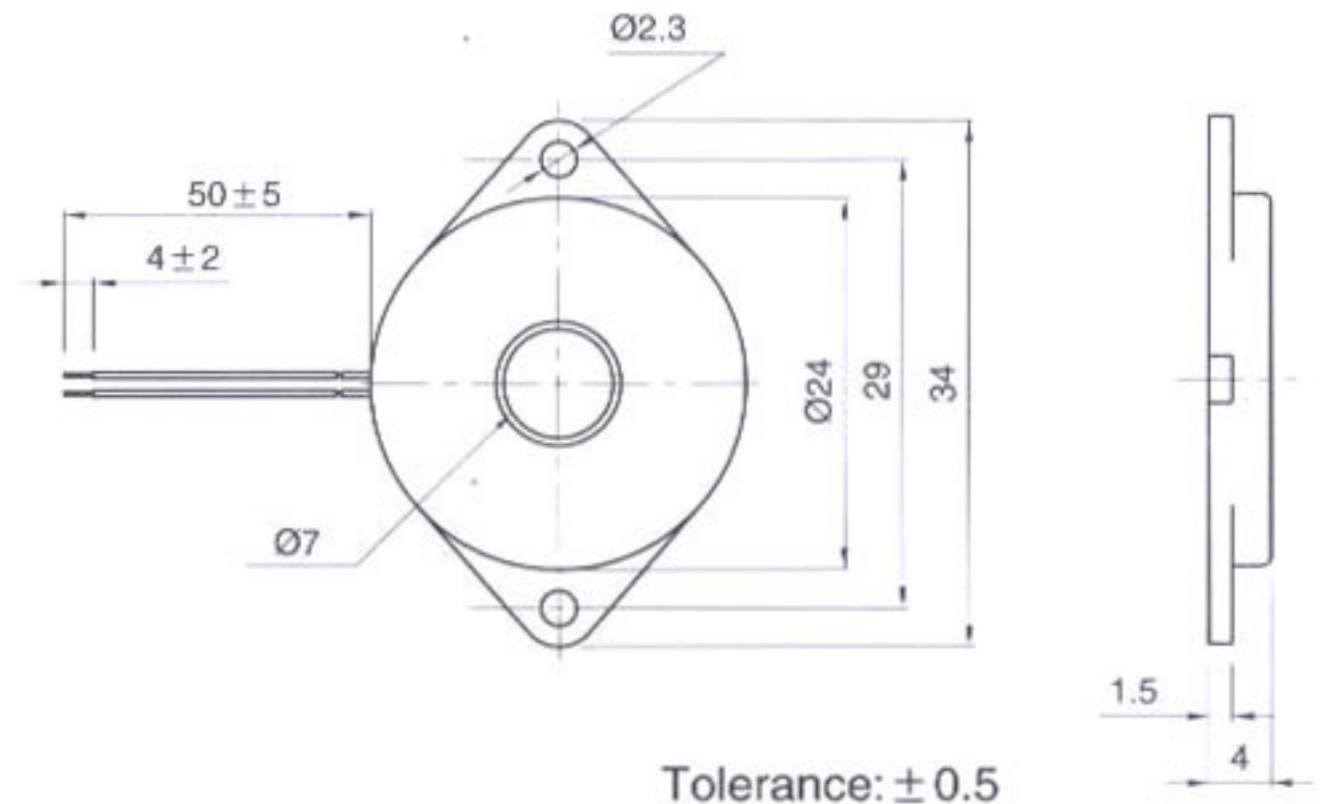
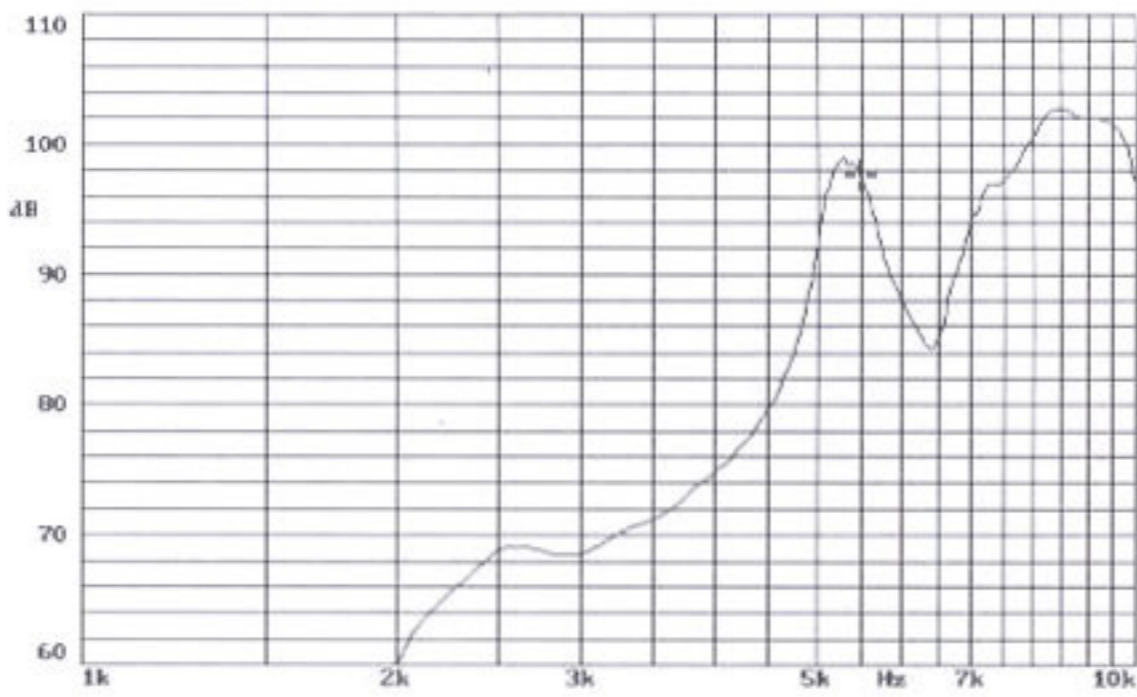


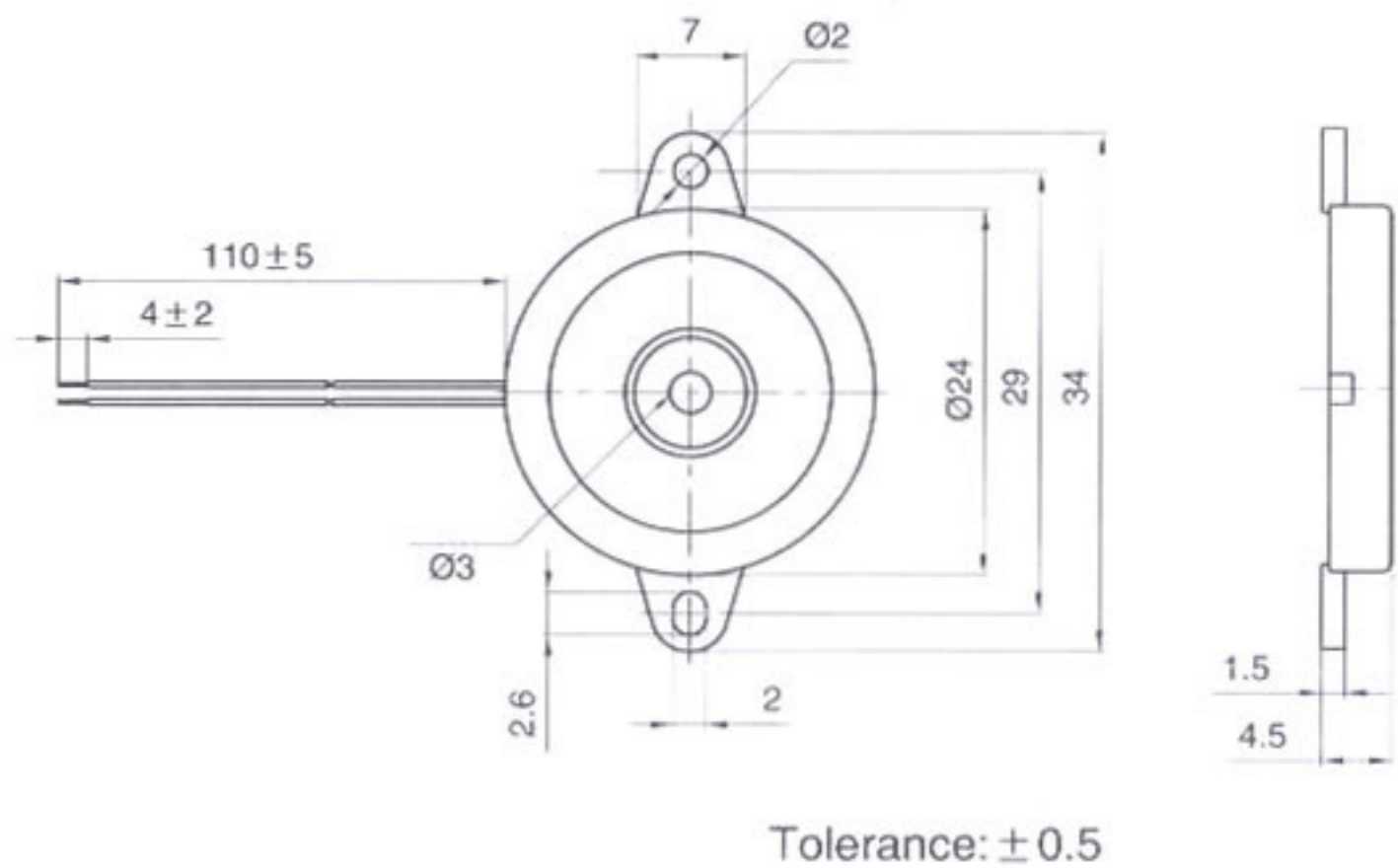
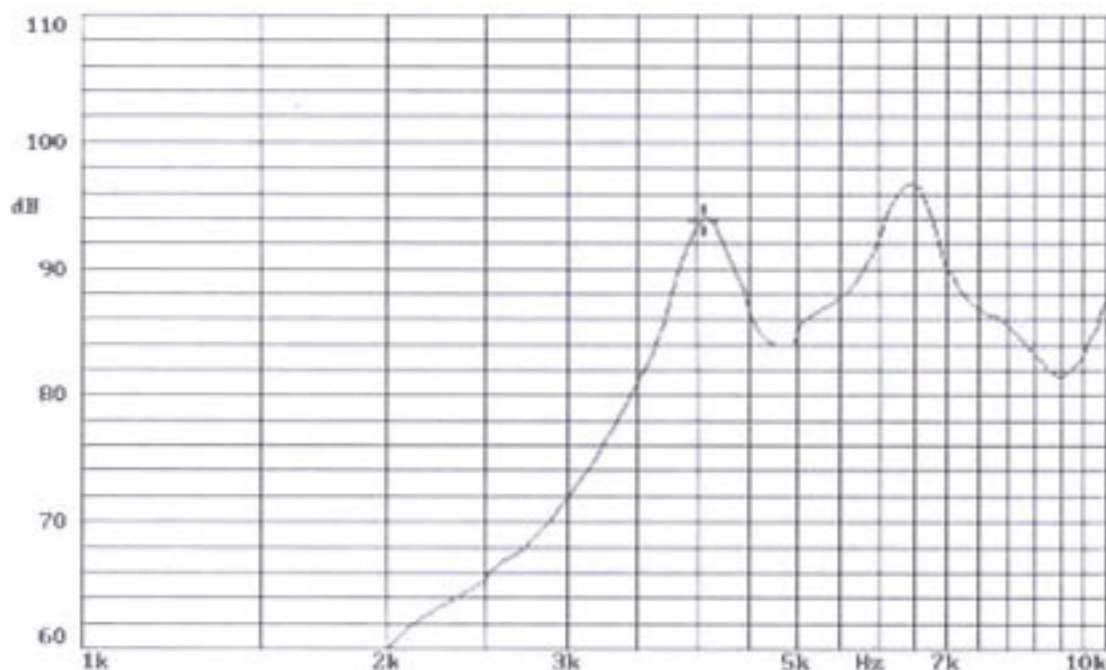
## XY12

Operating Voltage (Vp-p)	1~ 30
S.P.L at 10 cm (dB)	≥ 90
Resonant Frequency (Hz)	5500 ± 500
Capacitance at 120 Hz ,25°C (pF)	15000 ± 30%
Current (mA)	≤ 8.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



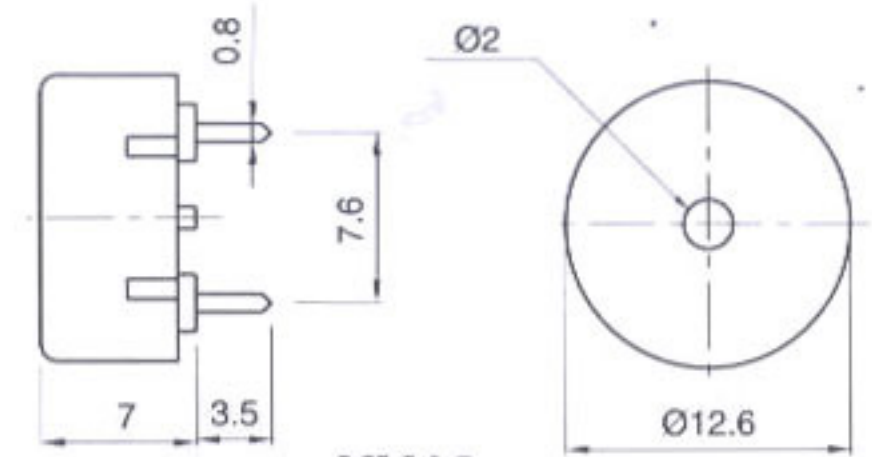
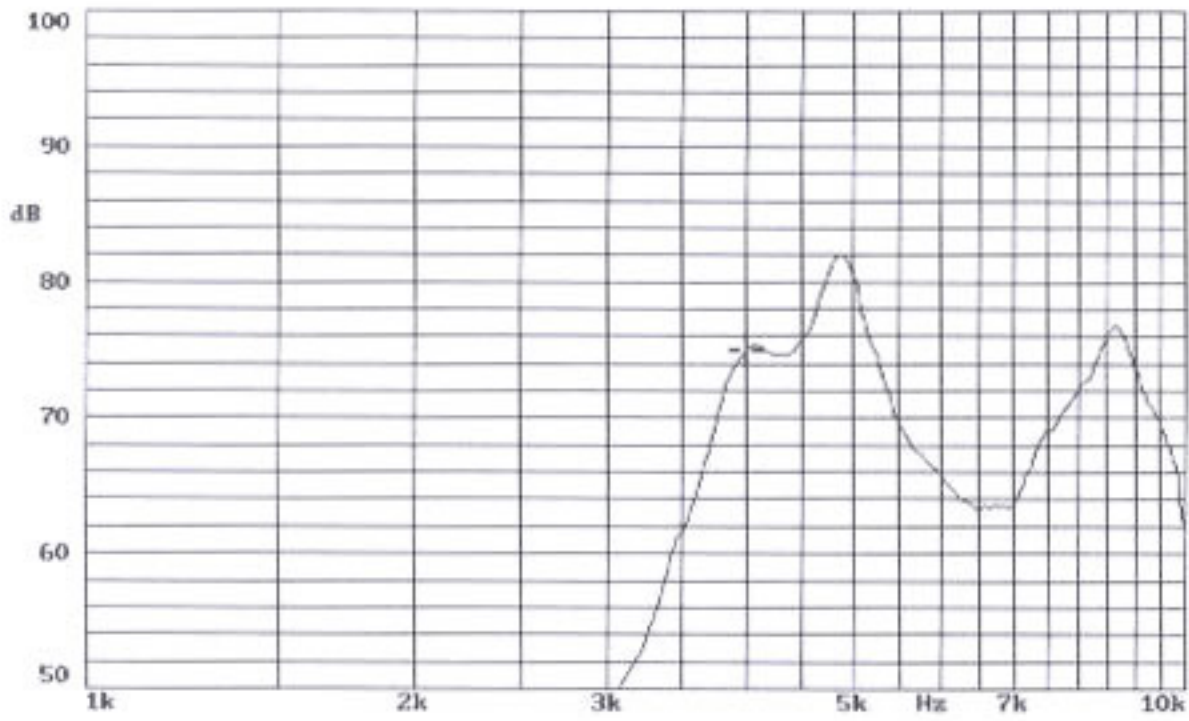
## XY12C

Operating Voltage (Vp-p)	1~30
S.P.L at 10 cm (dB)	≥ 80
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	28000 ± 30%
Current (mA)	≤ 5.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



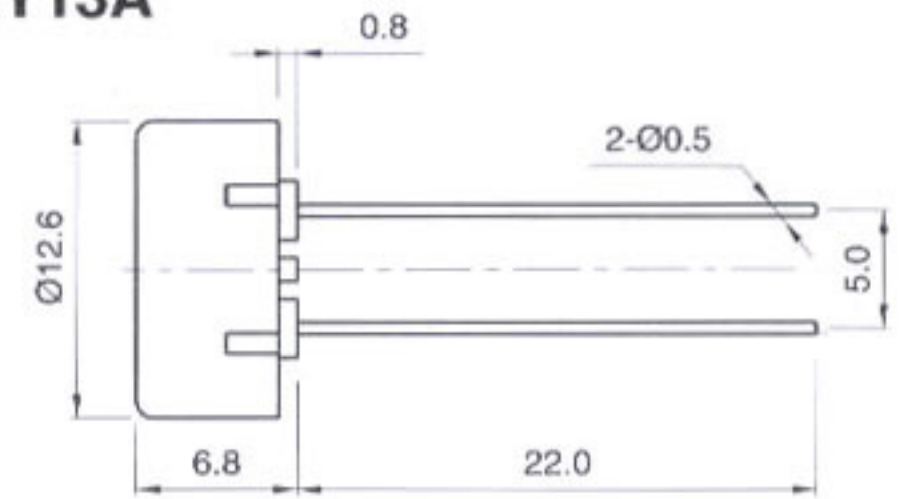
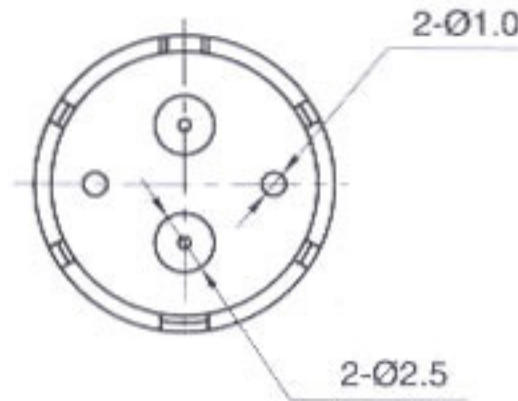
## XY13-XY13A

Operating Voltage (Vp-p)	1~ 20
S.P.L at 10 cm (dB)	≥75
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	11000 ± 30%
Current (mA)	≤1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



XY13A

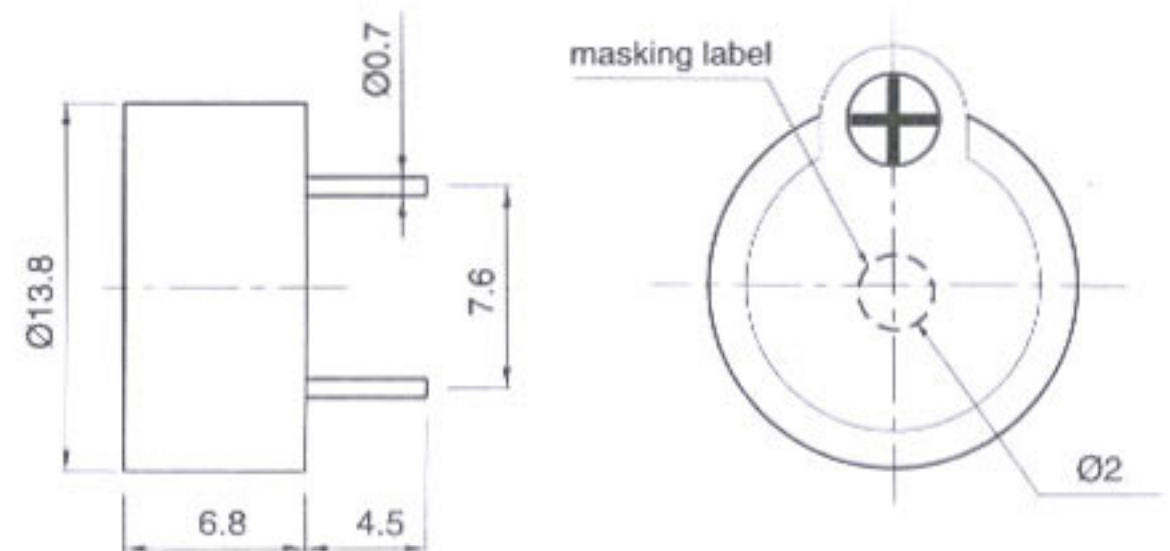
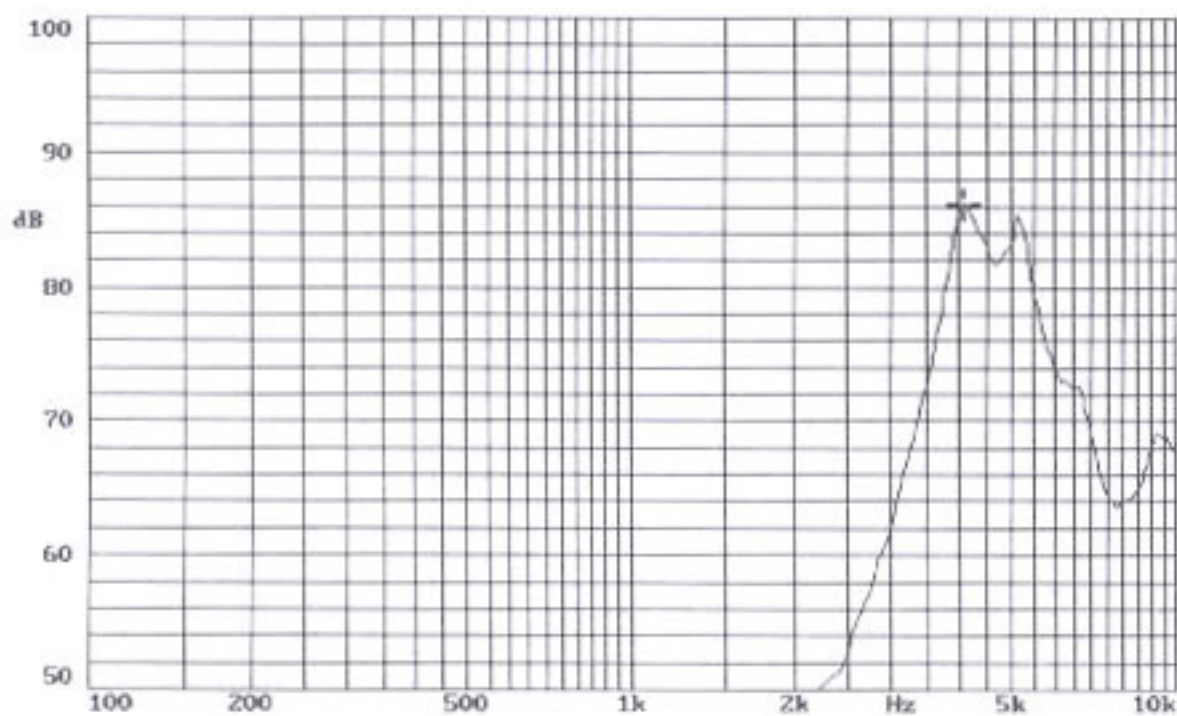
XY13



