATURES

- Dip-solderable and washable.
- Wide frequency range.
- Delivered in magazine for automatic insertion.

DIMENSIONS

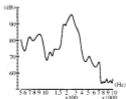


unit:mm

housing material:NORVI, SEI-GPNC

FREQUENCY RESPONSE

(typical curve of type GSF1806)



applied voltage :6V, square wave, 1/2 duty
distance for measurement: 10cm

MAGNETIC TRANSDUCER



GS12S SERIES

SPECIFICATIONS

Type	GS1205	GS1205	GS1205S	GS1205S	GS1212S
Rated Voltage (V)	1.5	3	5	9	12
Operating Voltage (V)	1.5-2	2-4	4-6.5	6.5-10	8-16
Max Current Consumption (mA)	MAX25	MAX30	MAX30	MAX30	MAX30
Sound Output at 10cm (dB)	MIN89(TYP82)	MIN85(TYP87)			
Basic Frequency (Hz)	2300 ± 300				
Response time (msec)	MAX50				
Operating Temperature (°C)	-40~+85				
Storage Temperature (°C)	-40~+85				
Weight (g)	2				

⊗ Value applying rated voltage

⊘ Value applying min operating voltage.

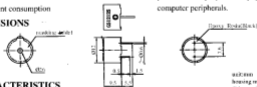
FEATURES

Dip-solderable and washable.

Compact

Low current consumption

DIMENSIONS



9.5±0.05mm
housing material: NORYL SE1
⊗ Long pin (+)

CHARACTERISTICS

(GS1205S)
Sound output vs. Voltage



Current vs. Voltage



(GS1212S)
Sound output vs. Voltage



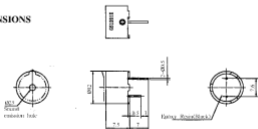
Current vs. Voltage



GS12X SERIES
SPECIFICATIONS

Type	GS1201X	GS1205X	GS1212X
Operating Voltage (V)	1.5~2	4~6.5	8~12
Rated Voltage (V)	1.5	5	12
⊖ Max Current Consumption (mA)	MAX20	MAX25	MAX25
⊕ Sound Output at 10cm (dB)	MIN80	MIN82	MIN85
⊖ Frequency (kHz)	1000 ~ 300		
Operating Temperature (°C)	-40~+85	-40~+85	-40~+85
Weight (g)	2	2	2

⊖ Value applying at rated voltage

DIMENSIONS

 0001000
 housing material NORYL SE1-GPN2
 NORYL SE1

MAGNETIC TRANSDUCER



GS16S SERIES

SPECIFICATIONS

Type		GS1601S	GS1606S	GS1612S
Rated Voltage	(V)	1.5	6	12
Operating Voltage	(V)	1.5-2	4-7	6-16
⊕ Max Current Consumption	(mA)	MAX25(TYP23)	MAX30(TYP27)	MAX30(TYP25)
⊕ Sound Output at 10cm	(dB)	MIN82(TYP85)	MIN85(TYP88)	MIN85(TYP87)
⊕ Basic Frequency	(Hz)	2200 ± 300		
⊕ Response time	(msec)	MAX50		
Operating Temperature	(°C)	-40~+85		
Storage Temperature	(°C)	-40~+85		
Weight	(g)	5		

FEATURES

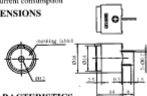
- ⊕ Voice applying rated voltage
- ⊕ Voice applying min operating voltage.

Dip-solderable and washable.