Tolerance:  $\pm 0.5$

## XY14

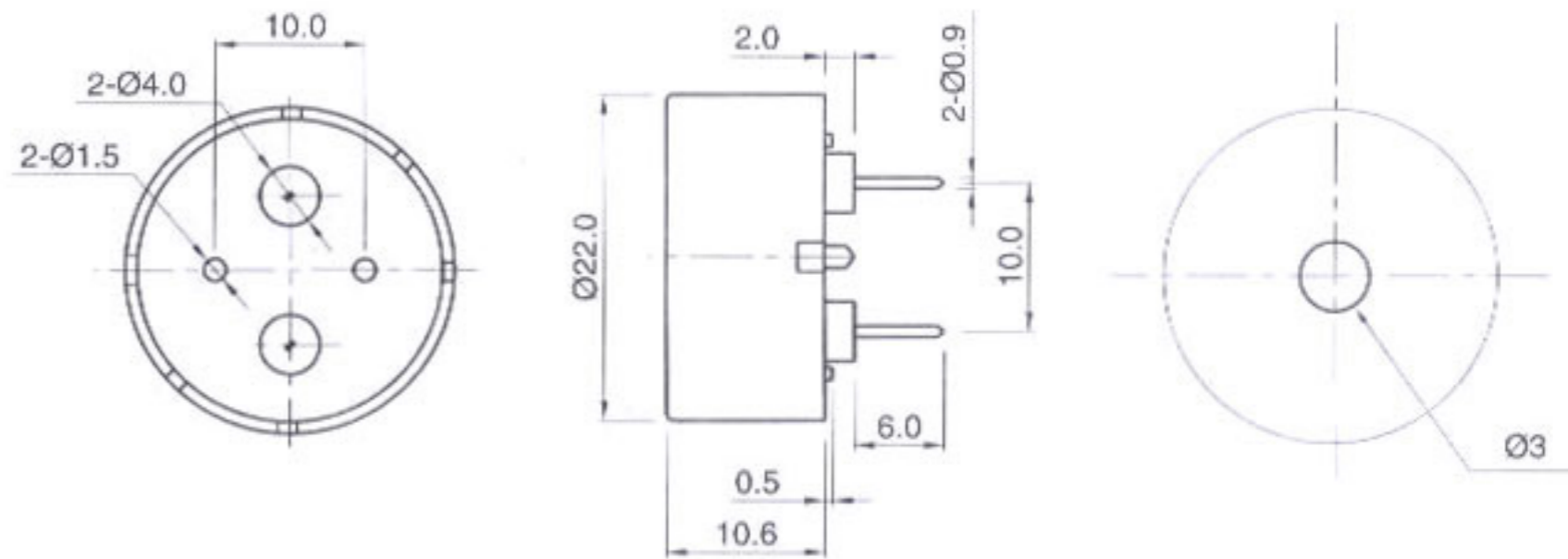
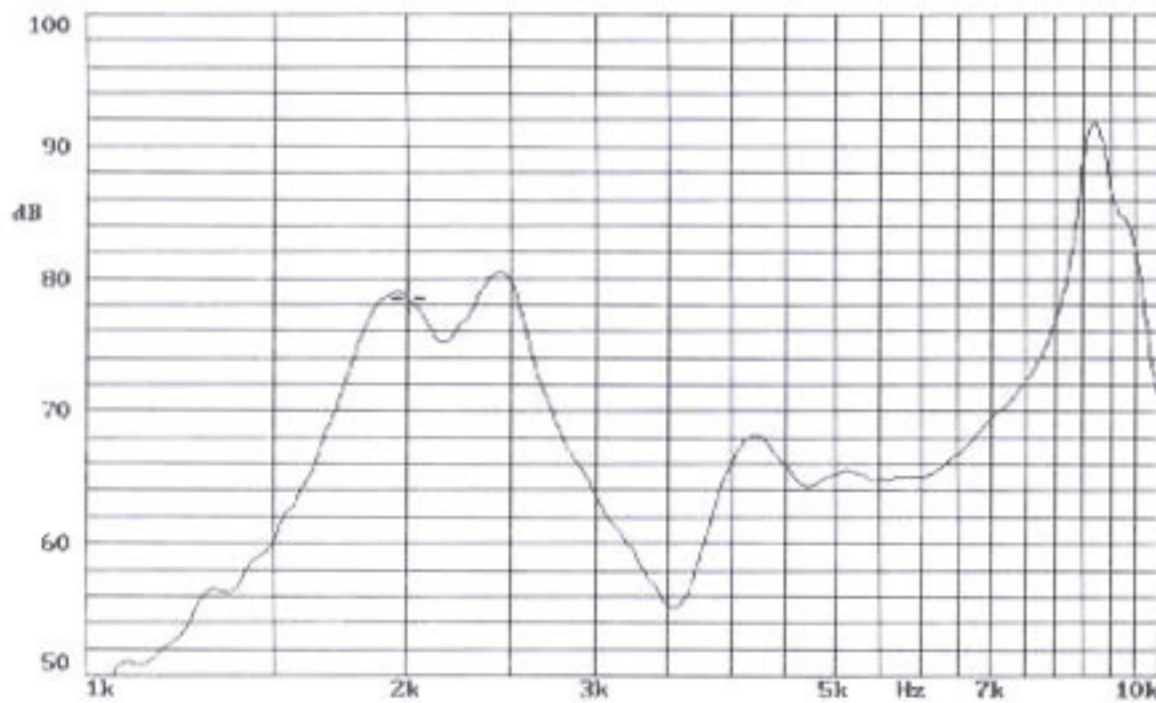
Operating Voltage (Vp-p)	1~ 20
S.P.L at 10 cm (dB)	≥80
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	15000 ± 30%
Current (mA)	≤1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance:  $\pm 0.5$

## XY20C

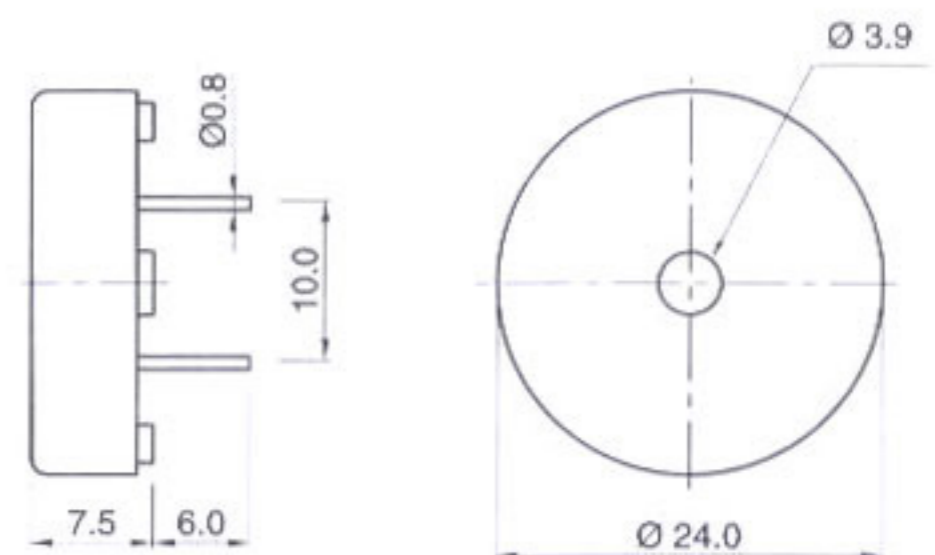
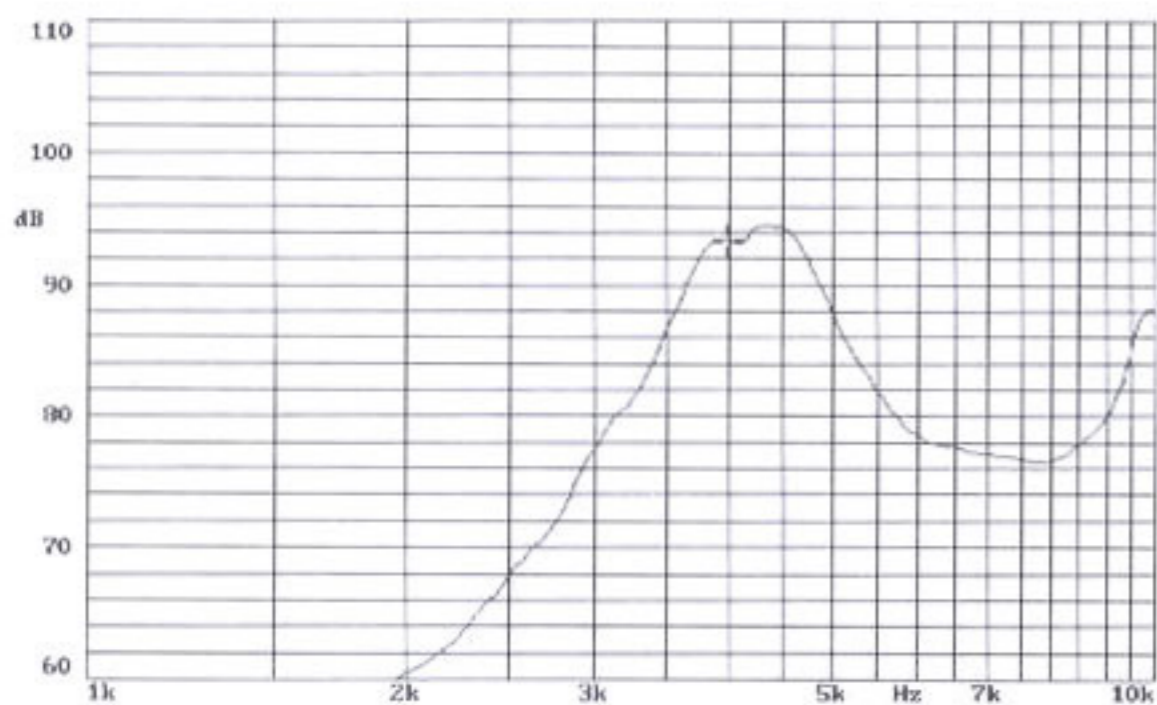
Operating Voltage (Vp-p)	1~ 30
S.P.L at 10 cm (dB)	≥75
Resonant Frequency (Hz)	2000 ± 500
Capacitance at 120 Hz ,25°C (pF)	28000 ± 30%
Current (mA)	≤ 1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY20K

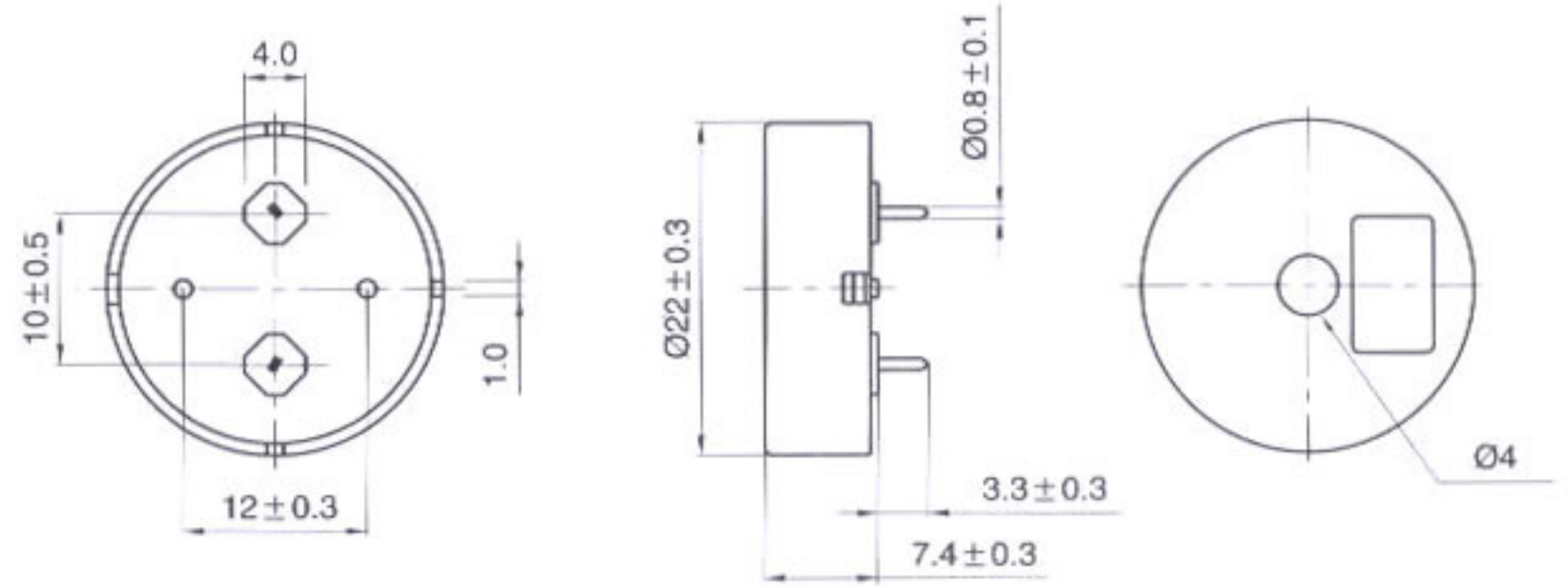
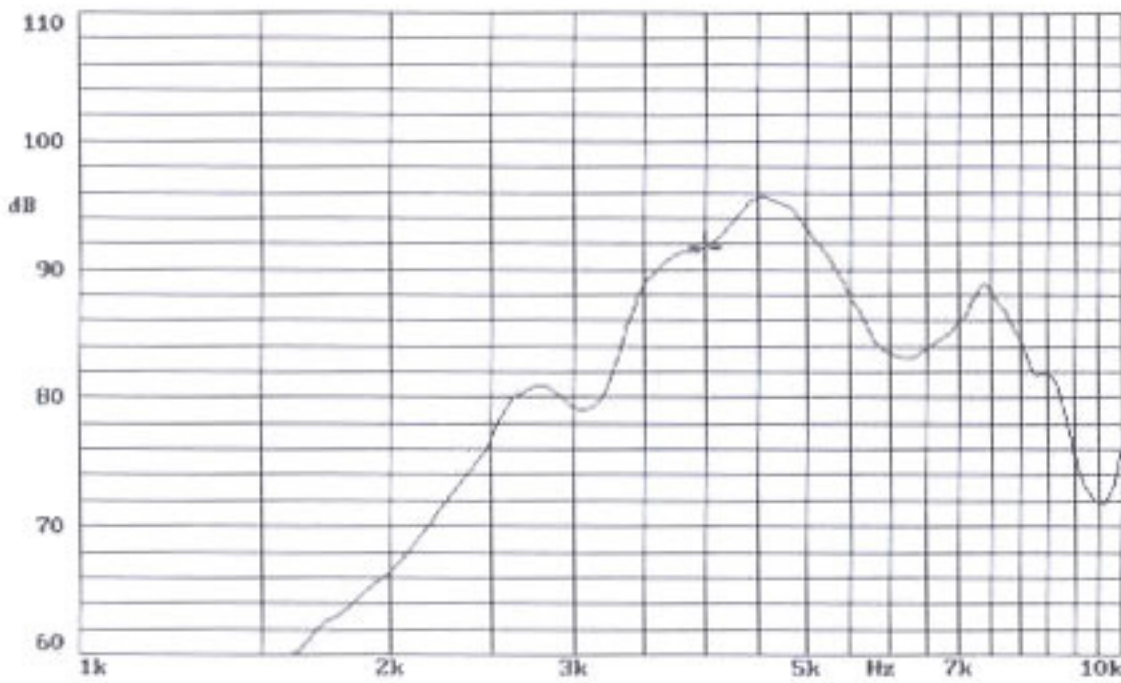
Operating Voltage (Vp-p)	1~ 30
S.P.L at 10 cm (dB)	≥90
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	15000 ± 30%
Current (mA)	≤ 1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY20E

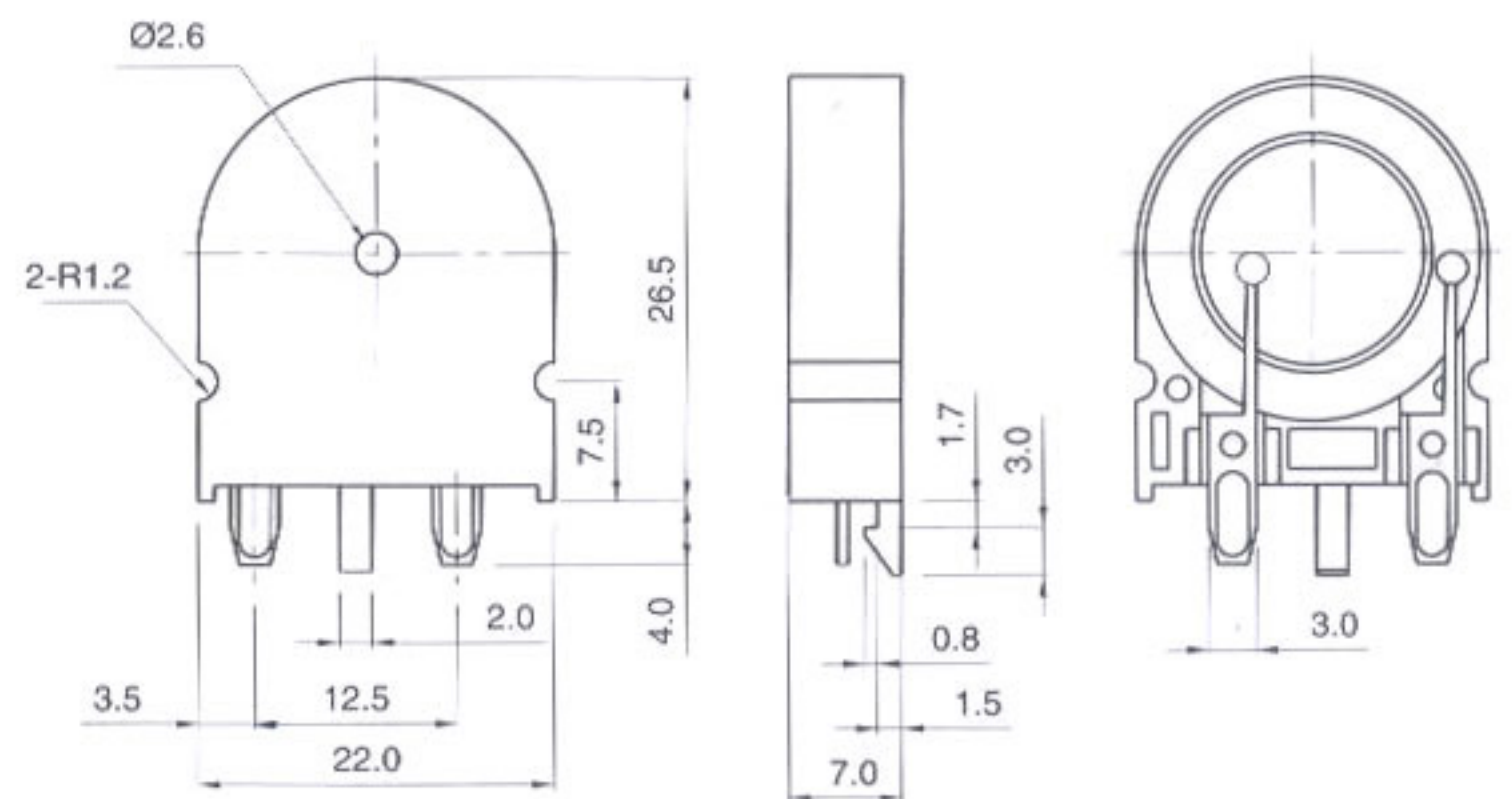
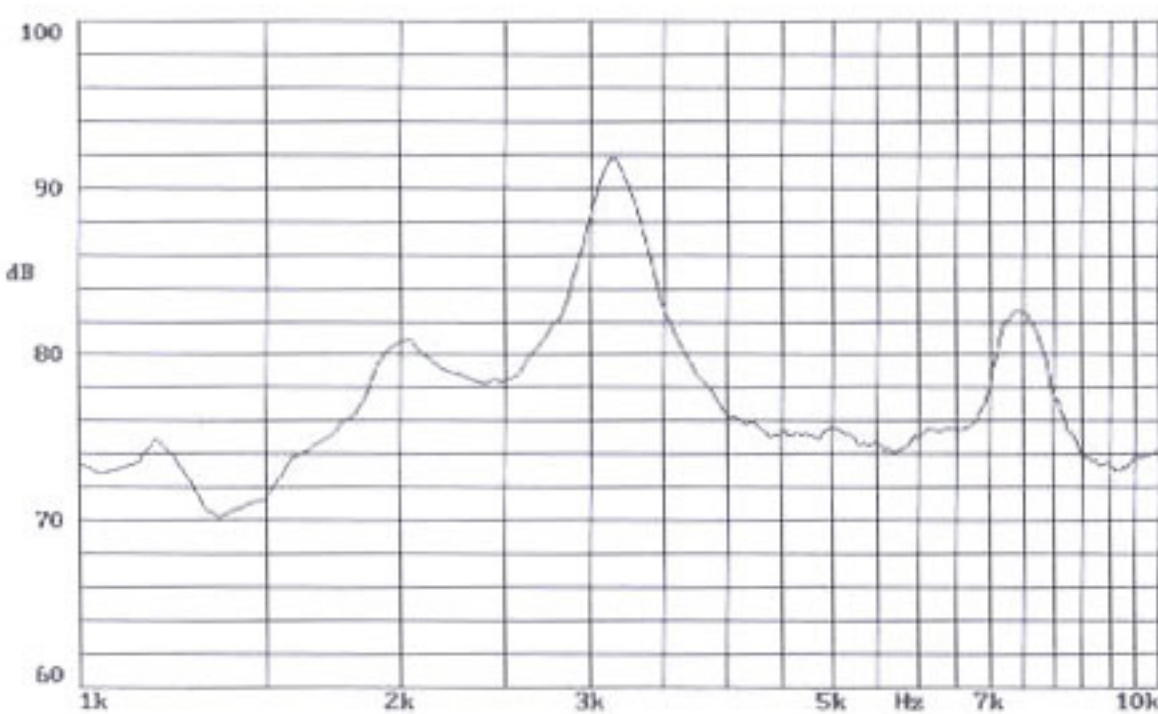
Operating Voltage (Vp-p)	1~ 30
S.P.L at 10 cm (dB)	≥ 90
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	15000 ± 30%
Current (mA)	≤ 3.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY22

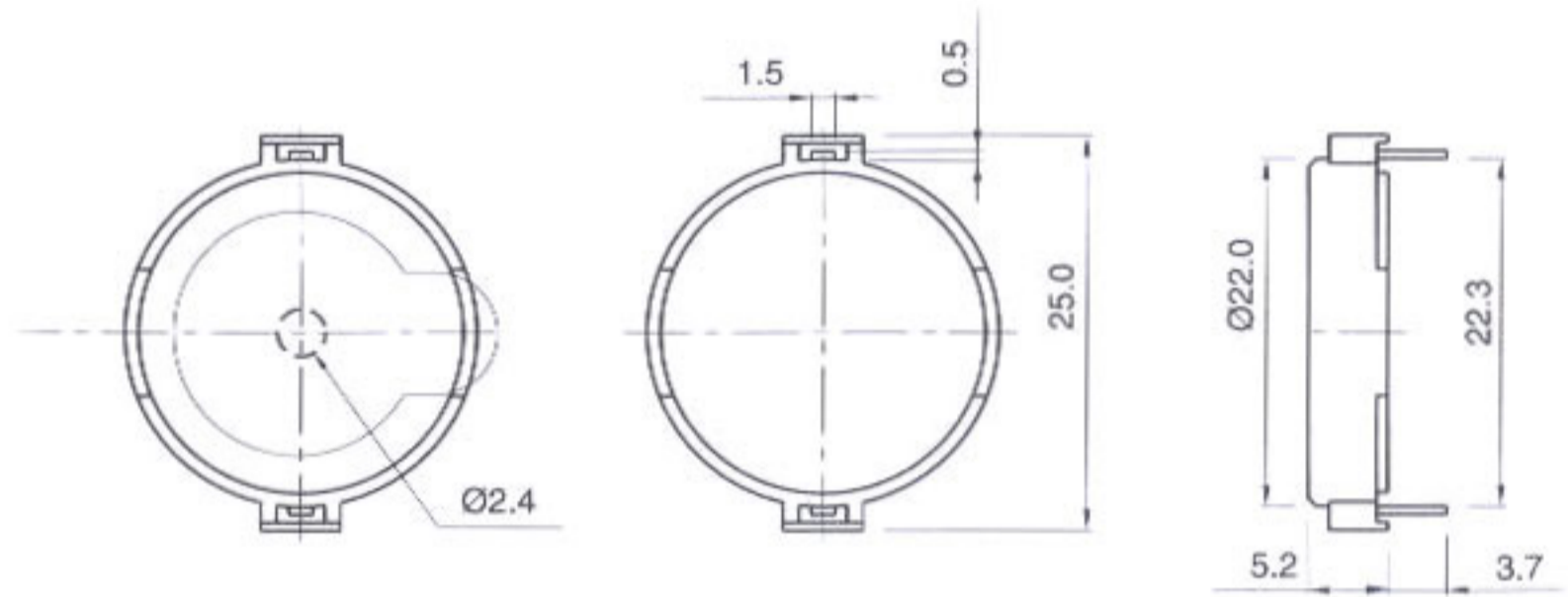
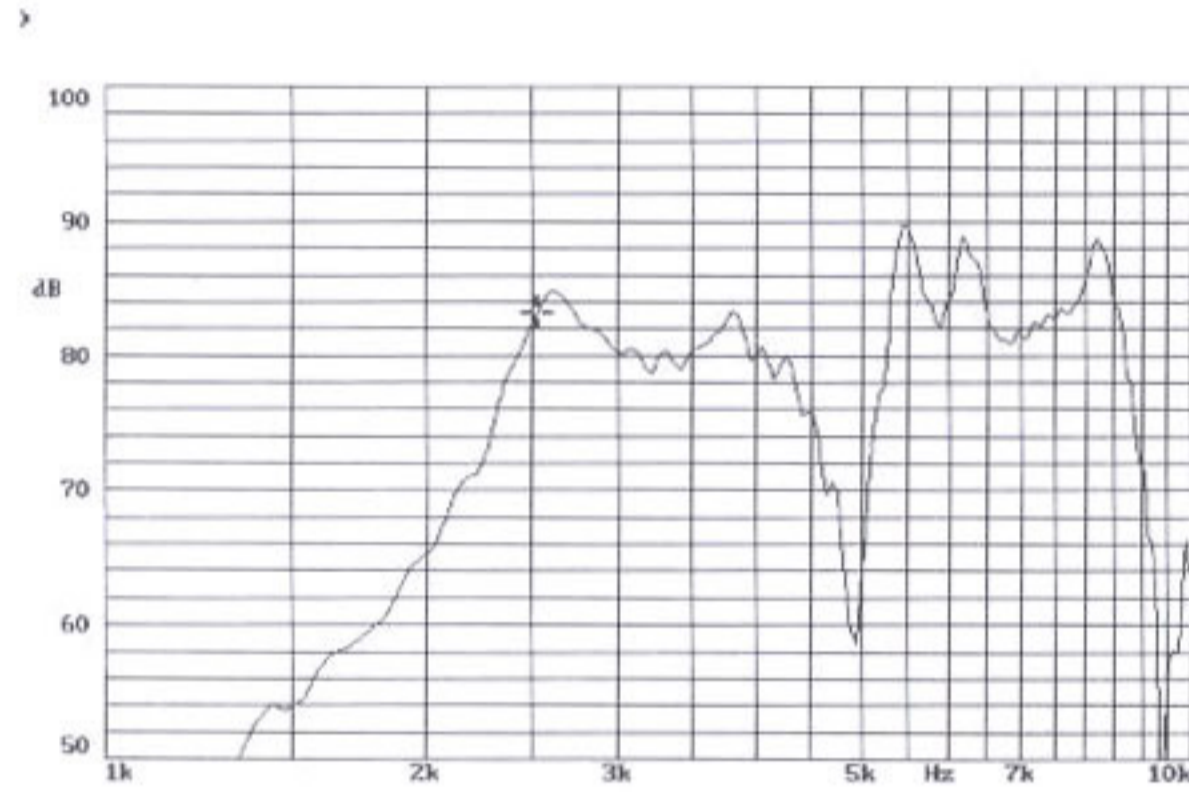
Operating Voltage (Vp-p)	1~ 25
S.P.L at 10 cm (dB)	≥ 75
Resonant Frequency (Hz)	2000 ± 500
Capacitance at 120 Hz ,25°C (pF)	28000 ± 30%
Current (mA)	≤ 1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY22AS

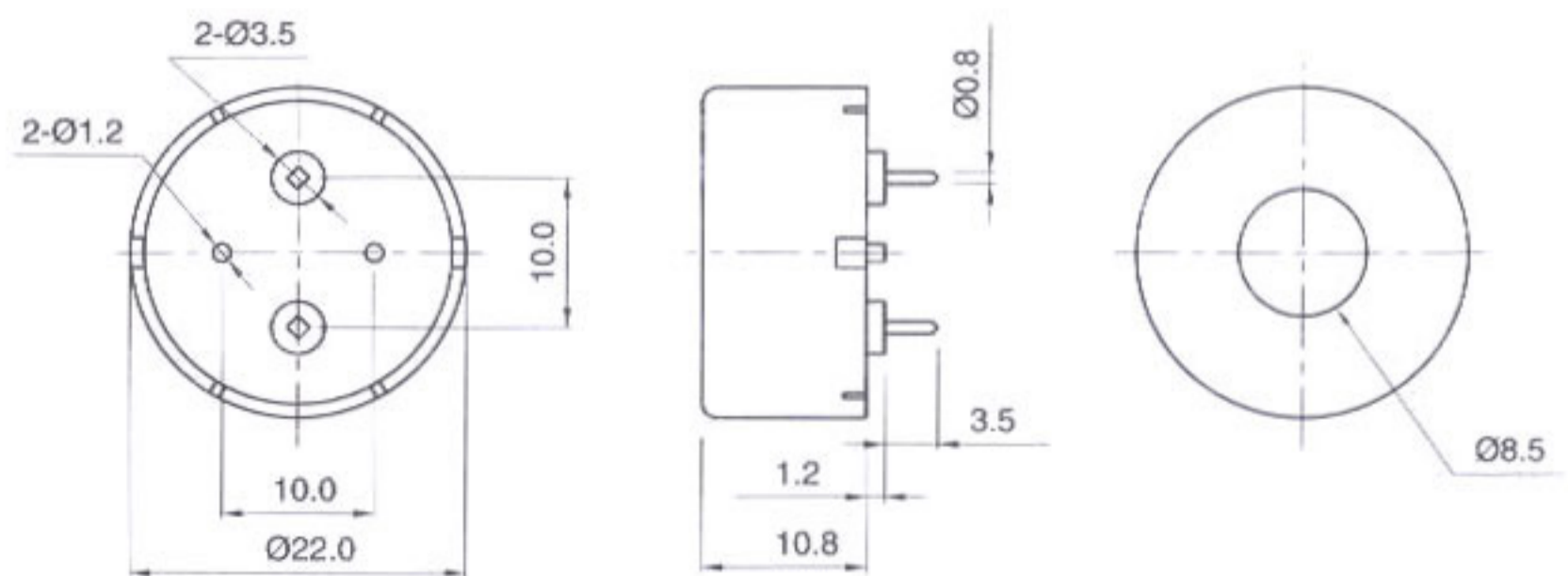
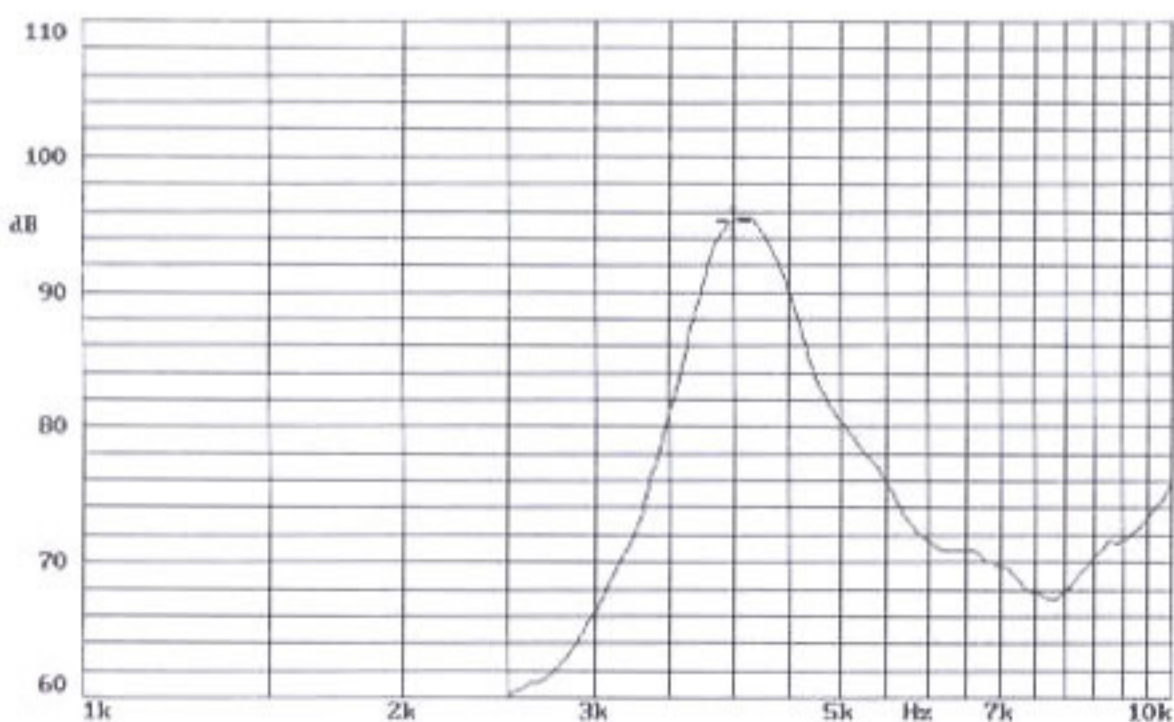
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 80
Resonant Frequency (Hz)	2500 ± 500
Capacitance at 120 Hz ,25°C (pF)	18000 ± 30%
Current (mA)	≤ 5.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ±0.5

## XY22B

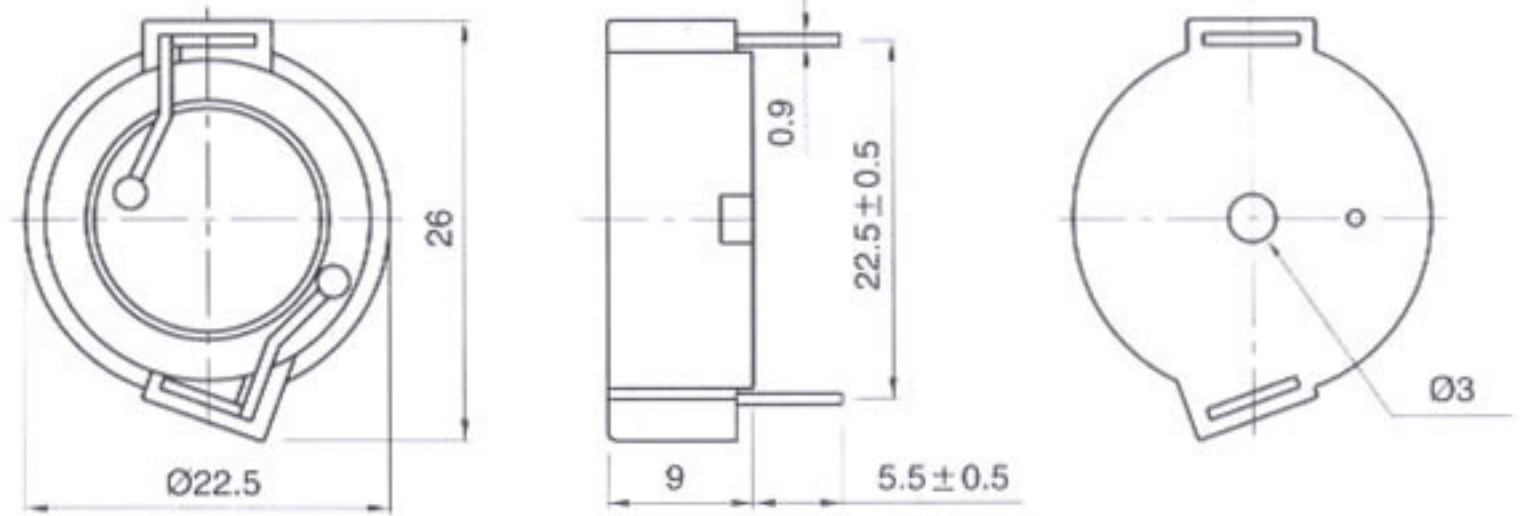
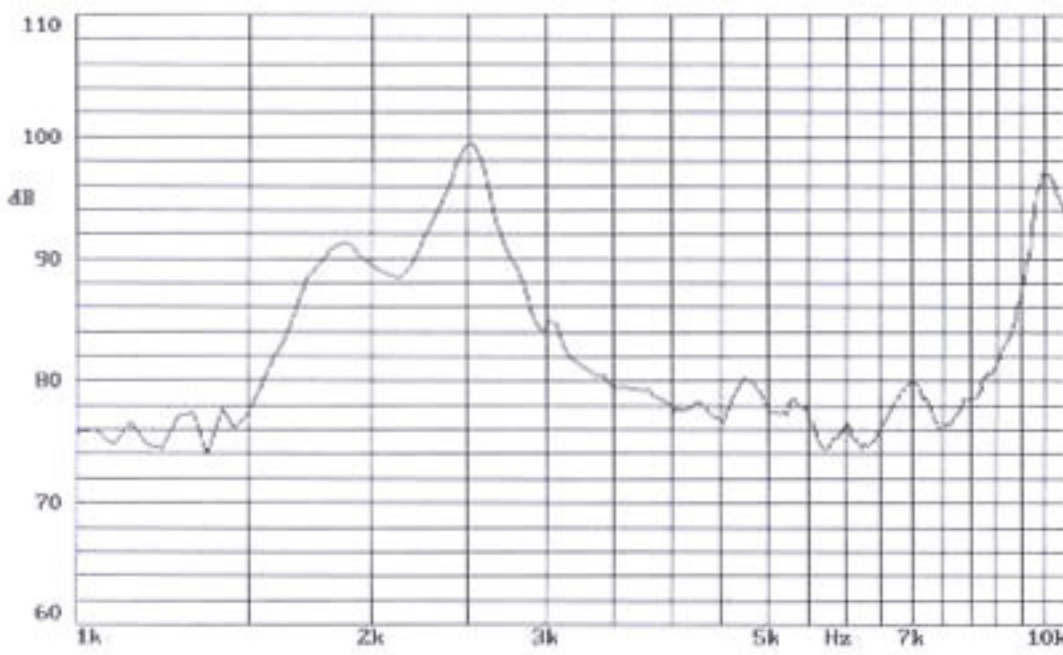
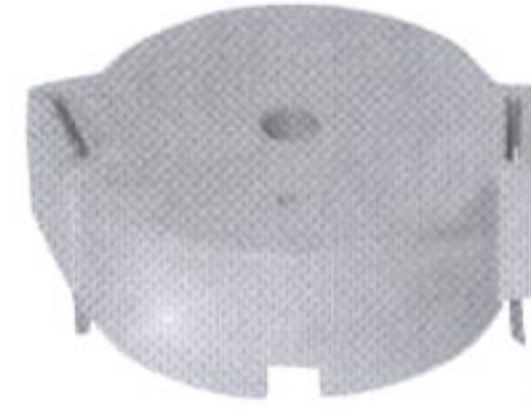
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	14000 ± 30%
Current (mA)	≤ 1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ±0.5

## XY23

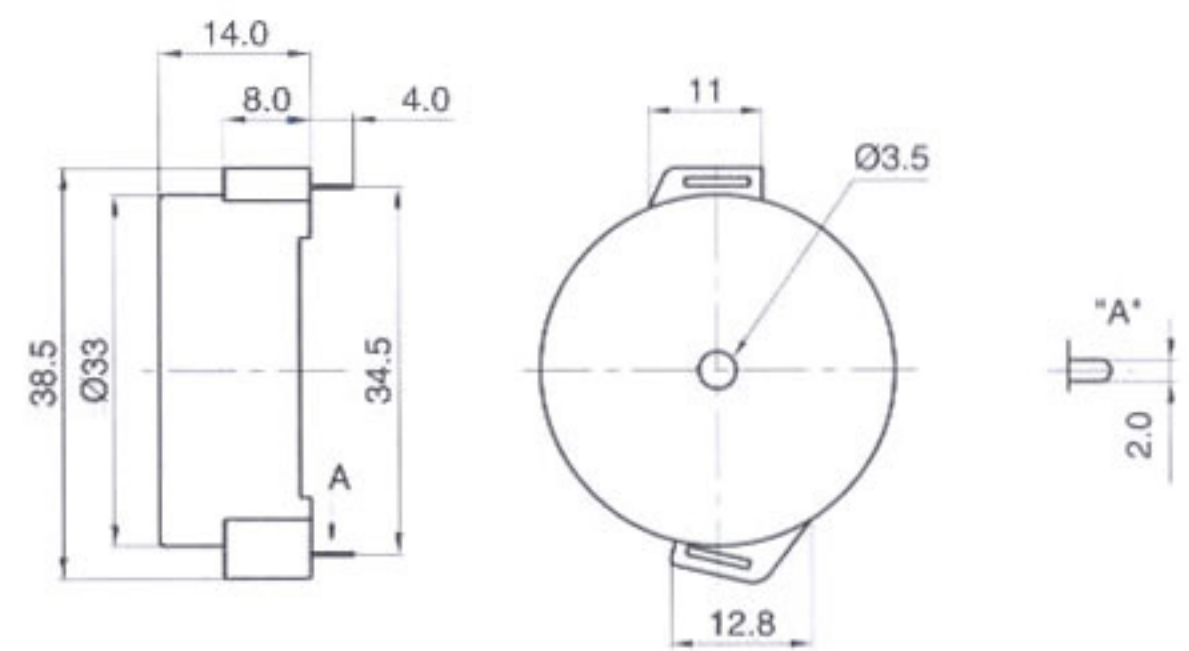
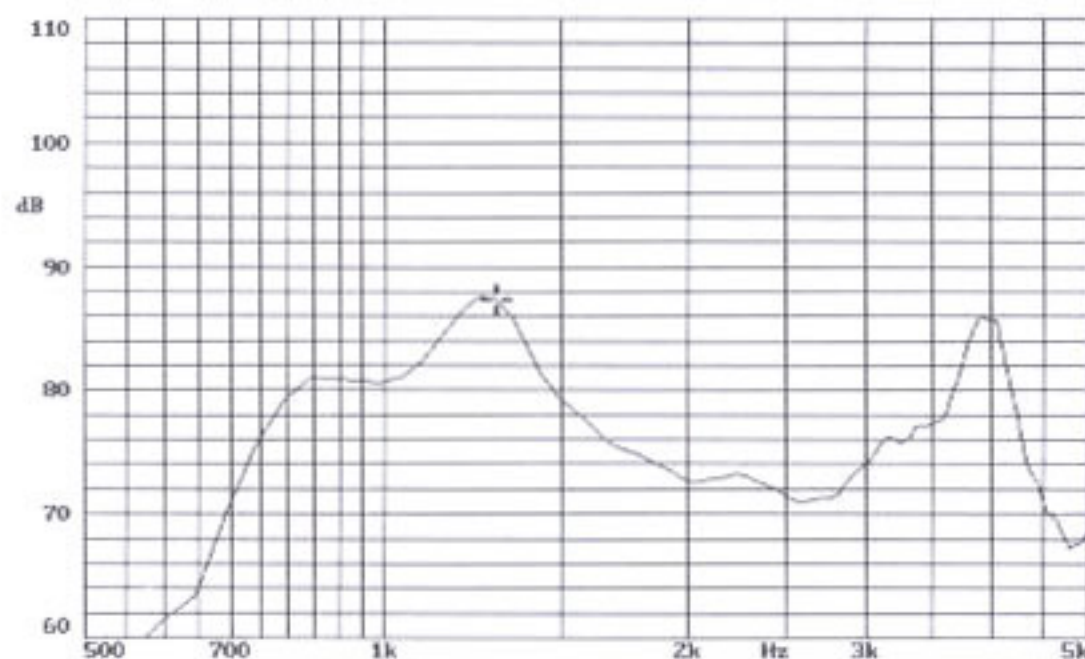
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	2048 ± 500
Capacitance at 120 Hz ,25°C (pF)	24000 ± 30%
Current (mA)	≤ 3.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ±0.5

## XY33

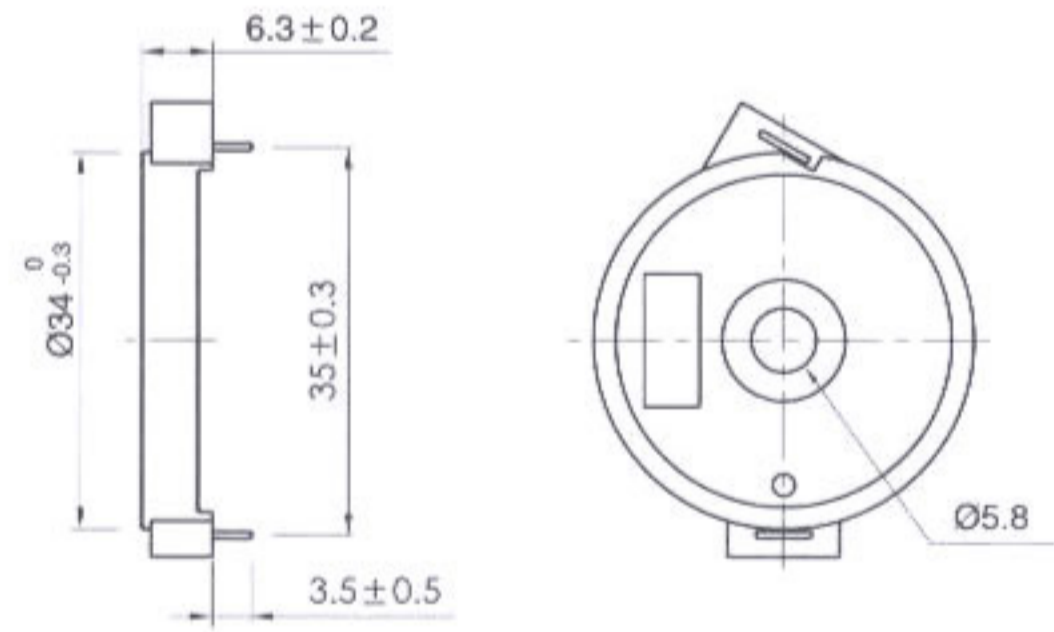
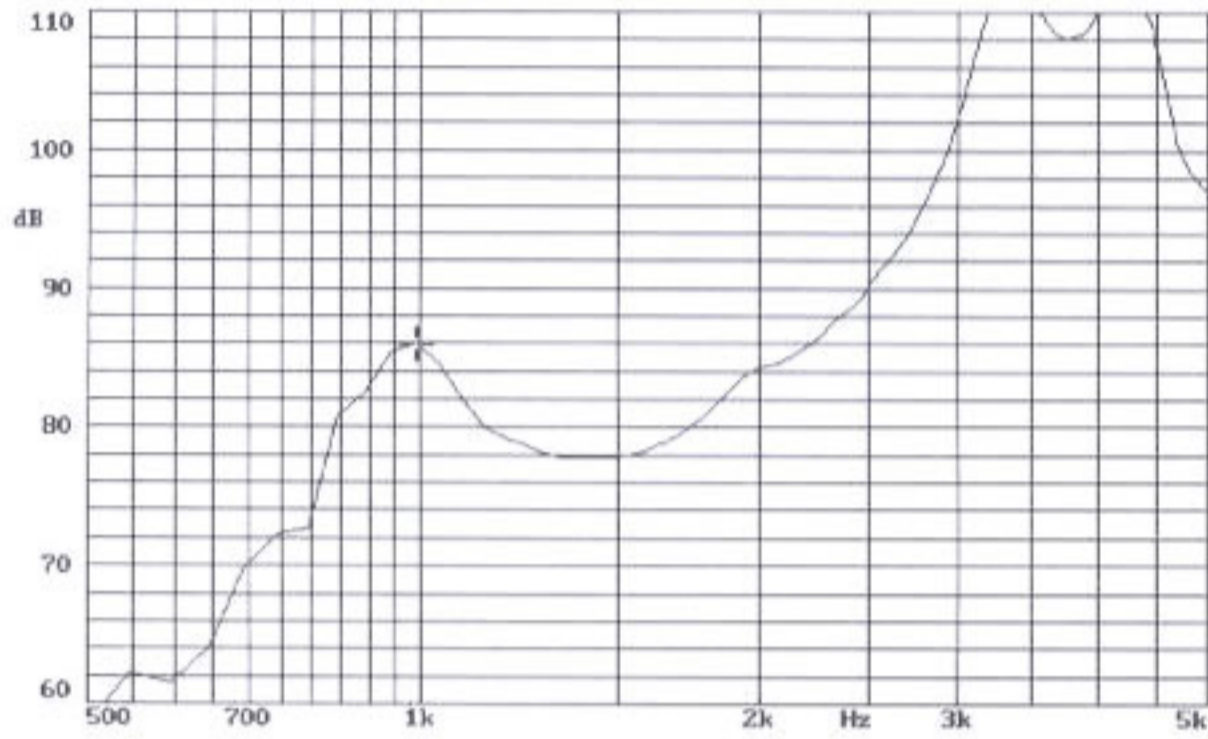
Operating Voltage (Vp-p)	1~ 30
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	1300 ± 500
Capacitance at 120 Hz ,25°C (pF)	40000 ± 30%
Current (mA)	≤ 3.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ±0.5