Compact

Low current consumption

DIMENSIONS



APPLICATIONS

microwave oven, printer, telephone electronic cash register, timer, auto-mobile electronics, POS system, portable battery-operated equipment, computer peripherals.



unit:mm
housing material:NYLON 66-GP92
⊕ Long pin(+)

CHARACTERISTICS

(GS1606S)
Sound output vs. Voltage



(GS1612S)
Sound output vs. Voltage

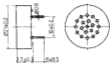


DYNAMIC TRANSDUCER

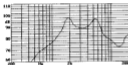
GEMBIRD
components

XD2108

DIMENSIONS Unit:mm



FREQUENCY RESPONSE



SPECIFICATIONS

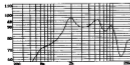
Type	XD2108
Rated Impedance (Ω)	5±20%
Rated (Max.) Power (W)	0.1(0.15)
Resonance Frequency (Hz)	2000±15%
Rated Freq. Range (Hz)	150-5000
Sound Output at 10cm, 100Hz (dB)	>80
Operating Temperature (°C)	-20~+60
Storage Temperature (°C)	-30~+70
Weight (g)	2.5

XD2308A

DIMENSIONS Unit:mm



FREQUENCY RESPONSE



SPECIFICATIONS

Type	XD2308A
Rated Impedance (Ω)	5±20%
Rated (Max.) Power (W)	0.09(0.15)
Resonance Frequency (Hz)	1500±20%
Rated Freq. Range (Hz)	50-5000
Sound Output at 10cm, 100Hz (dB)	>75
Operating Temperature (°C)	-20~+60
Storage Temperature (°C)	-30~+70
Weight (g)	3

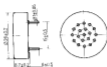
DYNAMIC TRANSDUCER



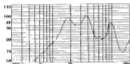
XD2608



DIMENSIONS Unit:mm



FREQUENCY RESPONSE



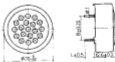
SPECIFICATIONS

Type	XD2608
Rated Impedance (Ω)	8±15%
Rated (Max.) Power (W)	0.10 (3)
Resonance Frequency (Hz)	1500±200
Rated Freq. Range (Hz)	800-4000
Sound Output at 10cm, 1.00Hz (dB)	> 85
Operating Temperature (°C)	-20~+60
Storage Temperature (°C)	-30~+70
Weight (g)	5

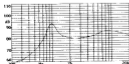
XD40/43



DIMENSIONS Unit:mm



FREQUENCY RESPONSE



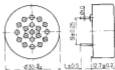
SPECIFICATIONS

Type	XD40	XD41	XD42	XD43
Rated Impedance (Ω)	100±15%	8±15%	30±15%	16±15%
Rated (Max.) Power (W)	0.10 (3)			
Resonance Frequency (Hz)	1000±20%			
Rated Freq. Range (Hz)	700-3000			
Sound Output at 10cm, 1.00Hz (dB)	> 81			
Operating Temperature (°C)	-20~+60			
Storage Temperature (°C)	-40~+80			
Weight (g)	10			

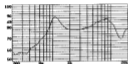
XD40Y/43Y



DIMENSIONS Unit:mm



FREQUENCY RESPONSE



SPECIFICATIONS

Type	XD40Y	XD41Y	XD42Y	XD43Y
Rated Impedance (Z_0)	100 \pm 15%	8 \pm 15%	32 \pm 15%	16 \pm 15%
Rated (Max.) Power (W)	0.15(0.2)			
Resonance Frequency (Hz)	1000 \pm 20%			
Rated Freq. Range (Hz)	700-5000			
Sound Output at 10cm, 1.0kHz (dB)	2-91			
Operating Temperature (°C)	-20~+65			
Storage Temperature (°C)	-40~+90			
Weight (g)	15			

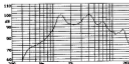
XD3108



DIMENSIONS Unit:mm



FREQUENCY RESPONSE



SPECIFICATIONS

Type	XD3108
Rated Impedance (Z_0)	8 \pm 20%
Rated (Max.) Power (W)	0.15(0.2)
Resonance Frequency (Hz)	1100 \pm 15%
Rated Freq. Range (Hz)	700-4000
Sound Output at 10cm (dB)	2-83
Operating Temperature (°C)	-20~+65
Storage Temperature (°C)	-20~+90
Weight (g)	11