## XY34

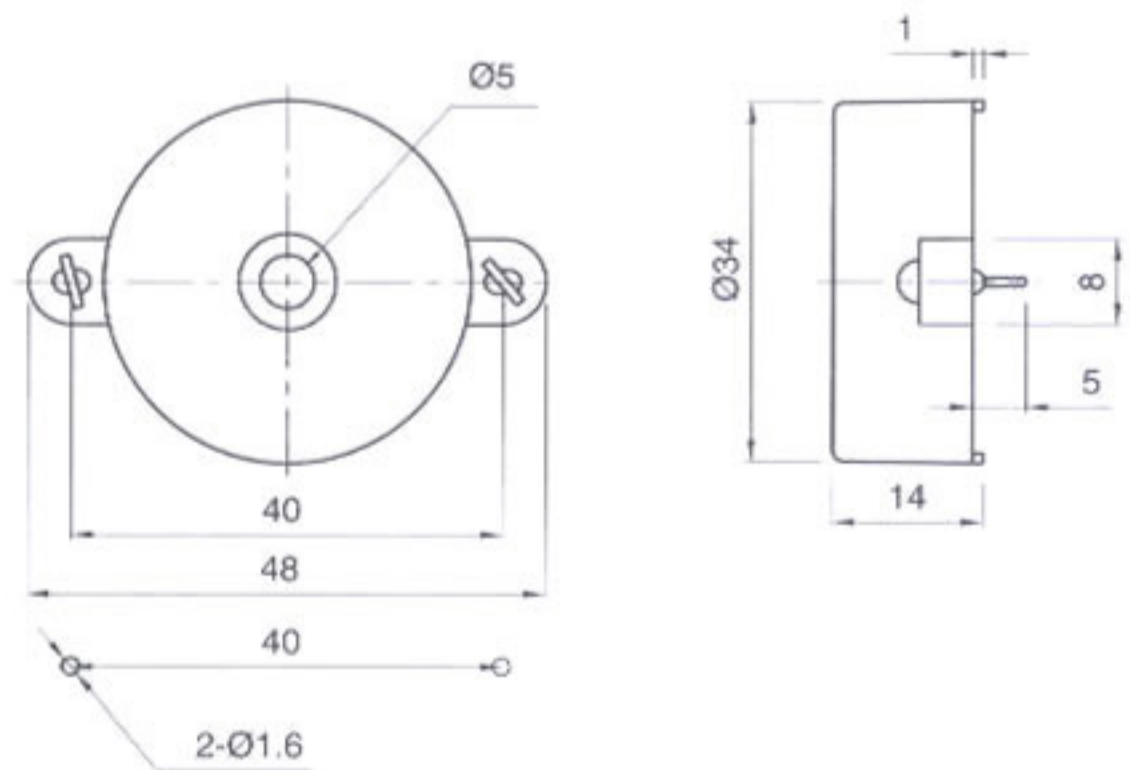
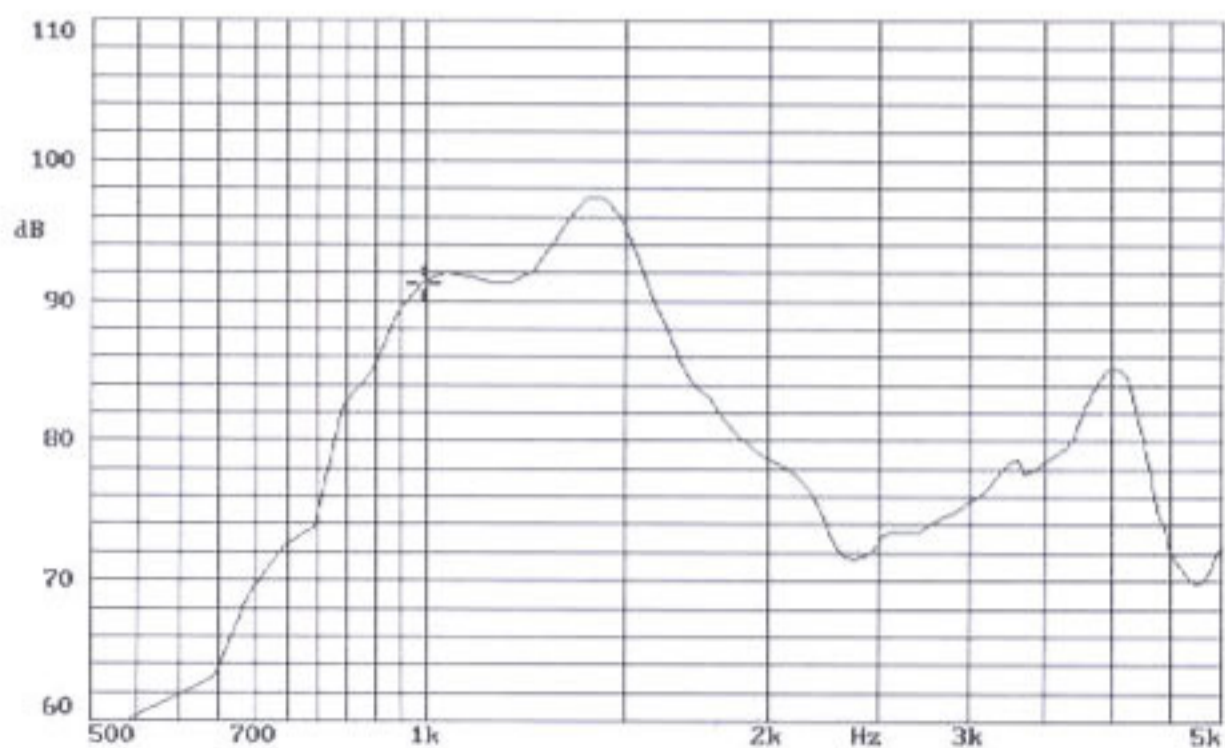
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	1000 ± 500
Capacitance at 120 Hz ,25°C (pF)	40000 ± 30%
Current (mA)	≤ 3.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY34A

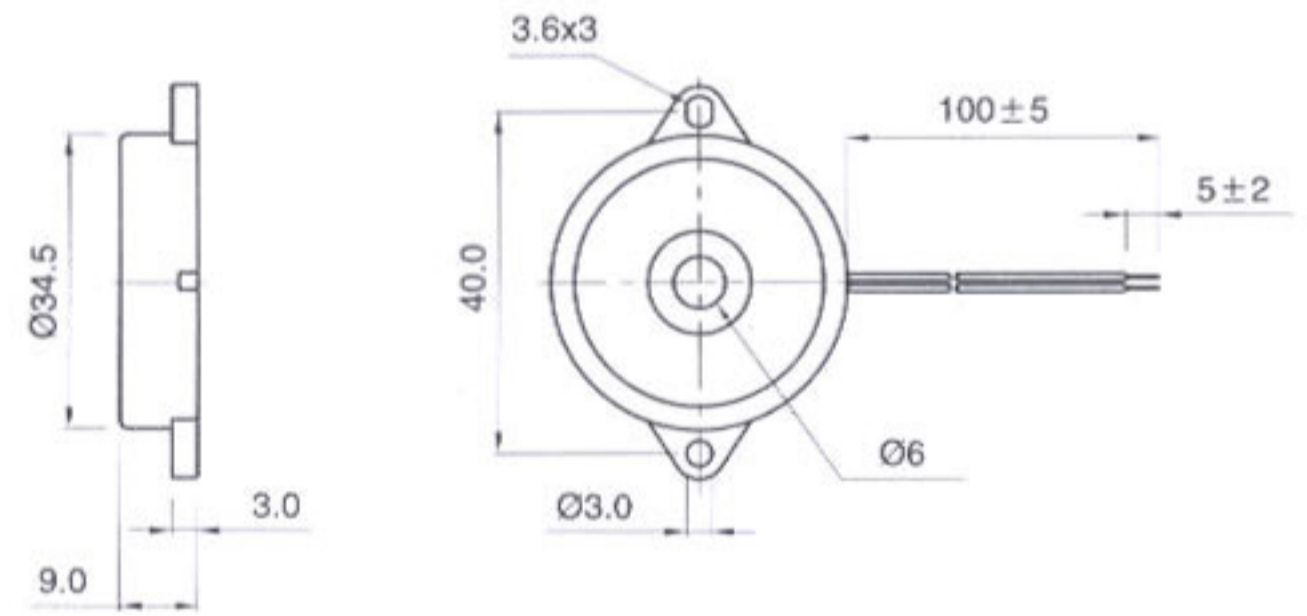
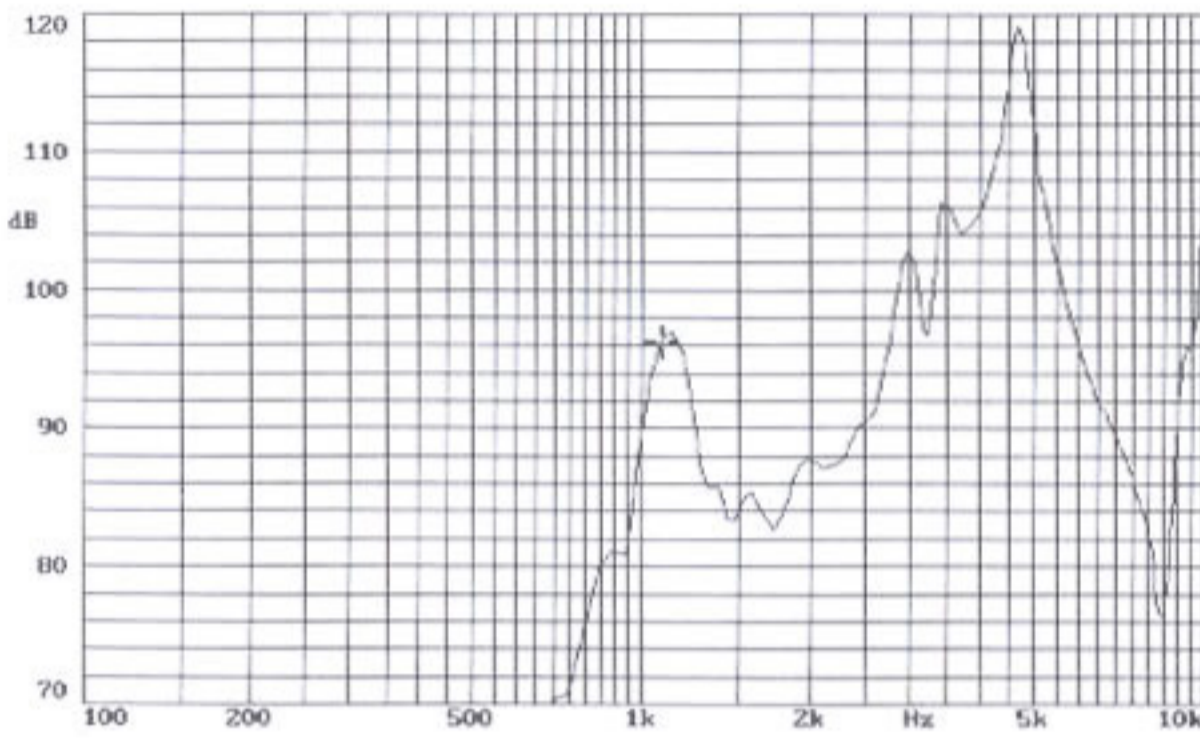
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 30 cm (dB)	≥ 80
Resonant Frequency (Hz)	1000 ± 300
Capacitance at 120 Hz ,25°C (pF)	68000 ± 30%
Current (mA)	≤ 5.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.2

## XY35

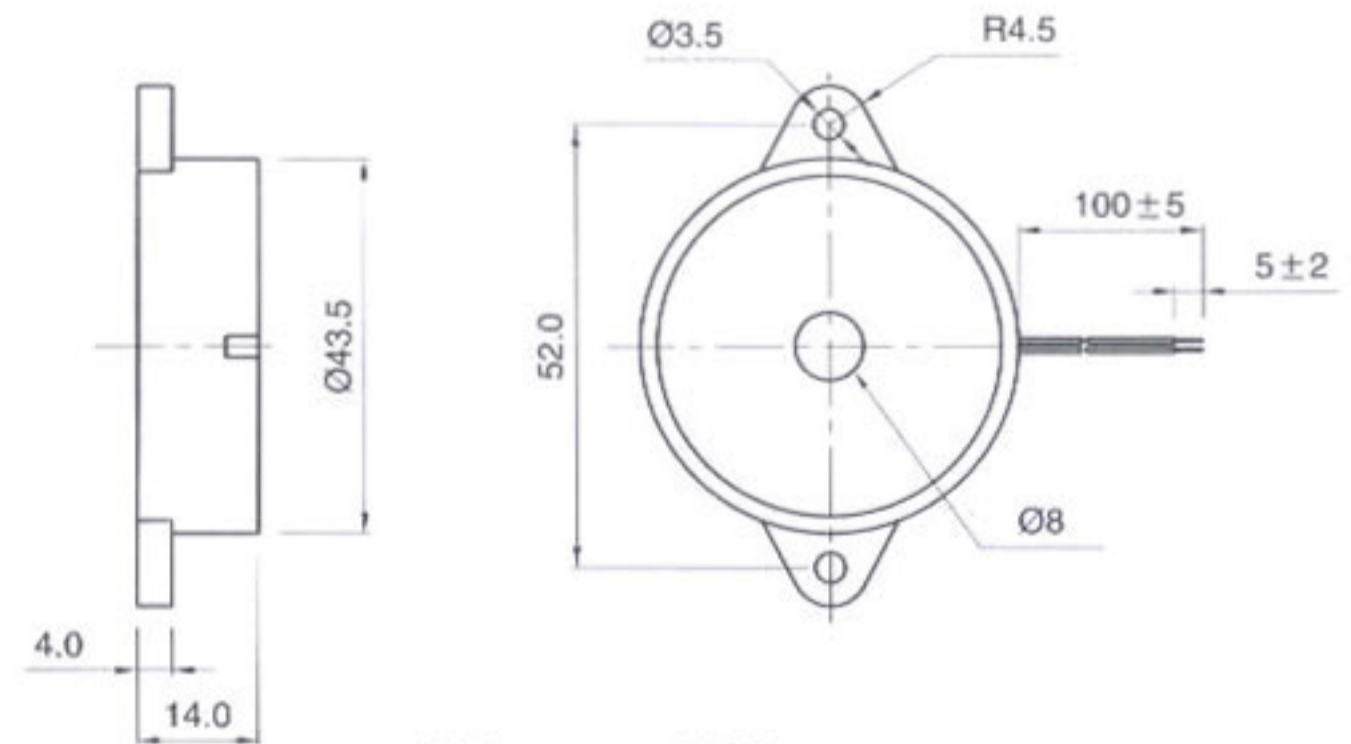
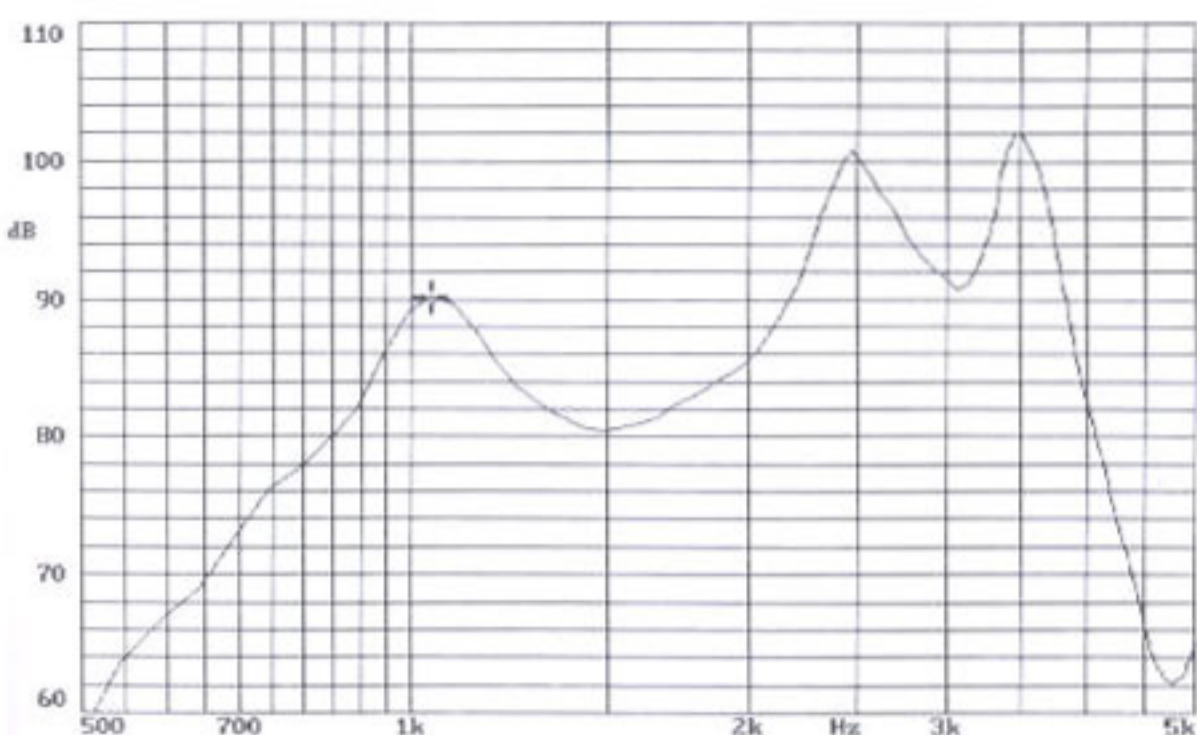
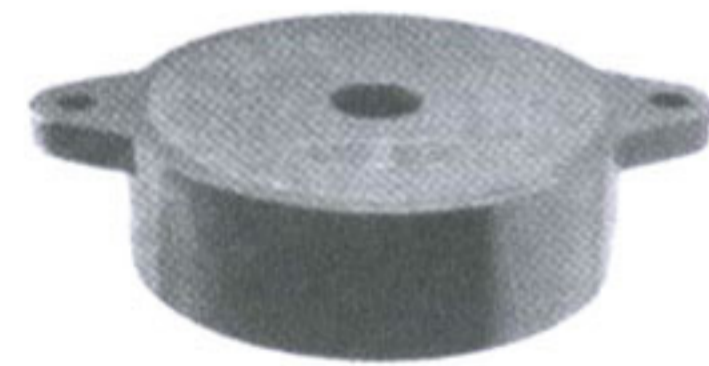
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	1100 ± 300
Capacitance at 120 Hz ,25°C (pF)	40000 ± 30%
Current (mA)	≤ 10
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance:  $\pm 0.5$

## XY44

Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	1000 ± 300
Capacitance at 120 Hz ,25°C (pF)	65000 ± 30%
Current (mA)	≤ 5
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80

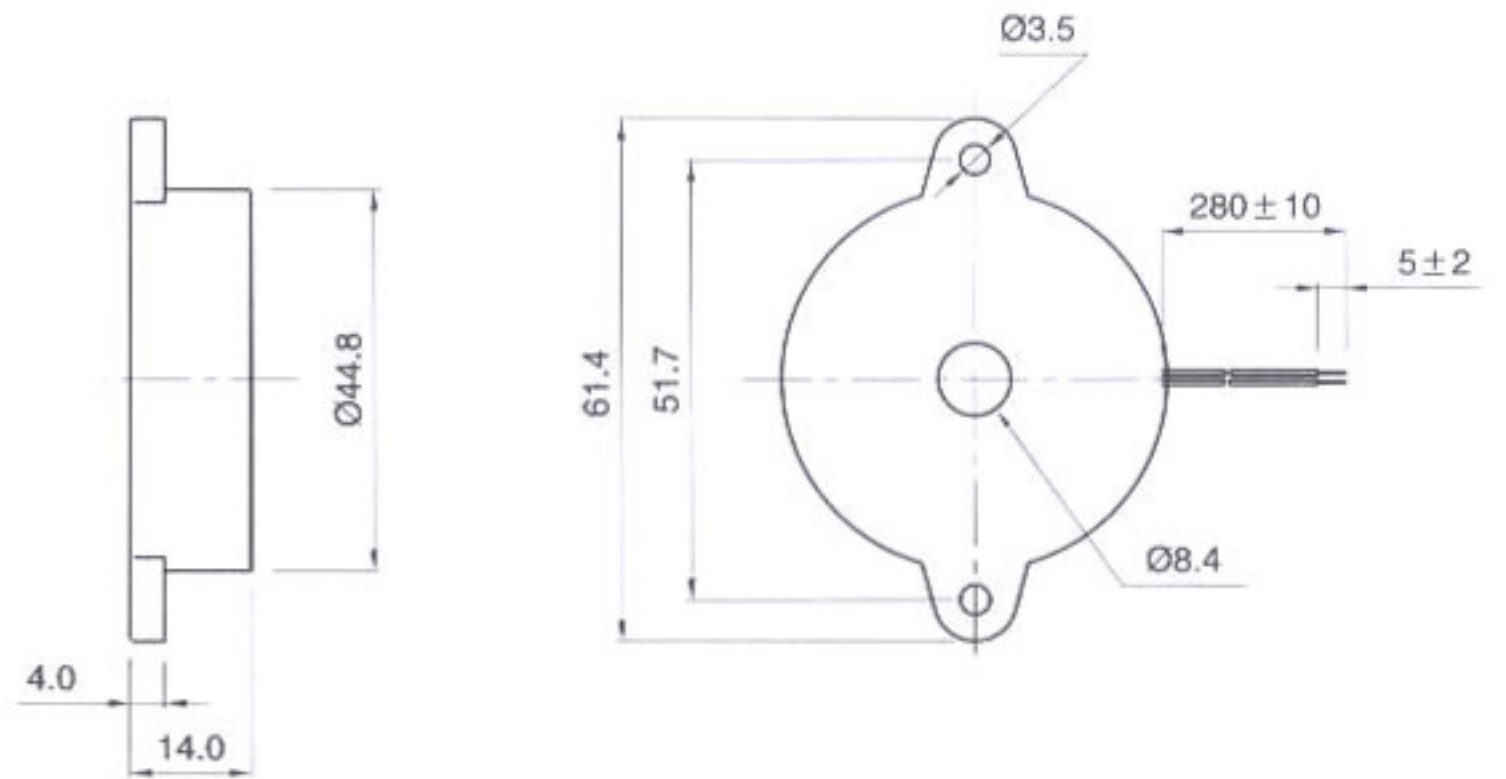
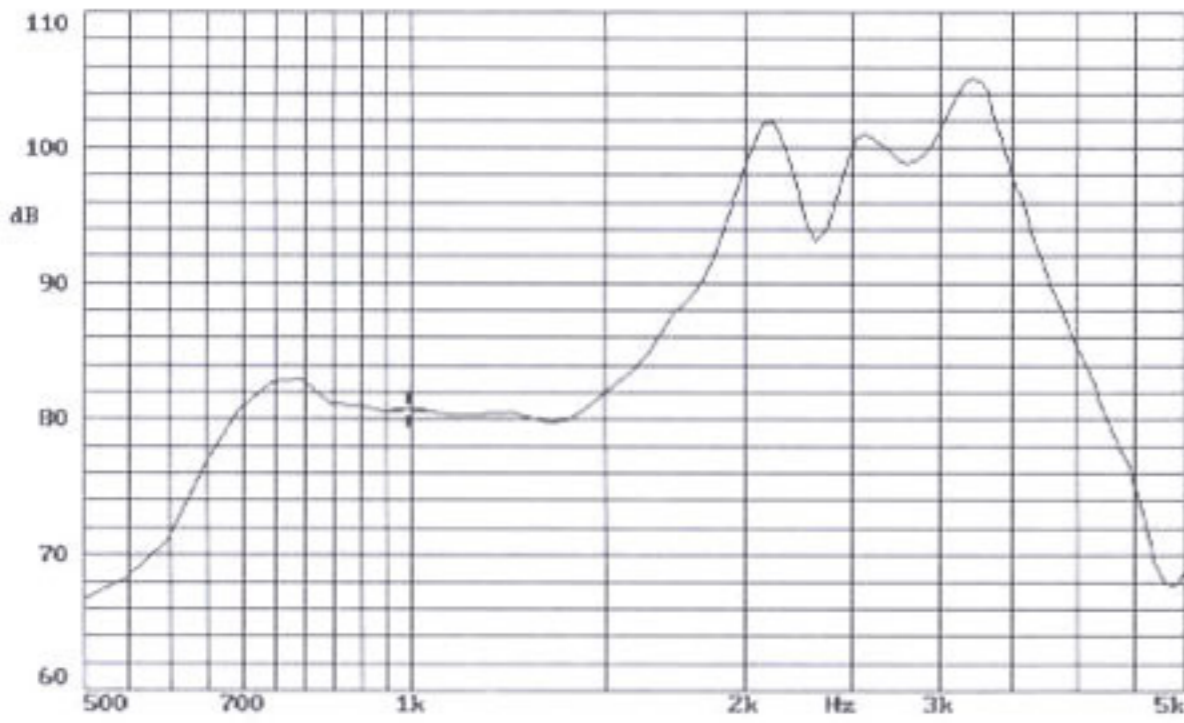
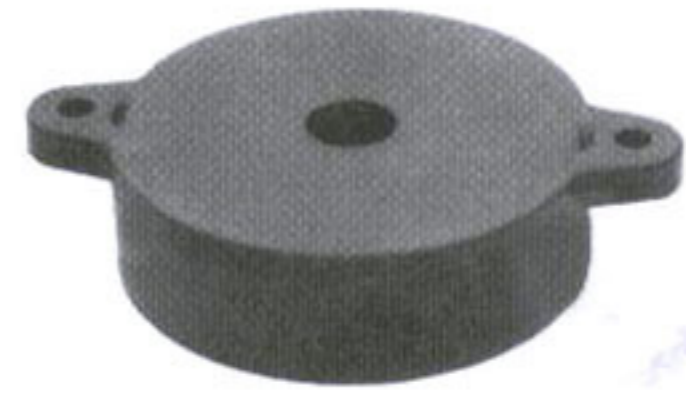


Tolerance:  $\pm 0.5$



## XY44-1

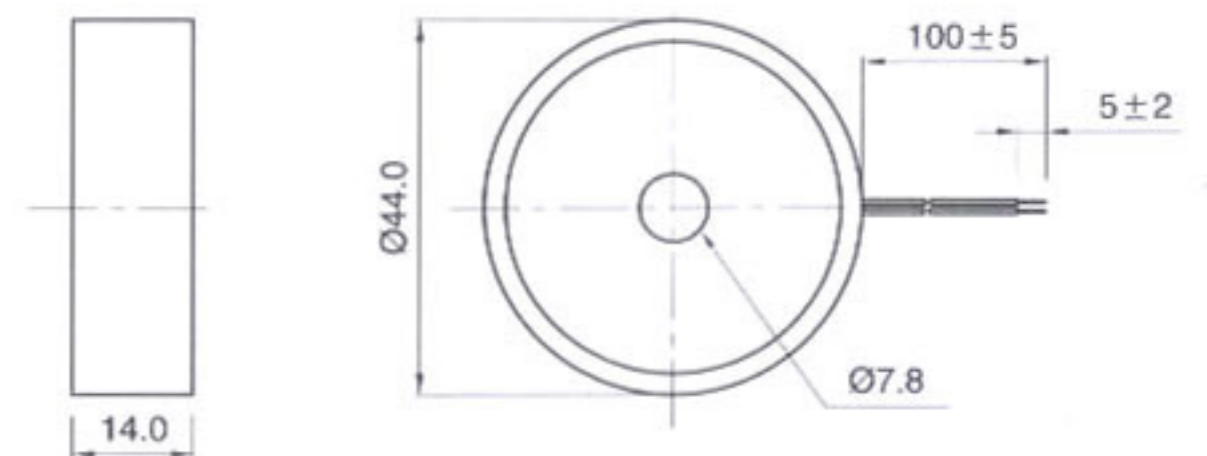
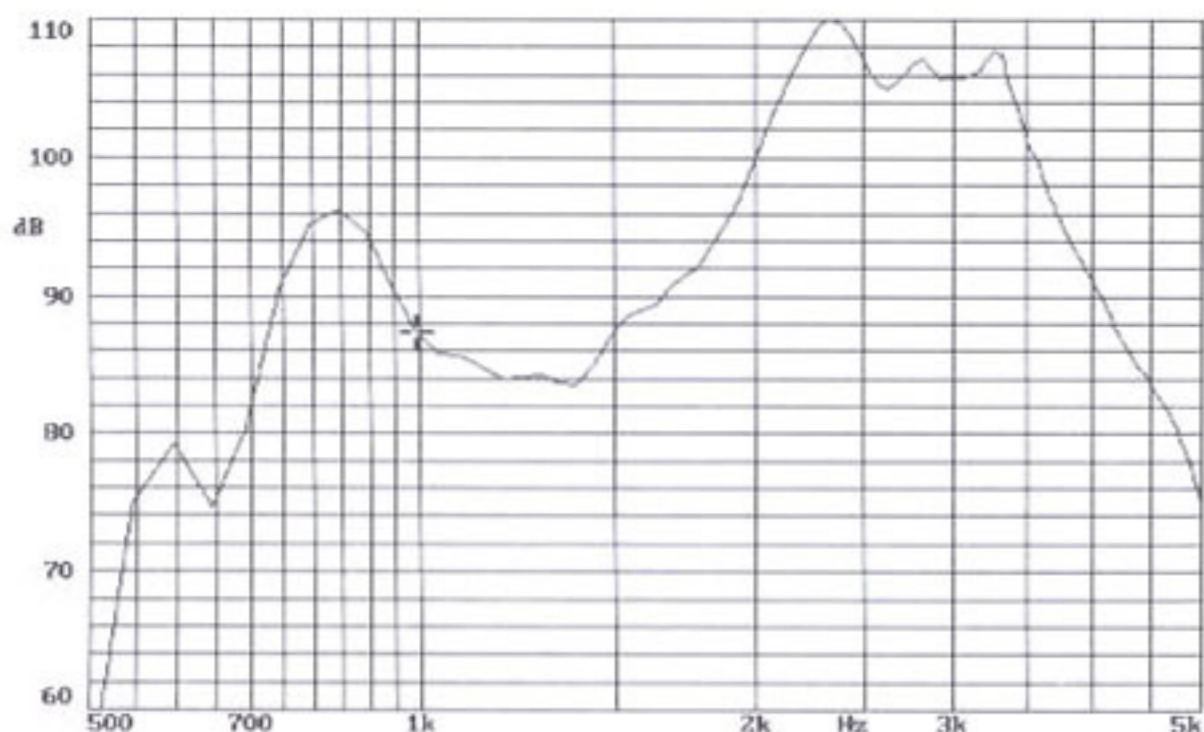
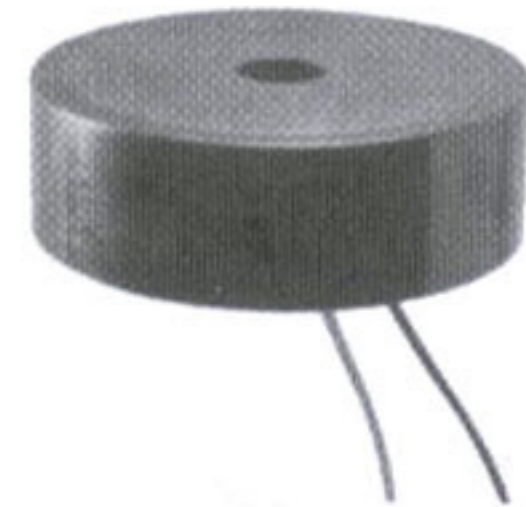
Operating Voltage (Vp-p)	1 ~ 40
S.P.L at 10 cm (dB)	≥ 80
Resonant Frequency (Hz)	1000 ± 300
Capacitance at 120 Hz ,25°C (pF)	77000 ± 30%
Current (mA)	≤ 10
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance:  $\pm 0.5$

## XY44D

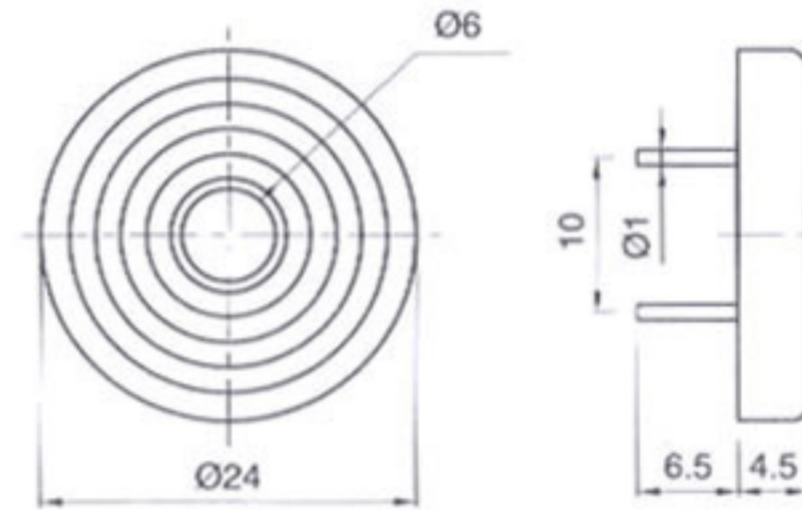
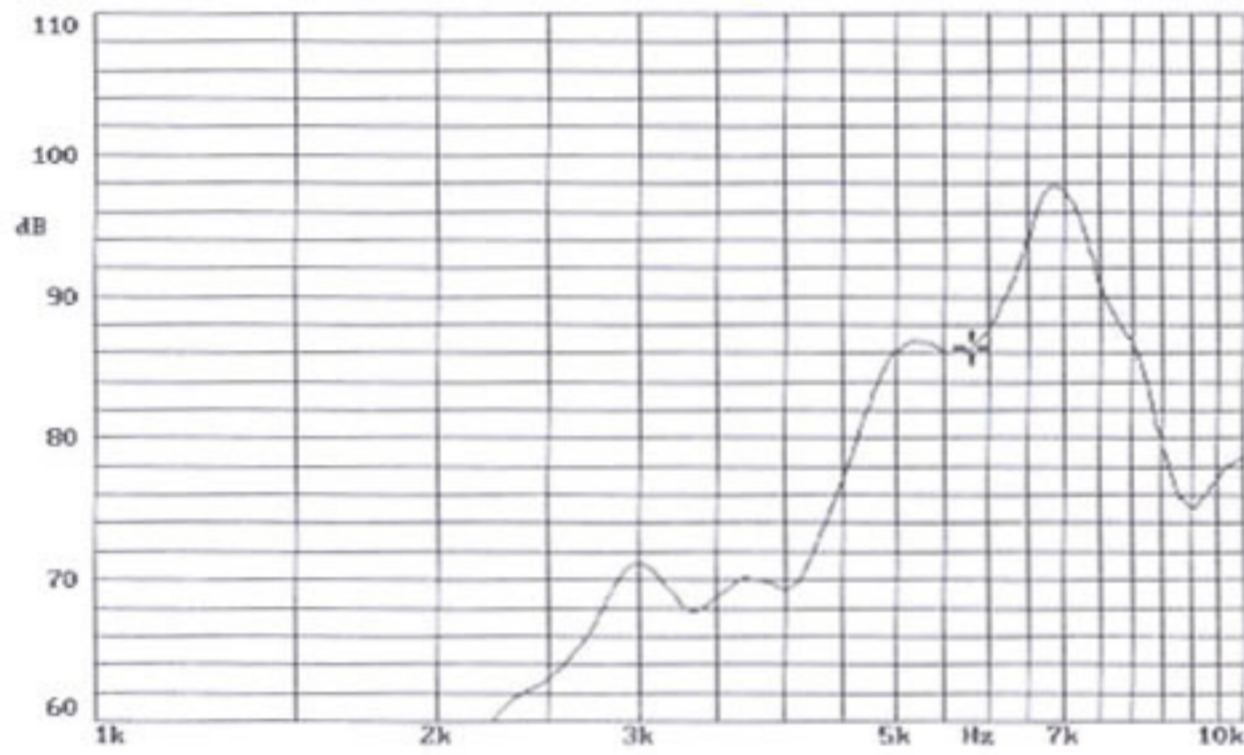
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	1000 ± 300
Capacitance at 120 Hz ,25°C (pF)	80000 ± 30%
Current (mA)	≤ 3
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance:  $\pm 0.5$

## XY124

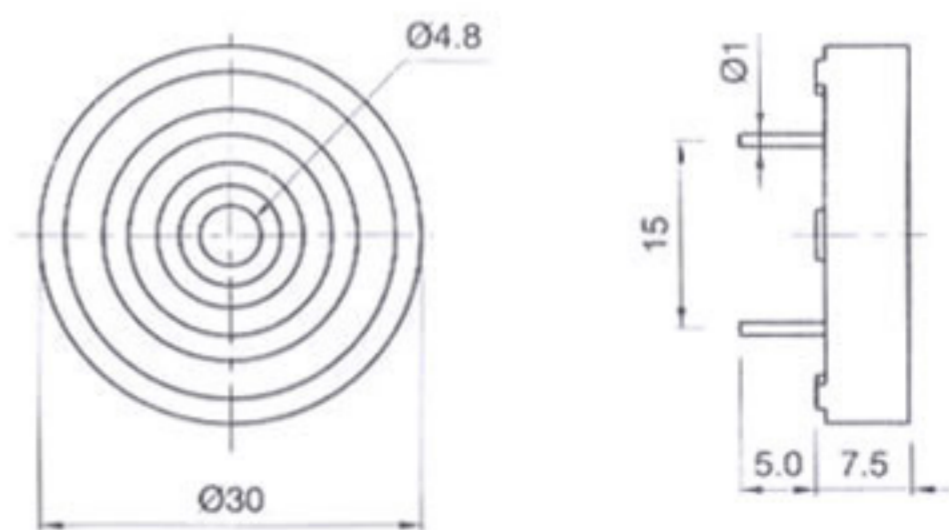
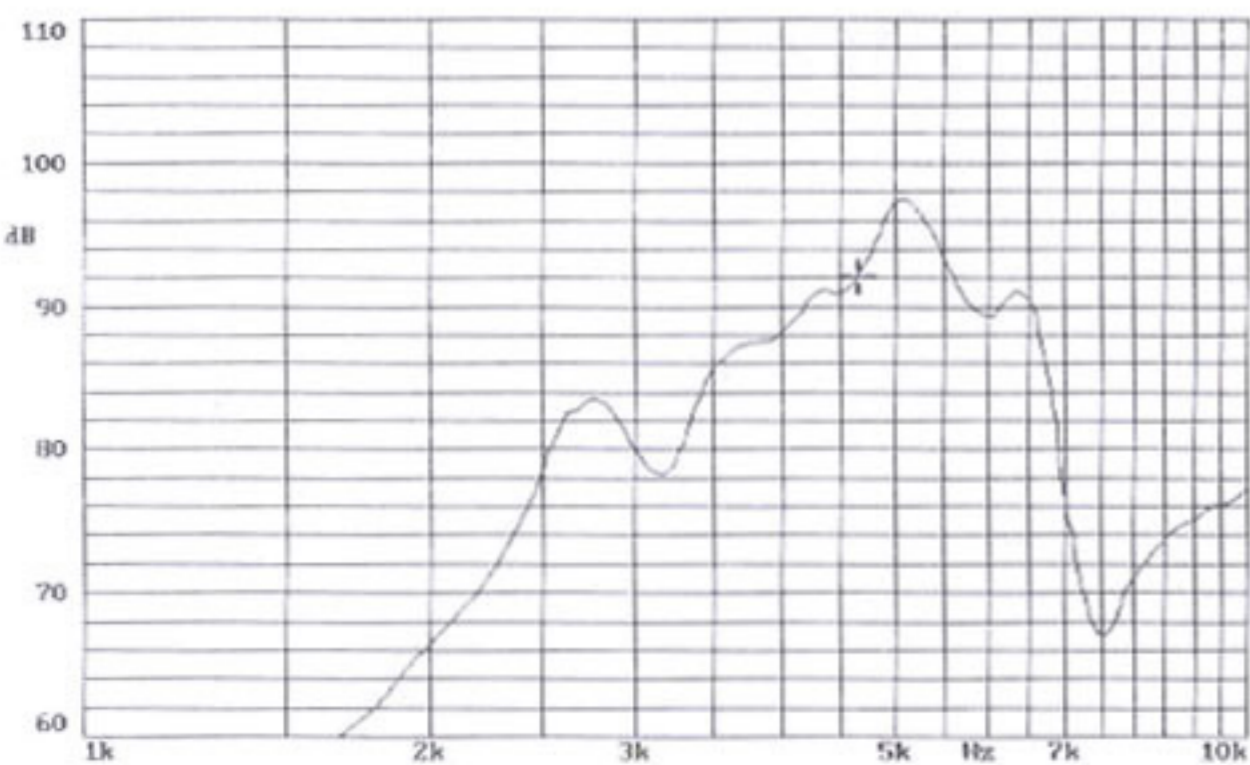
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 80
Resonant Frequency (Hz)	5800 ± 500
Capacitance at 120 Hz ,25°C (pF)	15000 ± 30%
Current (mA)	≤ 2.5
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY132

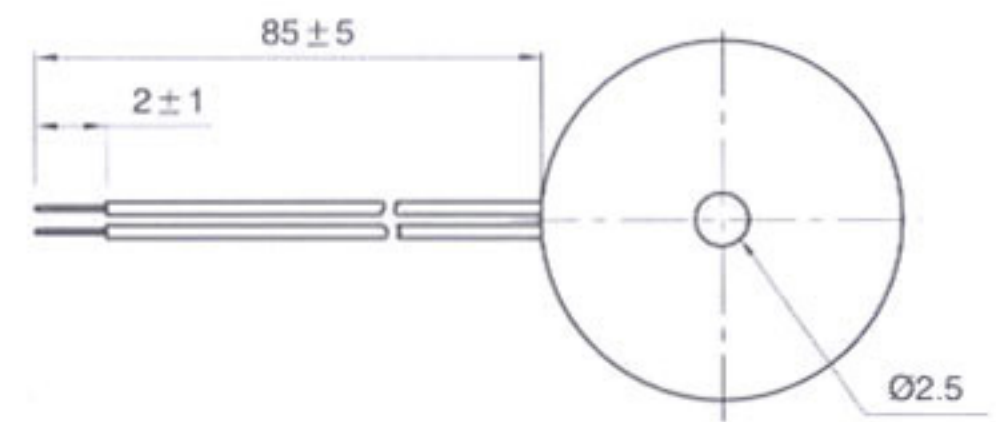
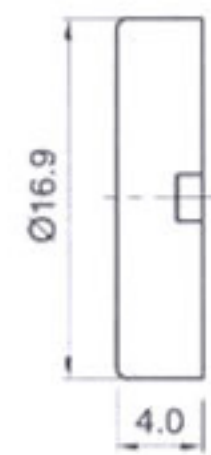
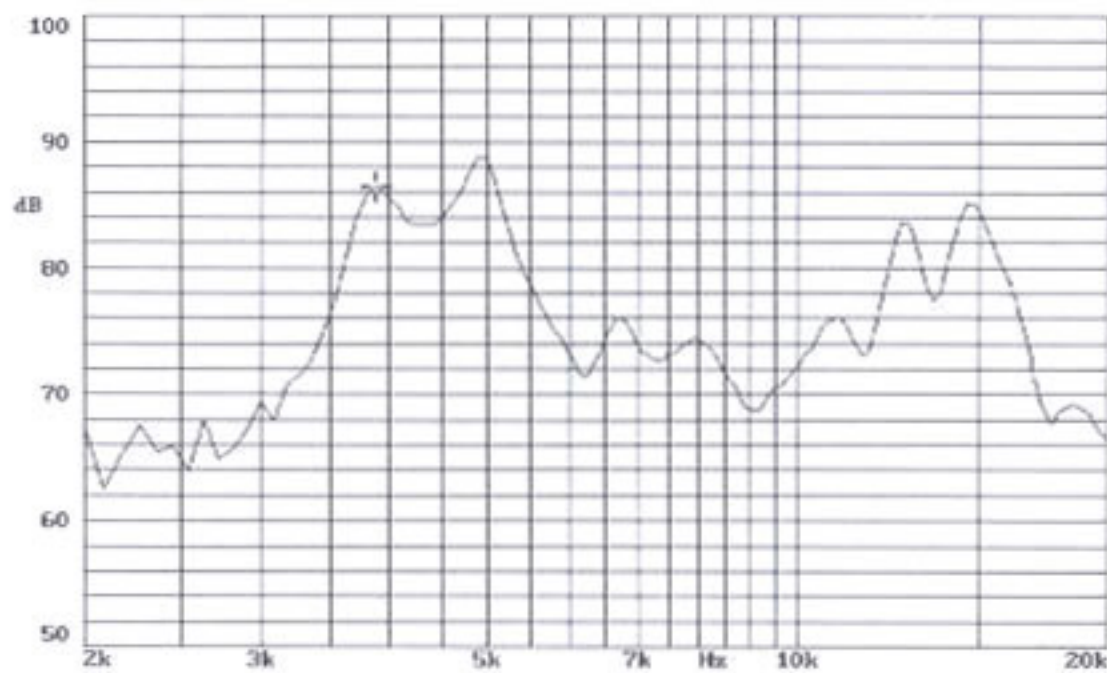
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥ 90
Resonant Frequency (Hz)	4600 ± 500
Capacitance at 120 Hz ,25°C (pF)	20000 ± 30%
Current (mA)	≤ 3
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY150

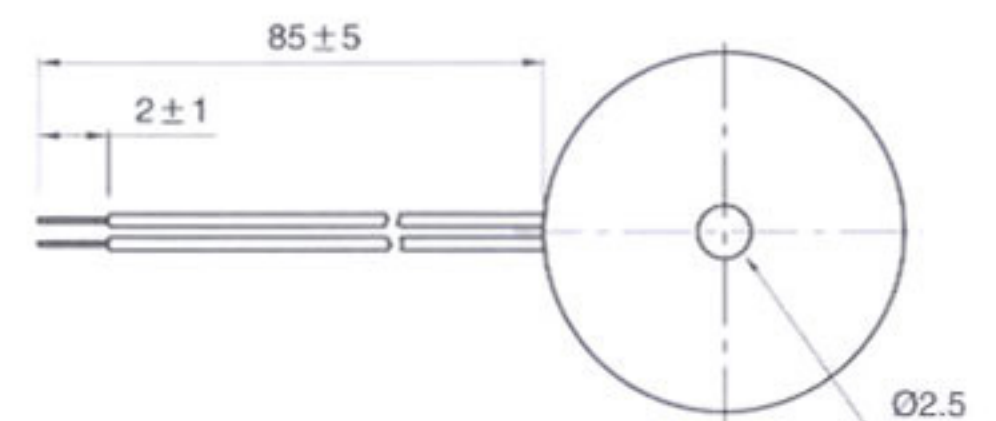
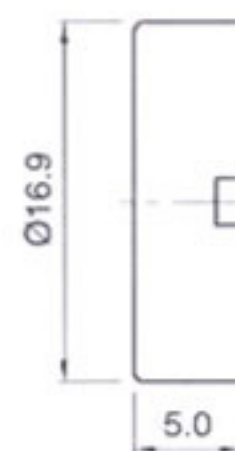
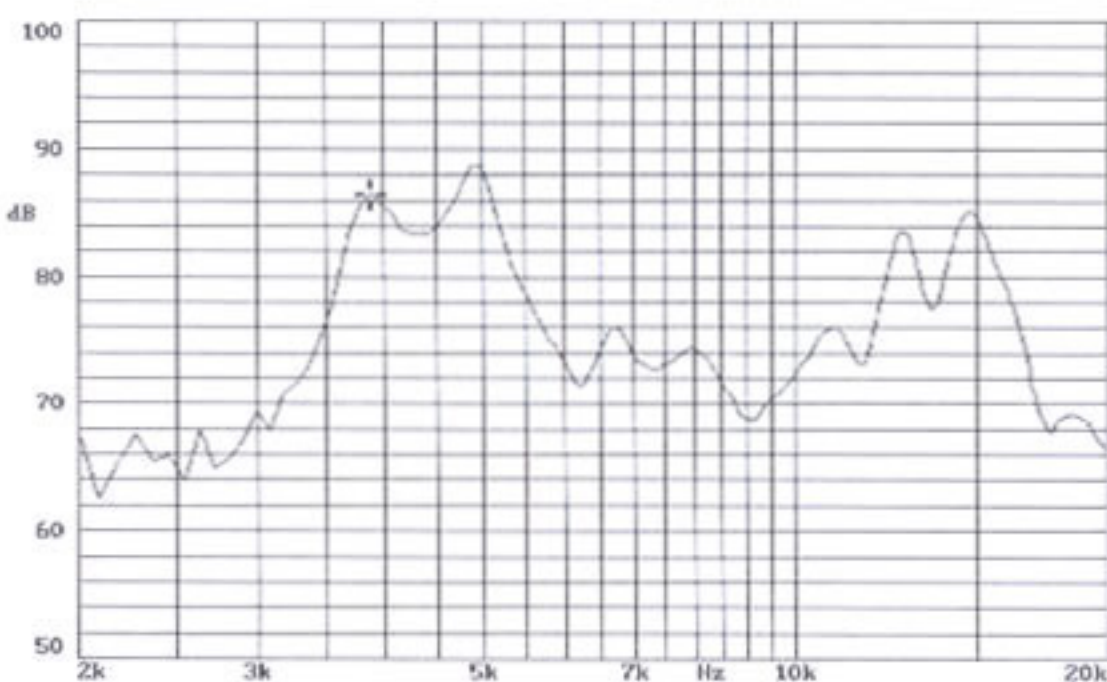
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	≥78
Resonant Frequency (Hz)	4000 ± 300
Capacitance at 120 Hz ,25°C (pF)	11000 ± 30%
Current (mA)	≤1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance:  $\pm 0.5$

## XY150A

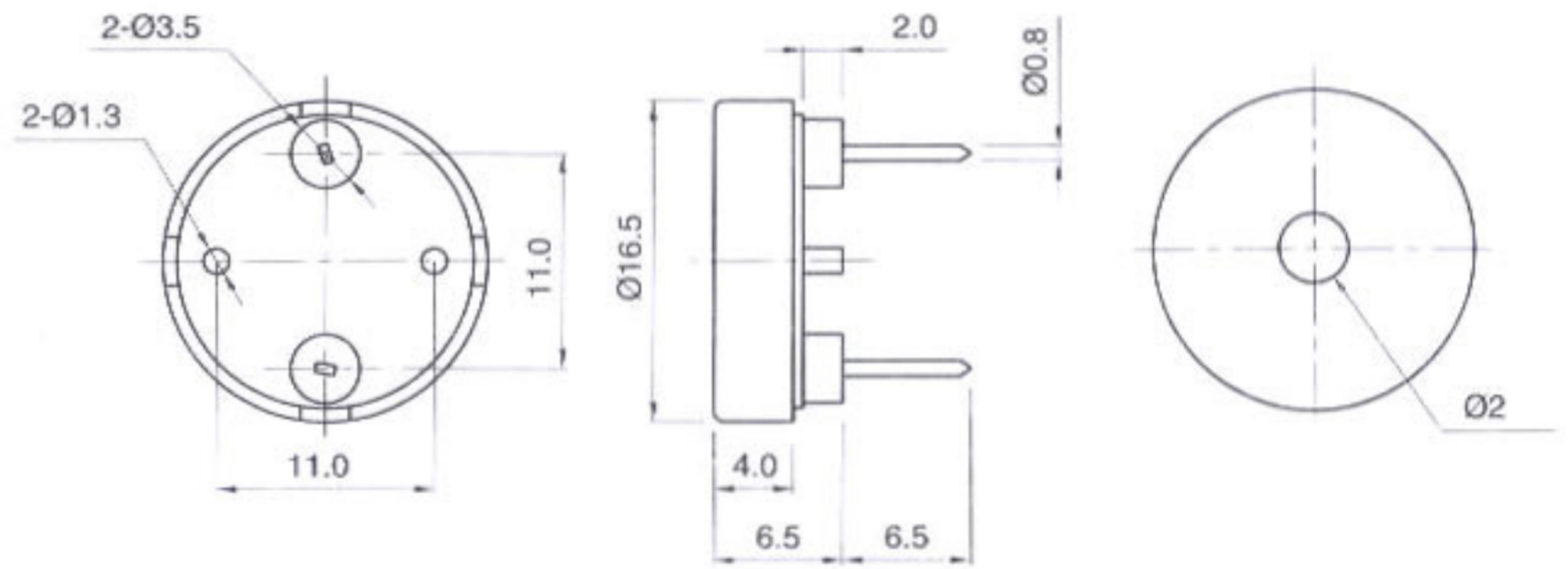
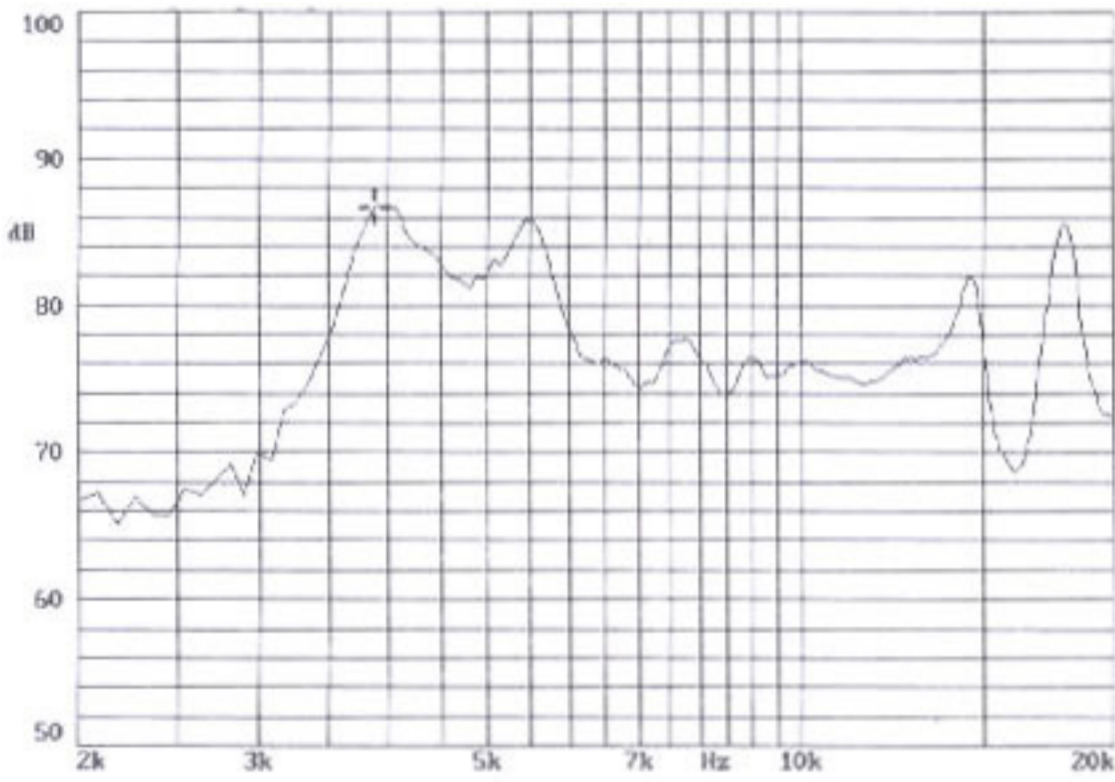
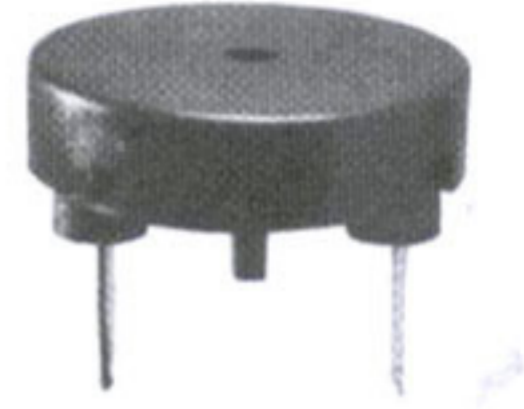
Operating Voltage (Vp-p)	1~ 30
S.P.L at 10 cm (dB)	≥78
Resonant Frequency (Hz)	4000 ± 300
Capacitance at 120 Hz ,25°C (pF)	11000 ± 30%
Current (mA)	≤1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance:  $\pm 0.5$

## XY152

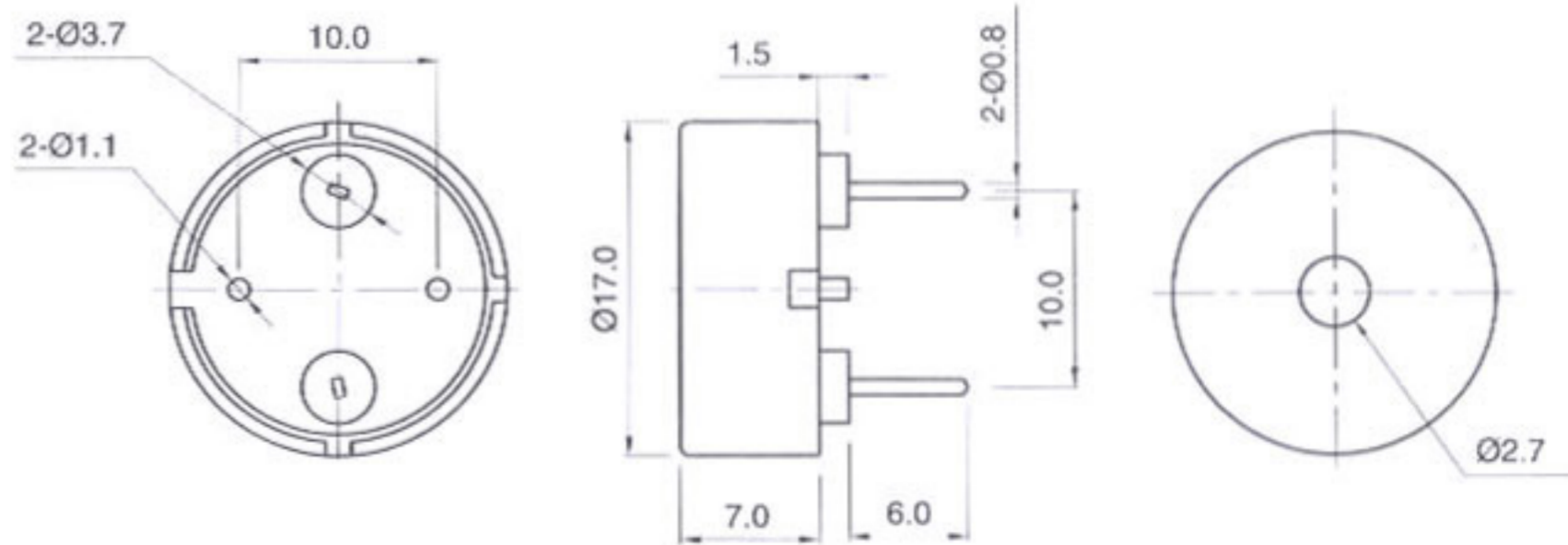
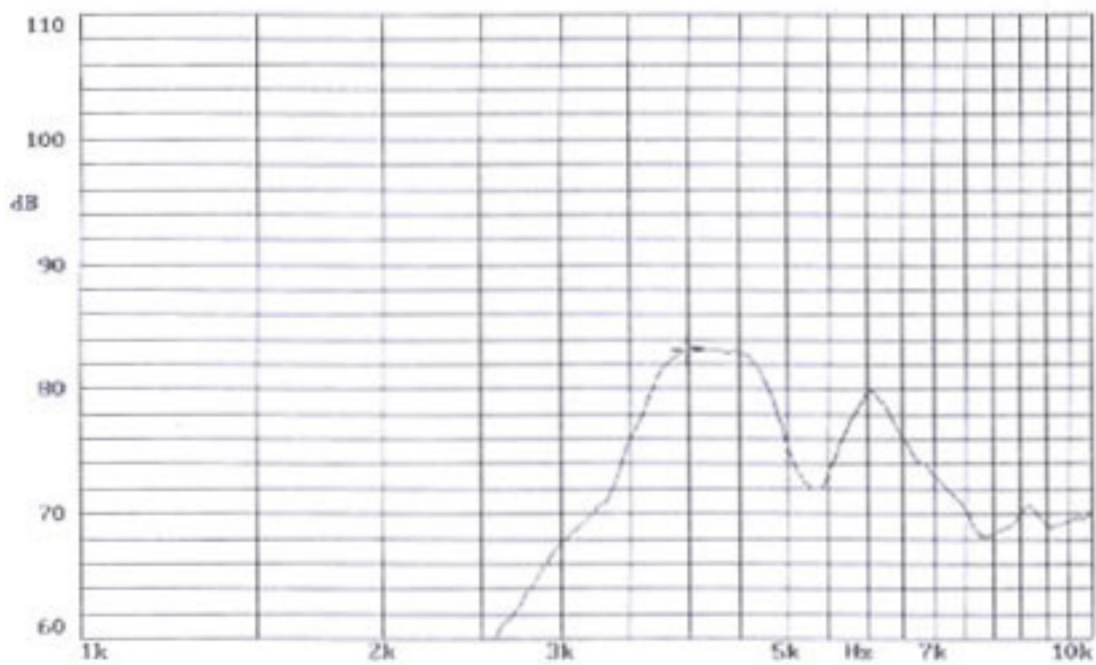
Operating Voltage (Vp-p)	1~ 20
S.P.L at 10 cm (dB)	≥ 78
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	11000 ± 30%
Current (mA)	≤ 1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY153

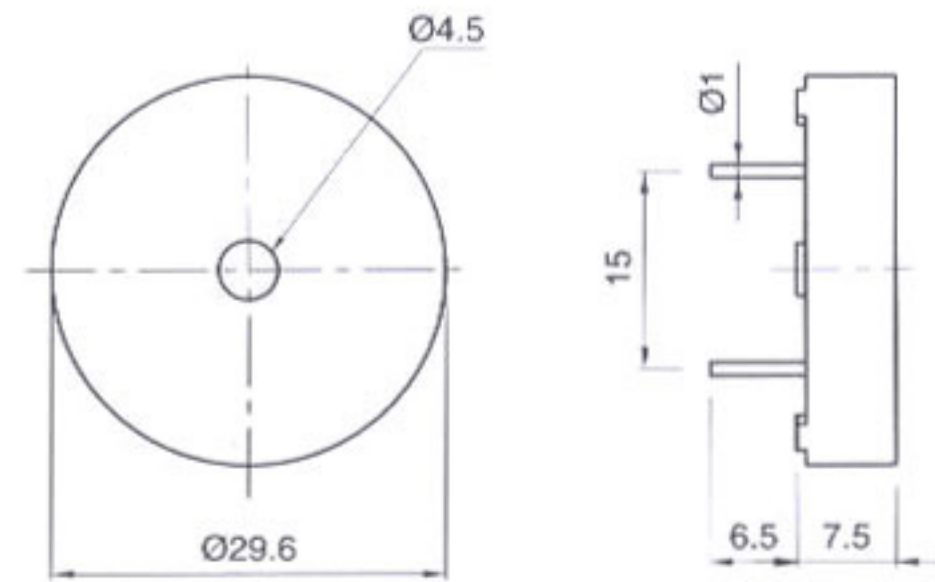
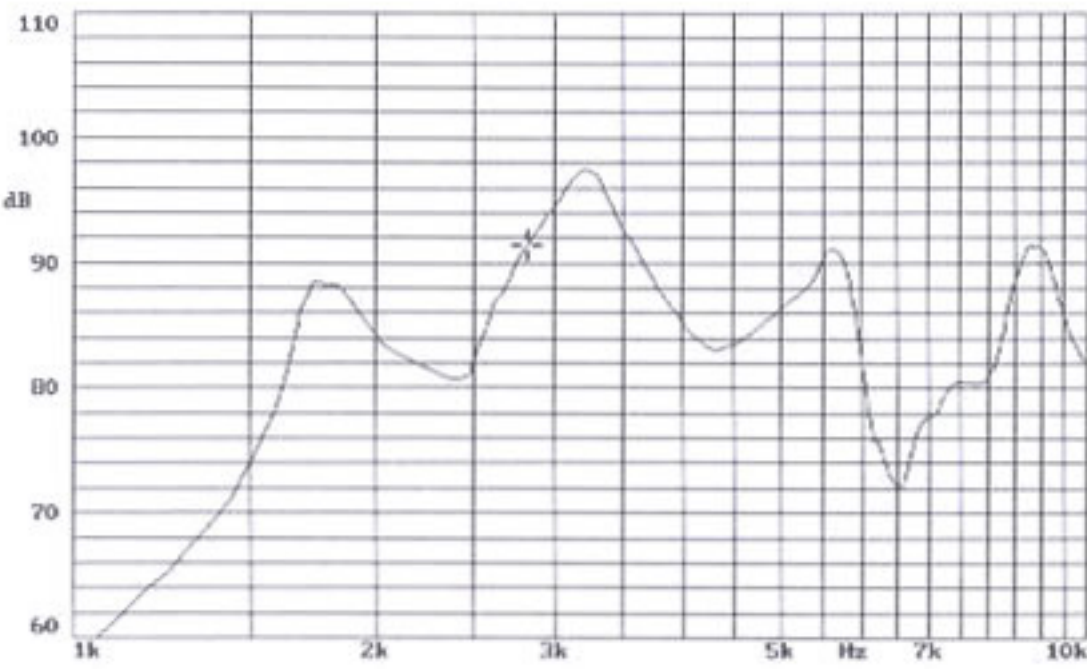
Operating Voltage (Vp-p)	1~ 20
S.P.L at 10 cm (dB)	≥ 78
Resonant Frequency (Hz)	4000 ± 500
Capacitance at 120 Hz ,25°C (pF)	11000 ± 30%
Current (mA)	≤ 1.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY1130

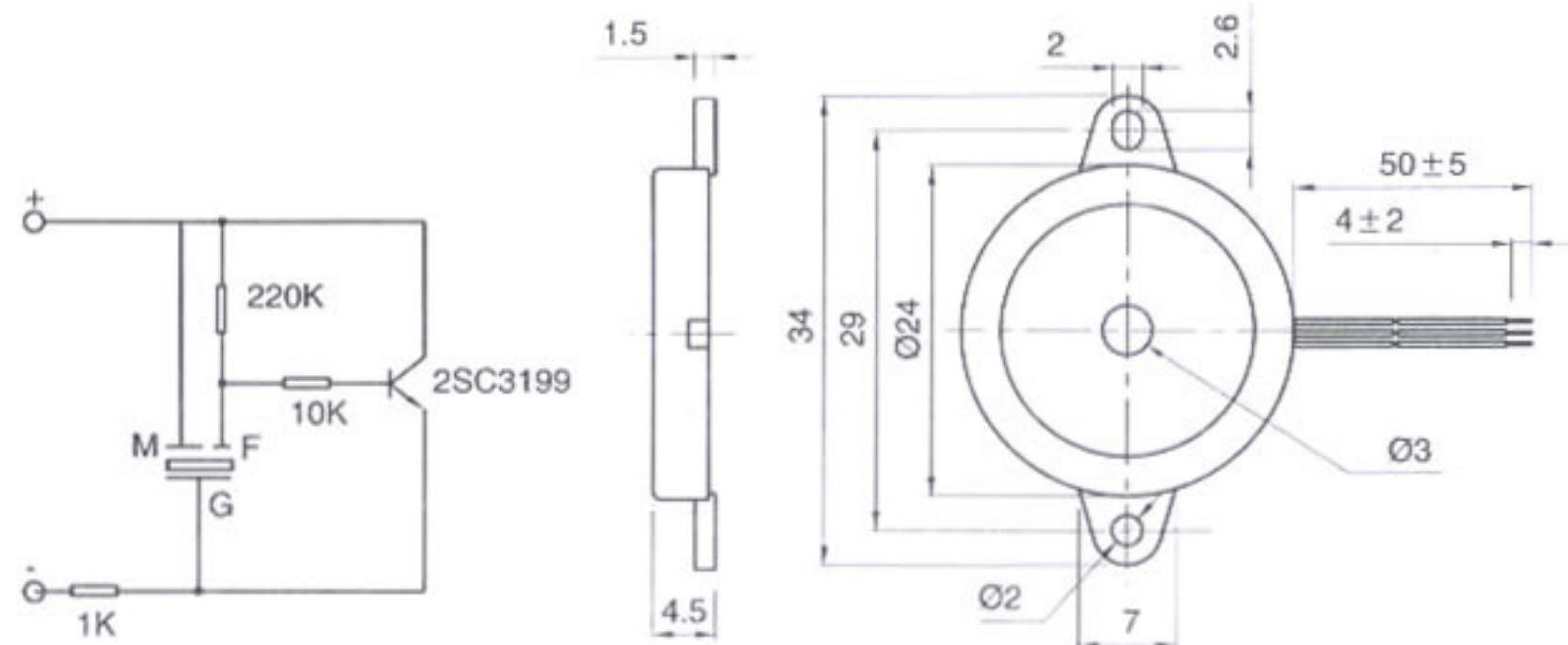
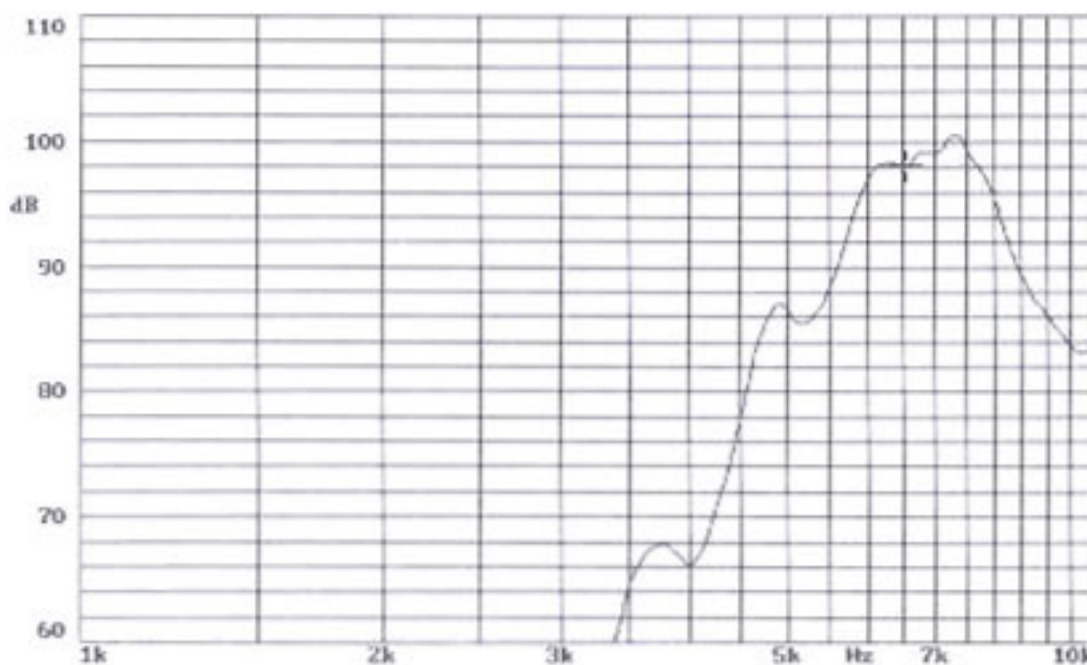
Operating Voltage (Vp-p)	1 ~ 30
S.P.L at 10 cm (dB)	> 90
Resonant Frequency (Hz)	2800 ± 500
Capacitance at 120 Hz ,25°C (pF)	30000 ± 30%
Current (mA)	< 5.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ±0.5

## XY12B

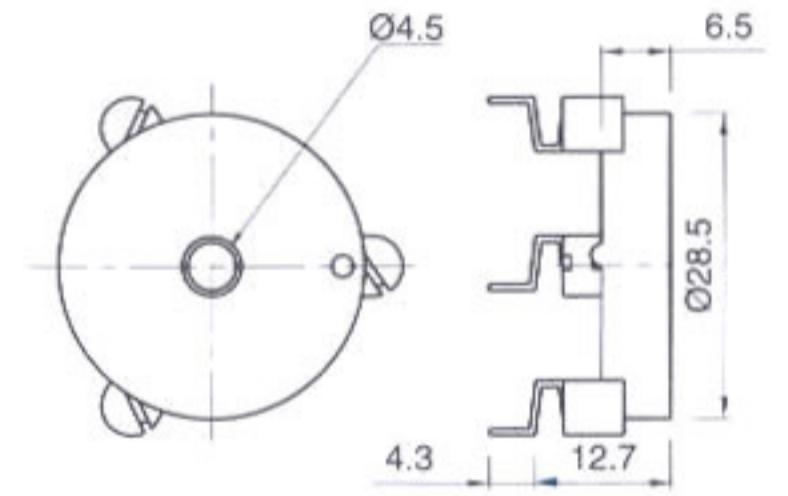
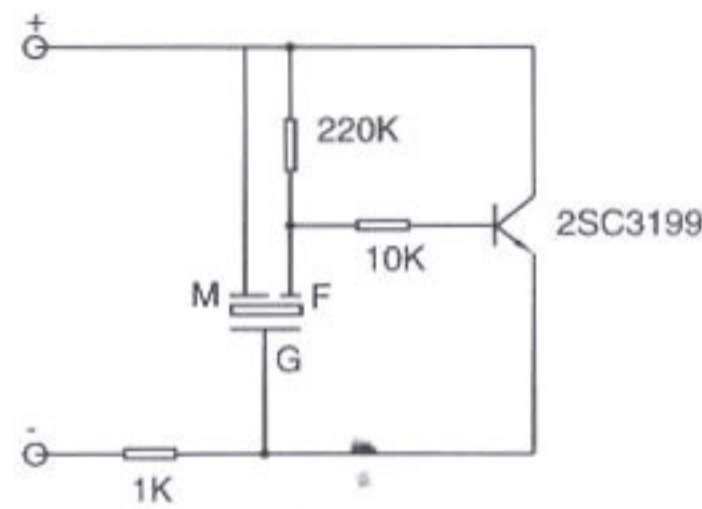
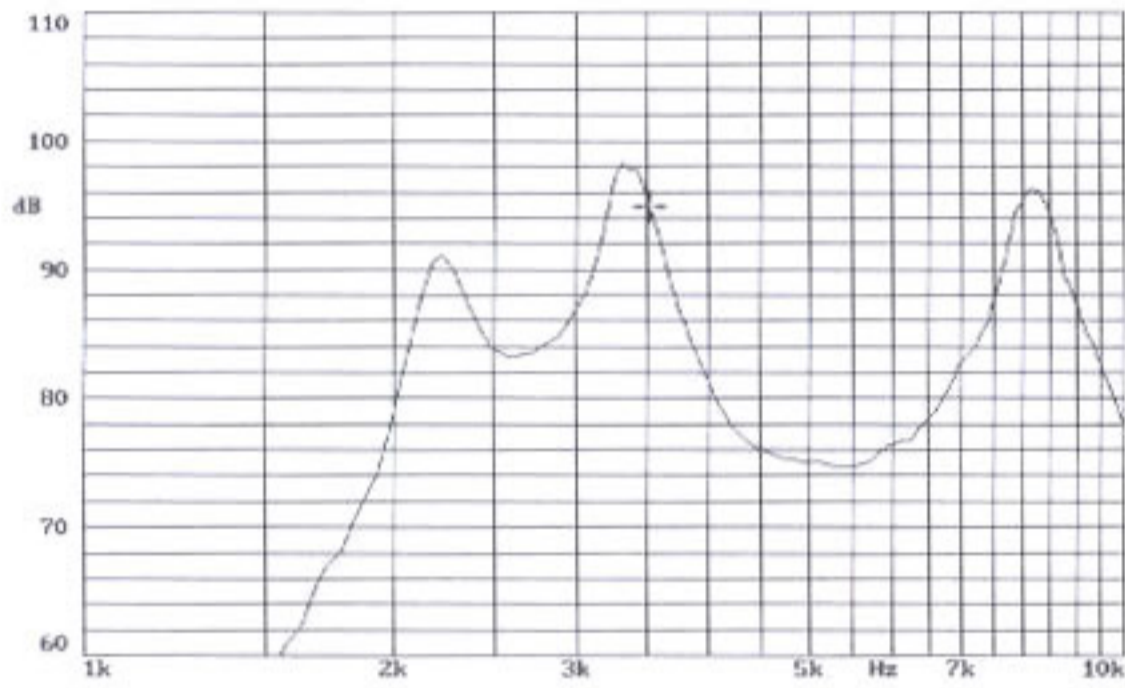
Operating Voltage (Vdc)	3 ~ 20
Rated Voltage (Vdc)	12
S.P.L at 10 cm (dB)	> 85
Resonant Frequency (HZ)	6500 ± 500
Current (mA)	< 10
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ±0.5

## XY23K

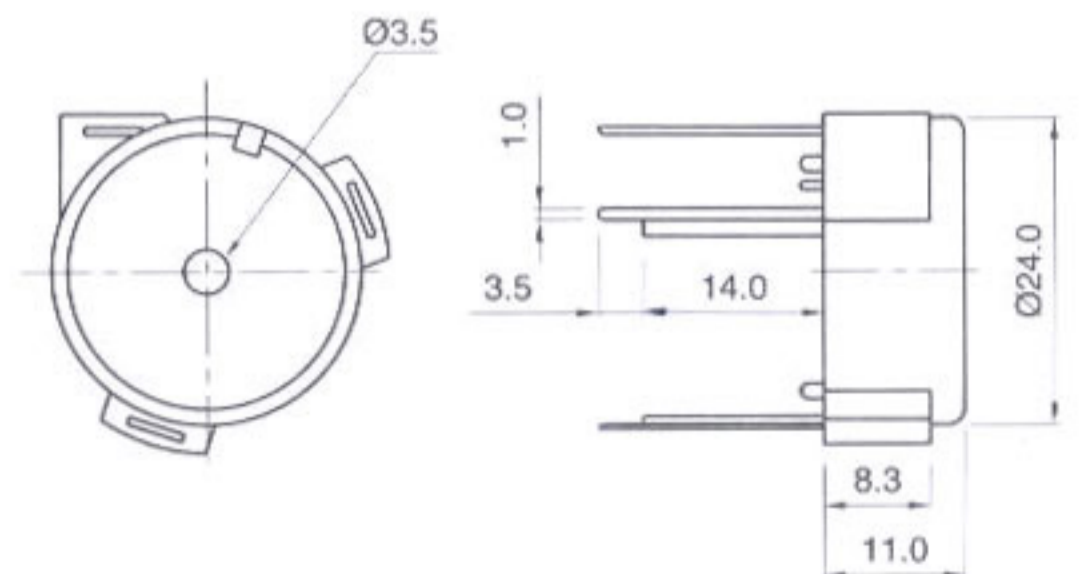
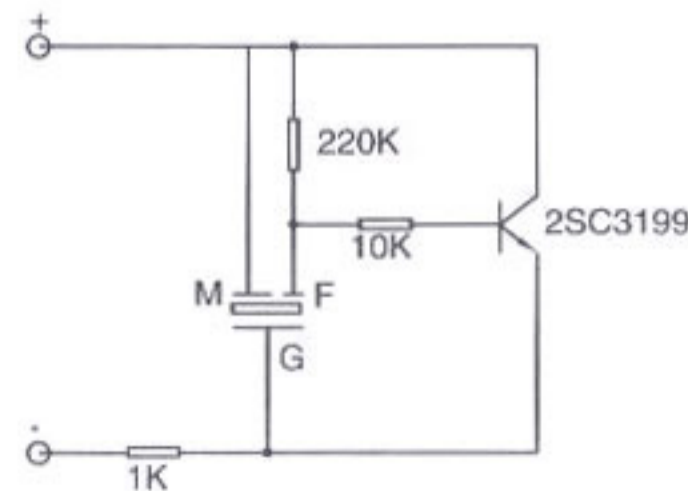
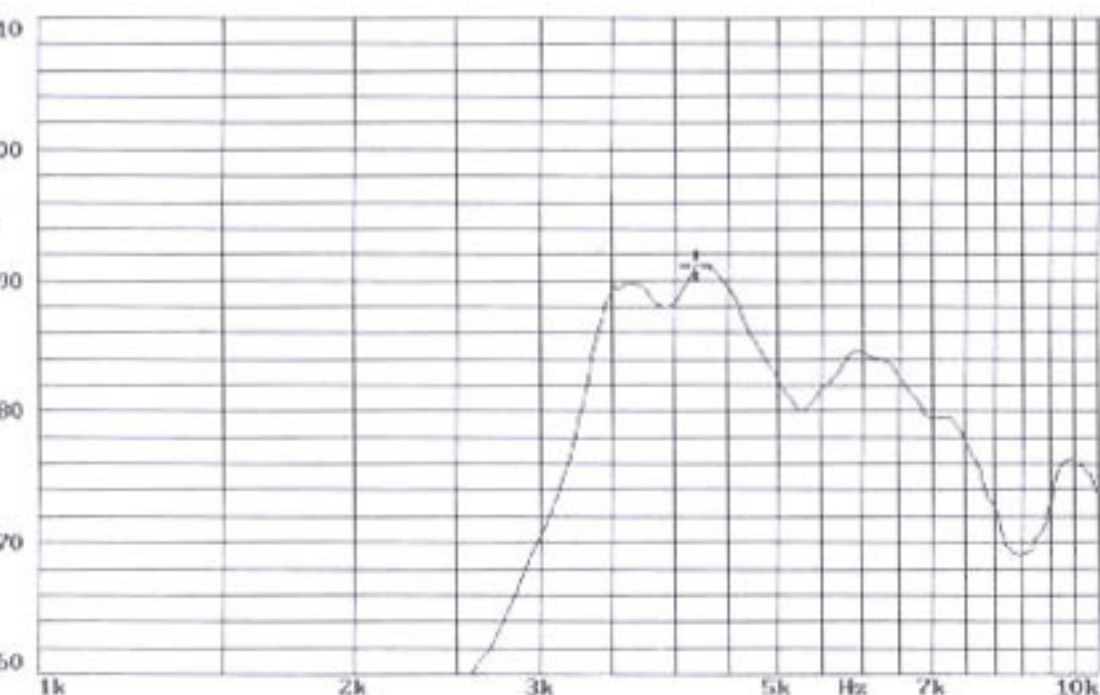
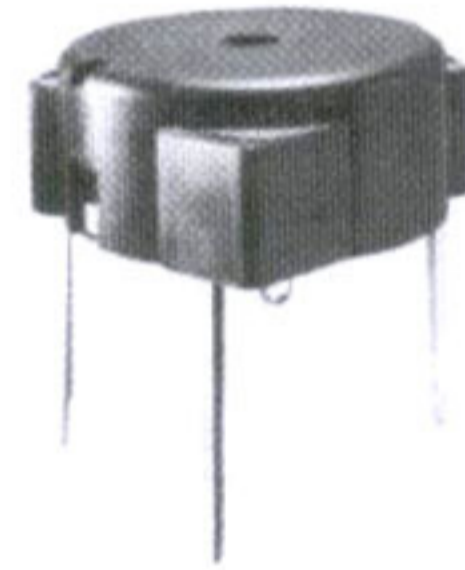
Operating Voltage (V <sub>DC</sub> )	3 ~ 20
Rated Voltage (V <sub>DC</sub> )	12
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	3500 ± 500
Current (mA)	≤ 8.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY24B

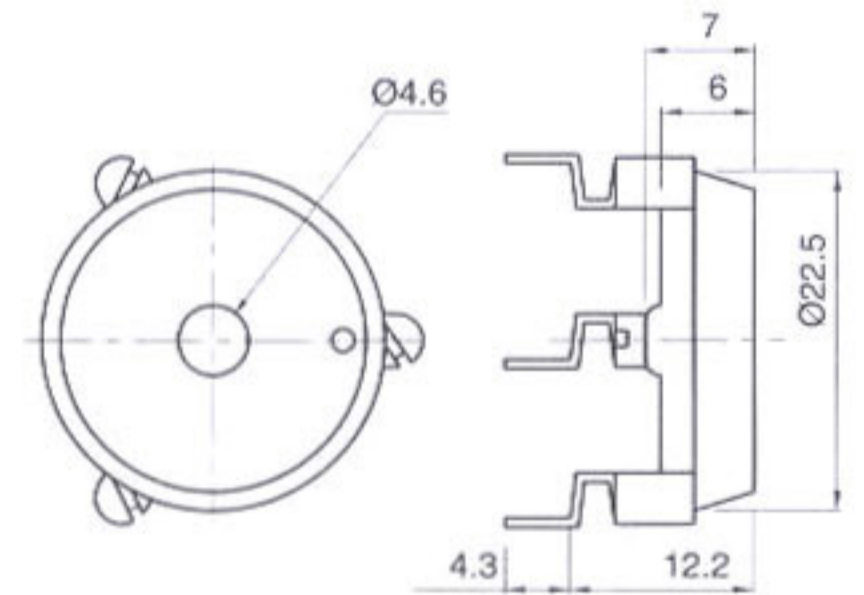
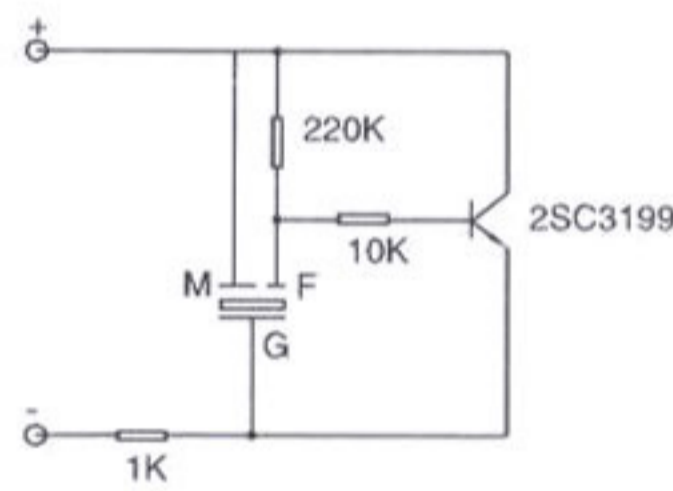
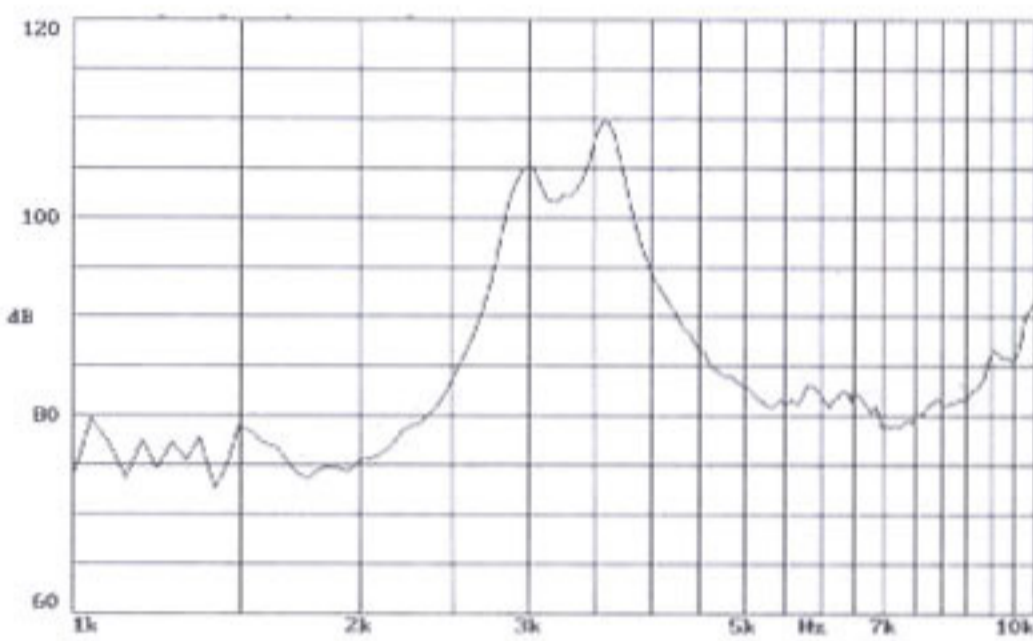
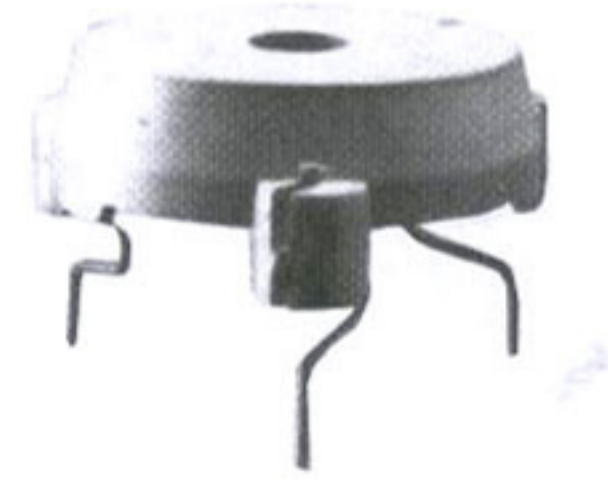
Operating Voltage (V <sub>DC</sub> )	3 ~ 20
Rated Voltage (V <sub>DC</sub> )	12
S.P.L at 10 cm (dB)	≥ 90
Resonant Frequency (Hz)	3800 ± 500
Current (mA)	≤ 12
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY24K

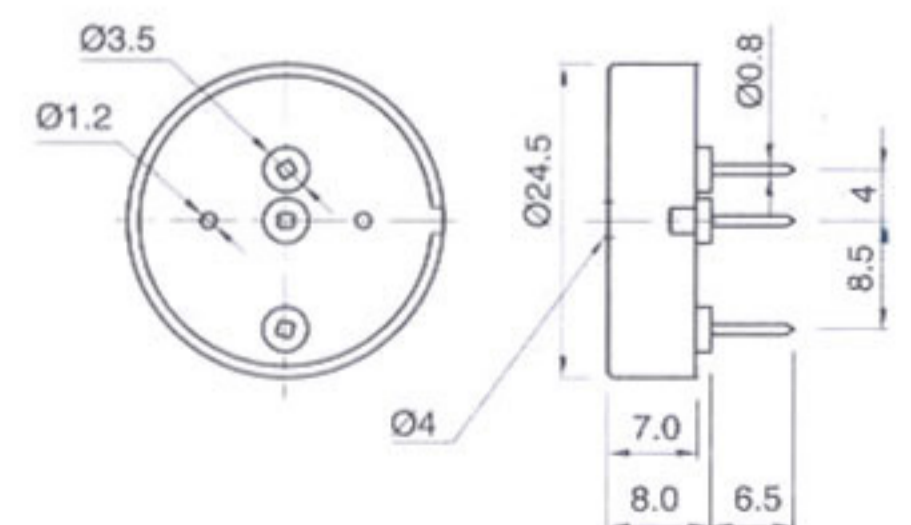
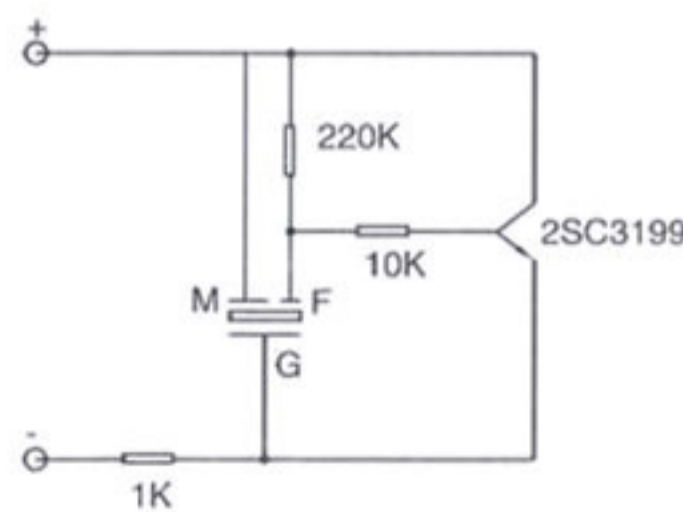
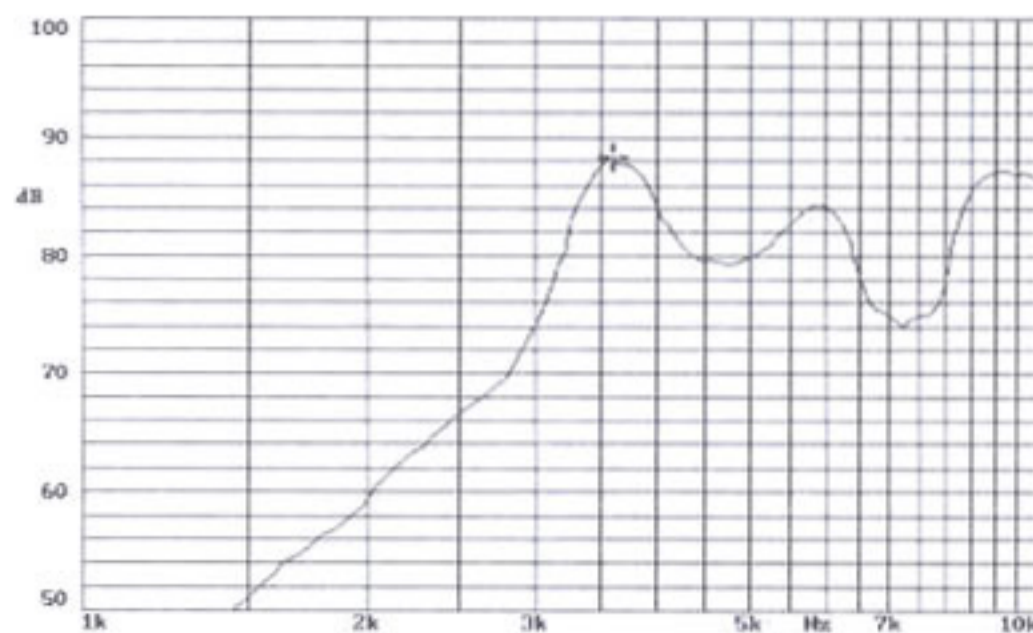
Operating Voltage (V <sub>DC</sub> )	3 ~ 20
Rated Voltage (V <sub>DC</sub> )	12
S.P.L at 10 cm (dB)	≥ 85
Resonant Frequency (Hz)	3600 ± 500
Current (mA)	≤ 8.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY25

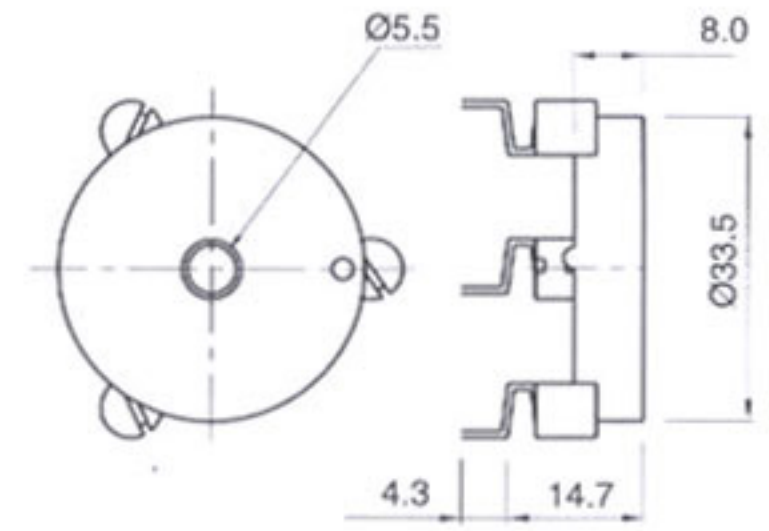
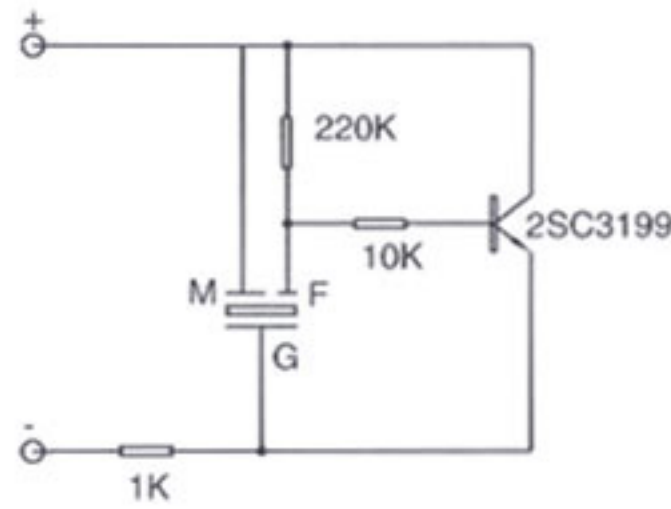
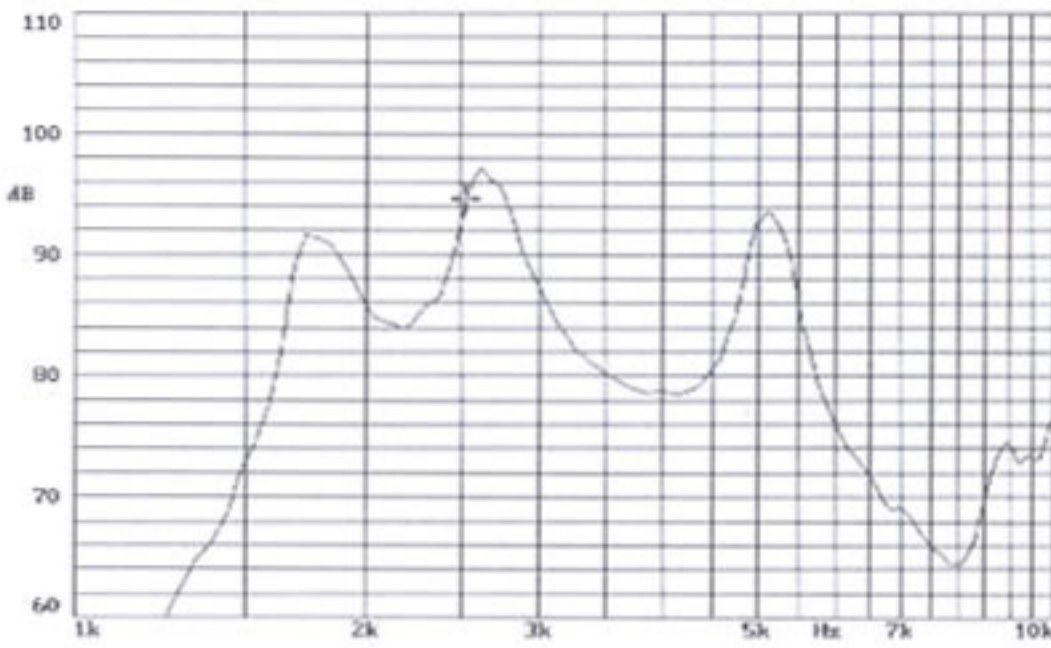
Operating Voltage (V <sub>DC</sub> )	3 ~ 20
Rated Voltage (V <sub>DC</sub> )	12
S.P.L at 10 cm (dB)	≥ 80
Resonant Frequency (Hz)	3500 ± 500
Current (mA)	≤ 20
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY33K

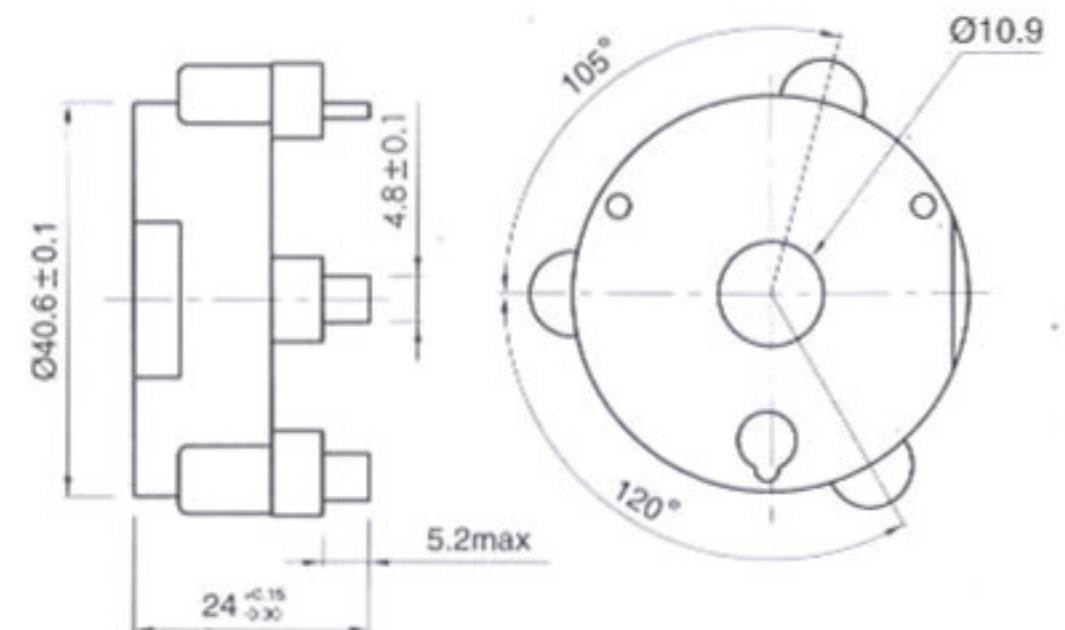
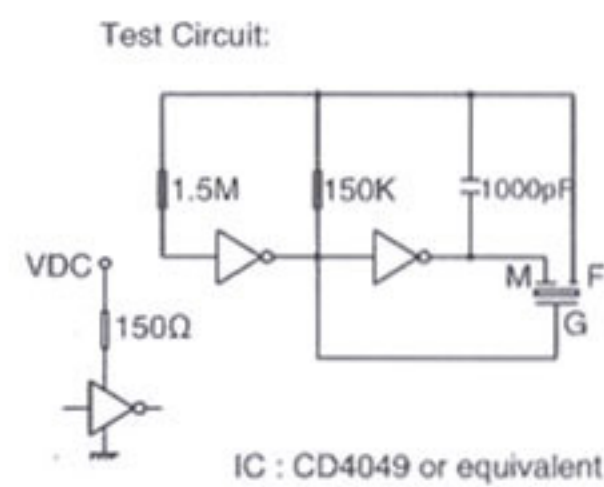
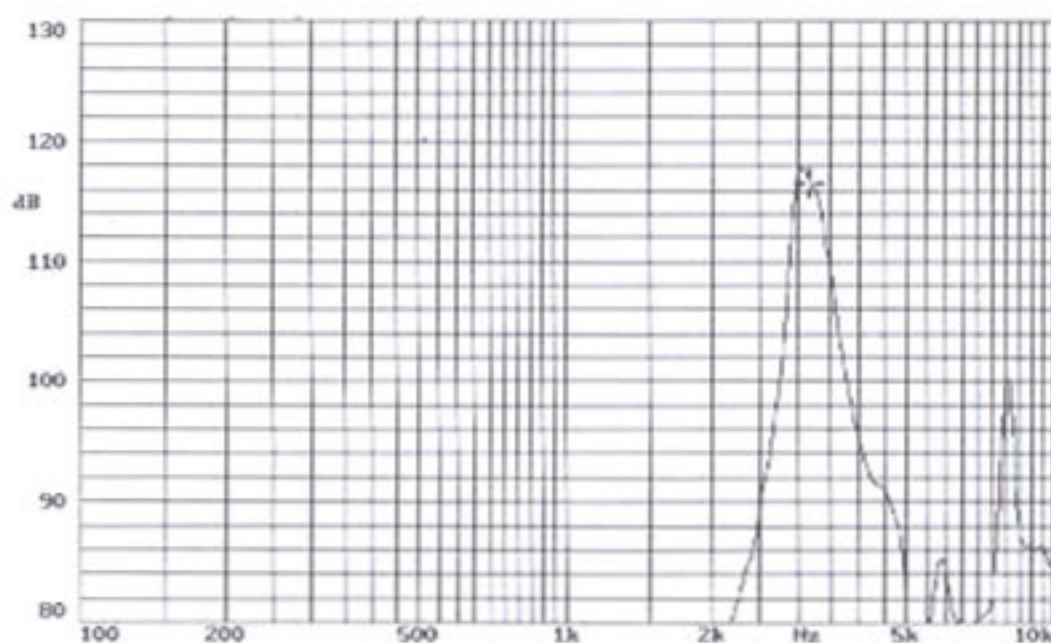
Operating Voltage (V <sub>DC</sub> )	3 ~ 20
Rated Voltage (V <sub>DC</sub> )	12
S.P.L at 10 cm (dB)	≥ 88
Resonant Frequency (Hz)	2000 ± 500
Current (mA)	≤ 8.0
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY39

Operating Voltage (V <sub>DC</sub> )	4.5 ~ 15
Rated Voltage (V <sub>DC</sub> )	9
S.P.L at 30 cm (dB)	≥ 95
Resonant Frequency (Hz)	3400 ± 500
Current (mA)	≤ 15
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80

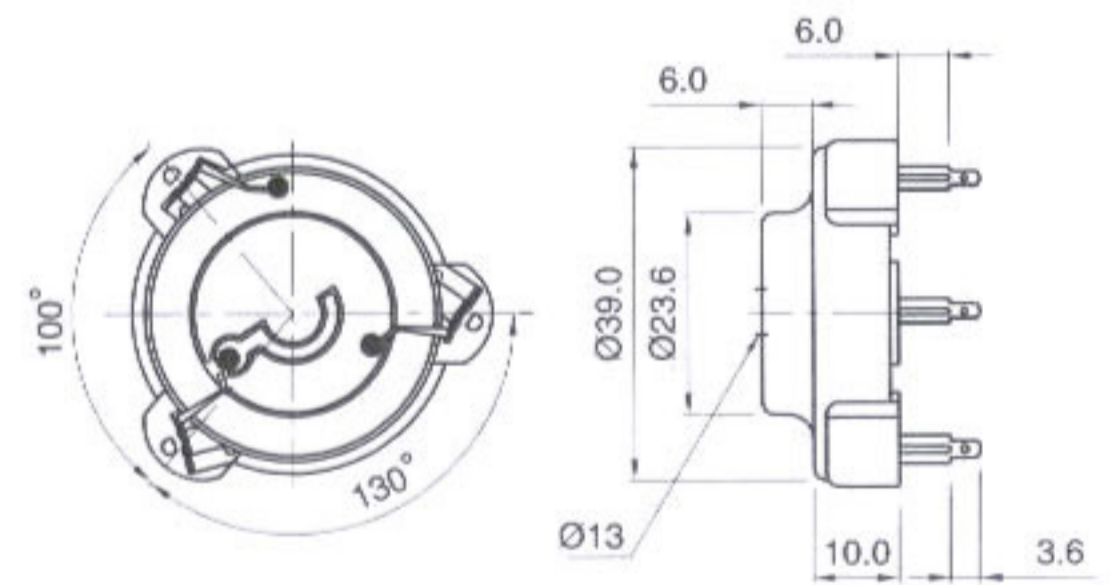
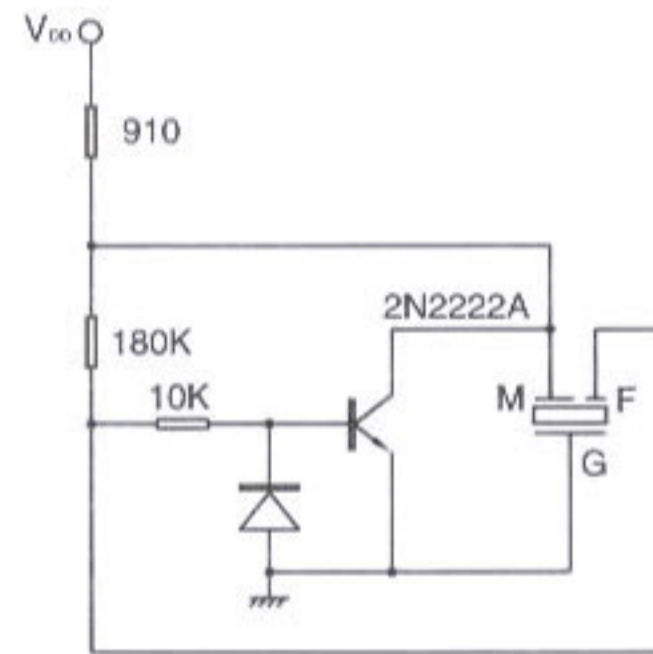
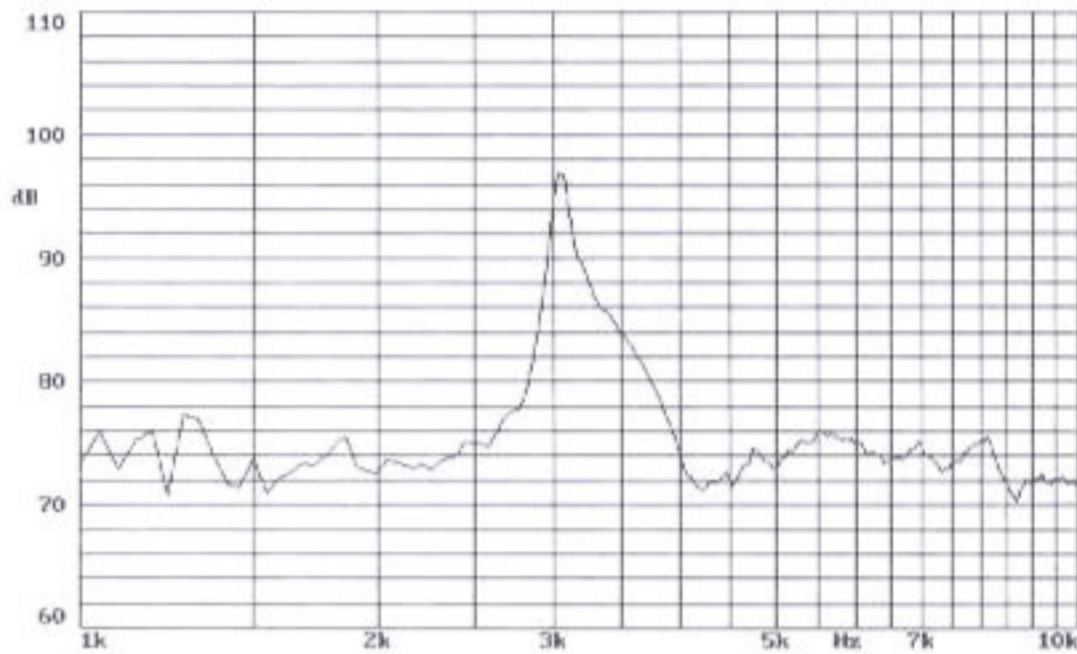


Tolerance: ± 0.5



## XY44B

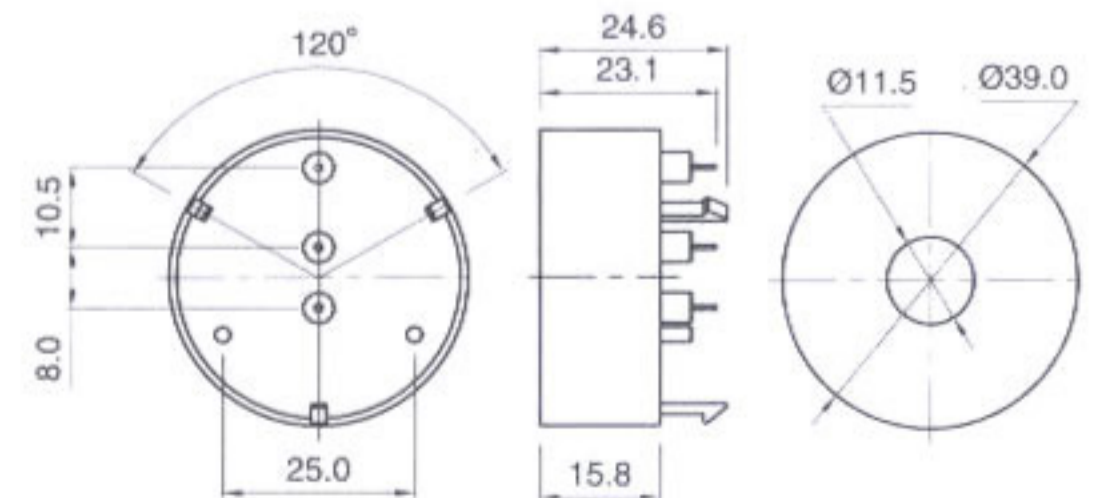
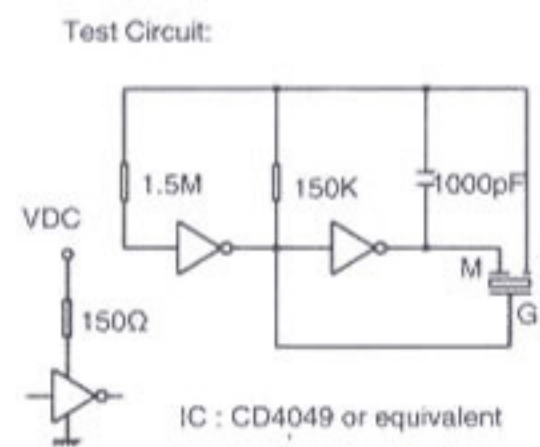
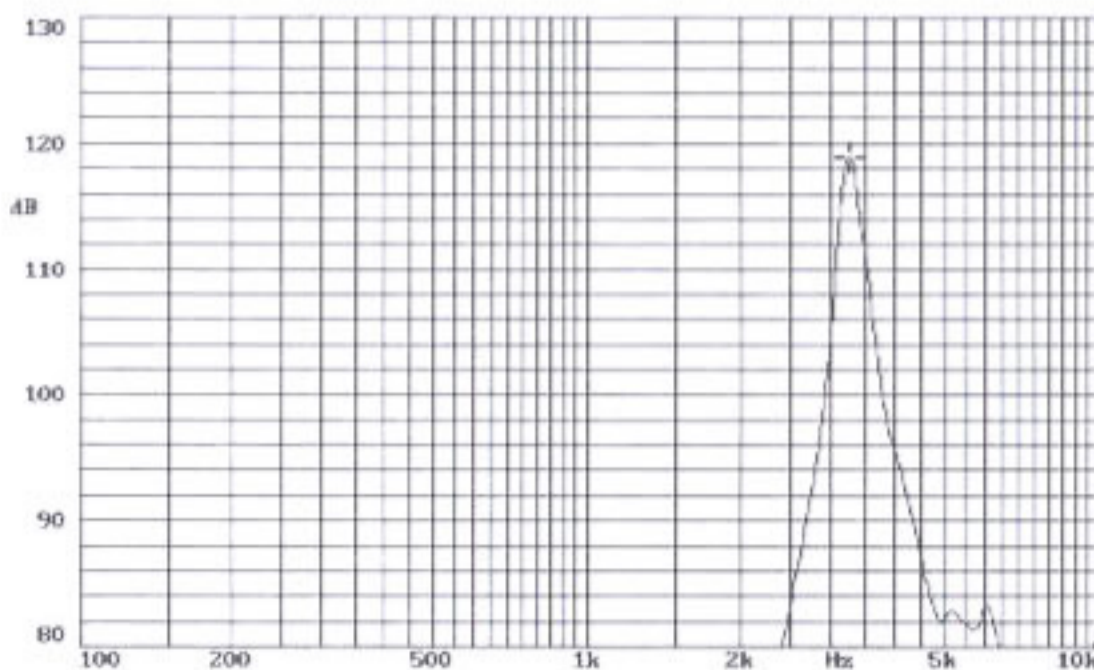
Operating Voltage (V)	6 ~ 20
Rated Voltage (V)	12
S.P.L at 10 cm (dB)	≥ 106
Resonant Frequency (Hz)	3200 ± 500
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XYE168

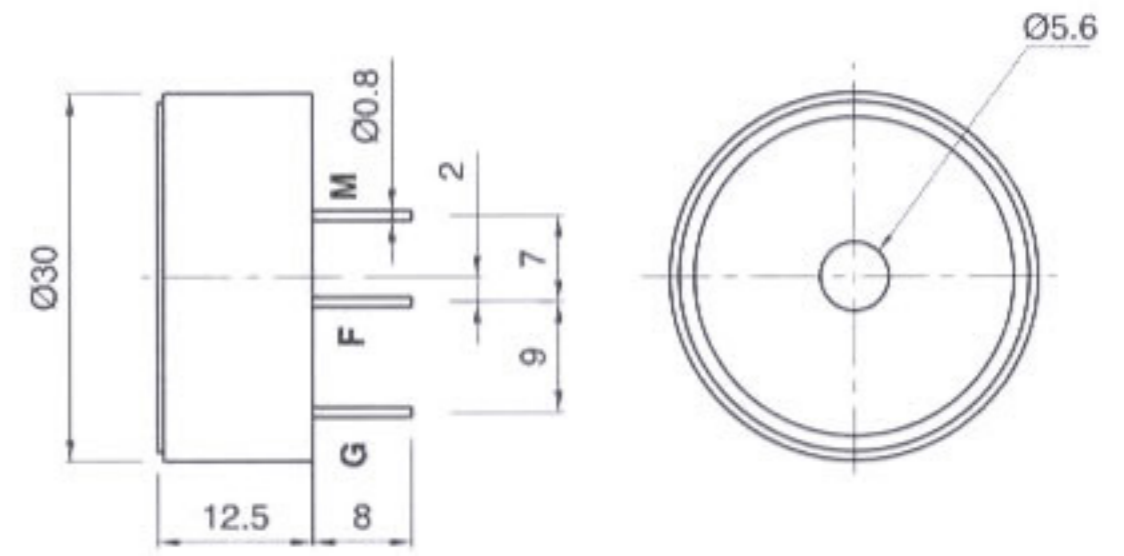
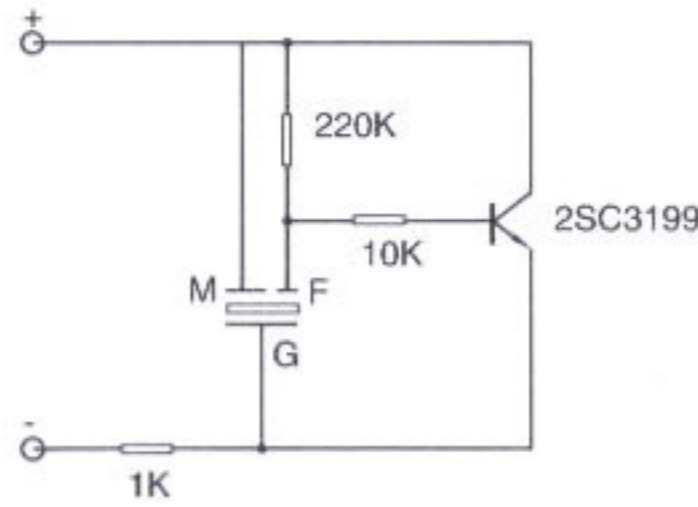
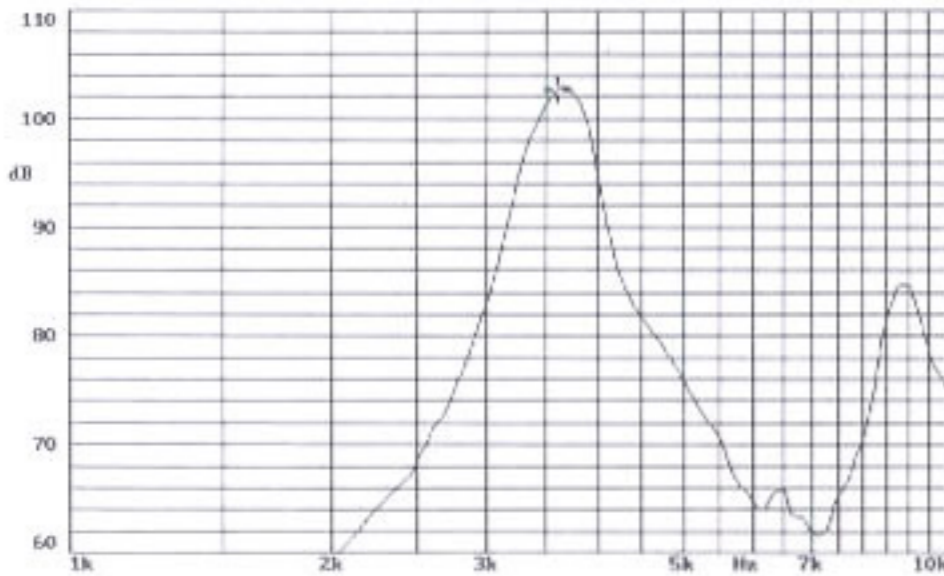
Operating Voltage (V)	4.5 ~ 15
Rated Voltage (V)	9
S.P.L at 30 cm (dB)	≥ 95
Resonant Frequency (Hz)	3400 ± 500
Current (mA)	≤ 15
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## XY1172

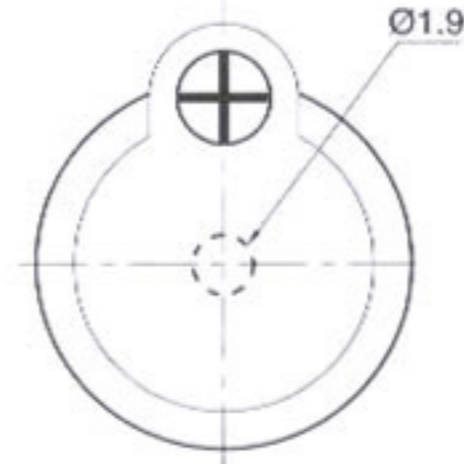
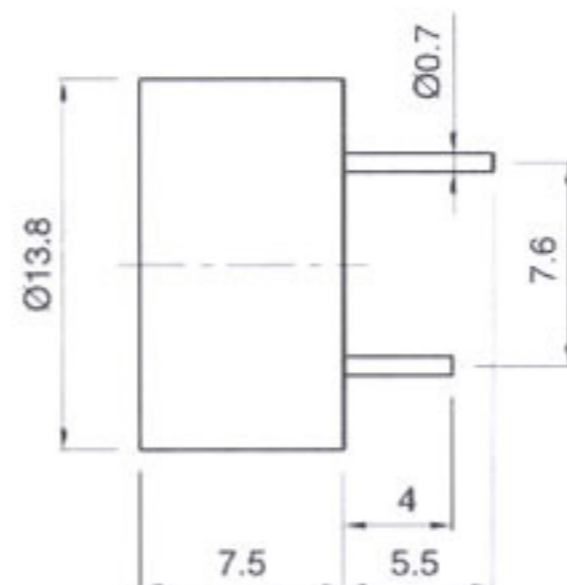
Operating Voltage (V <sub>DC</sub> )	3 ~ 30
Rated Voltage (V <sub>DC</sub> )	12
S.P.L at 10 cm (dB)	> 88
Resonant Frequency (Hz)	3600 ± 500
Current (mA)	< 10
Operating Temp (°C)	-20~+70
Storage Temp (°C)	-30~+80



Tolerance: ± 0.5

## FY14/FY14A

Type	FY14	FY14A
Operating Voltage (V <sub>DC</sub> )	3~16	3~16
Rated Voltage (V <sub>DC</sub> )	12	12
S.P.L at 10 cm (dB)	> 80	> 85
Resonant Frequency (Hz)	4000 ± 500	4800 ± 400
Current (mA)	< 7	< 10
Operating Temp (°C)	-20~+70	-20~+70
Storage Temp (°C)	-30~+80	-30~+80



Tolerance: ± 0.5