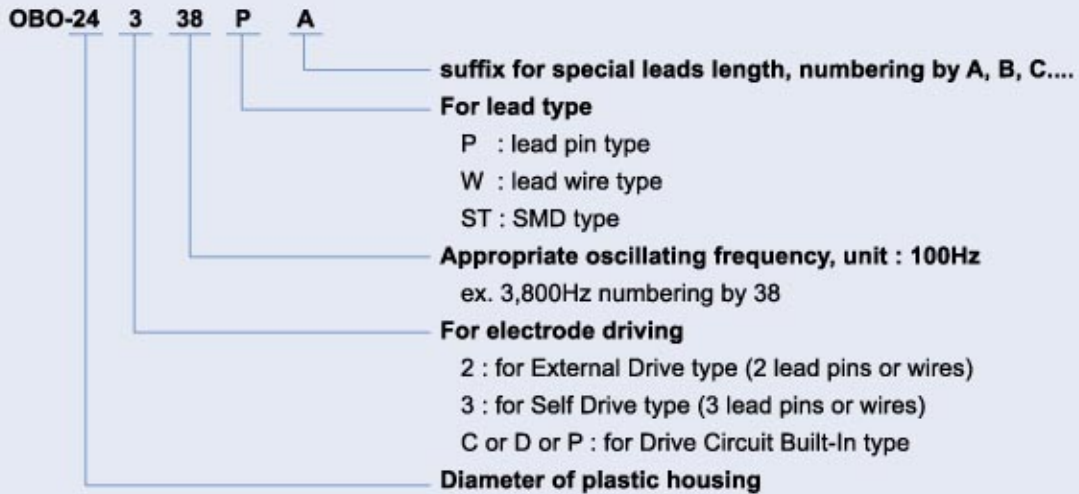


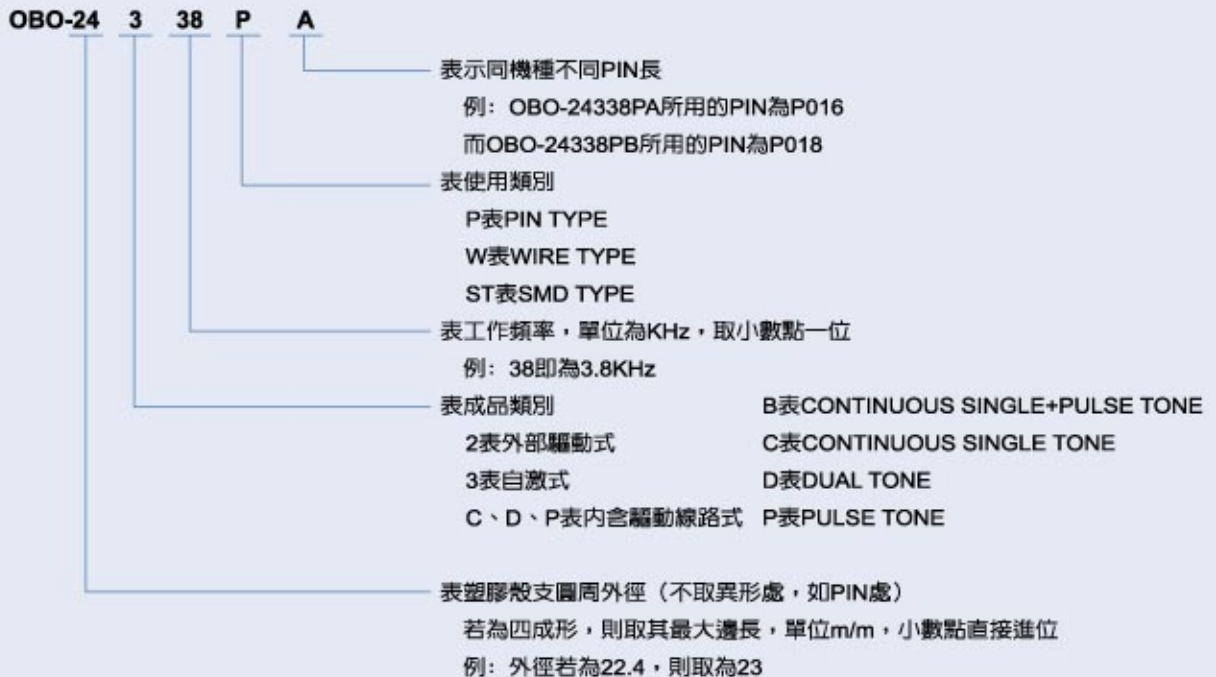
PIEZOELECTRIC BUZZER

蜂鳴器

PART NUMBERING SYSTEM



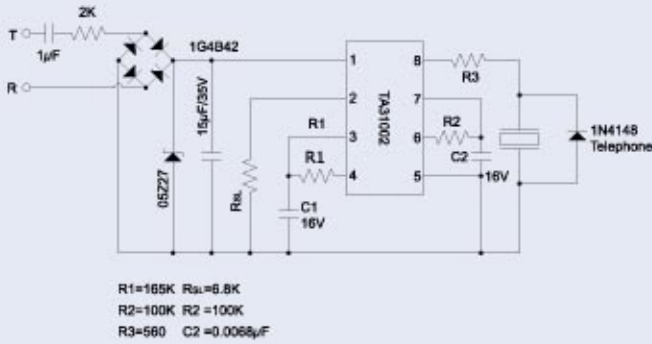
成品編號原則



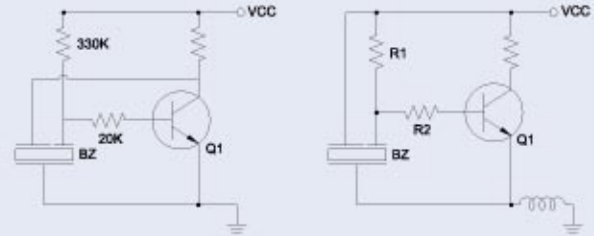
RECOMMENDED CIRCUIT PIEZOELECTRIC BUZZER

應用線路

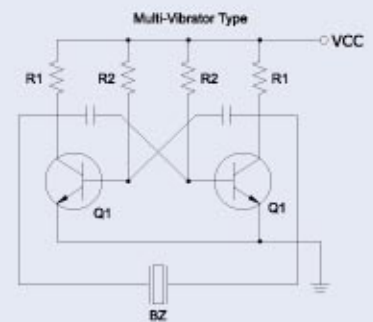
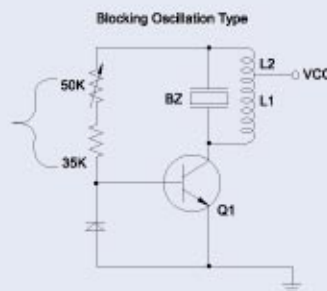
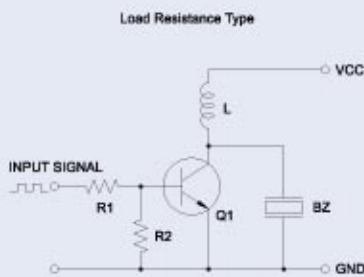
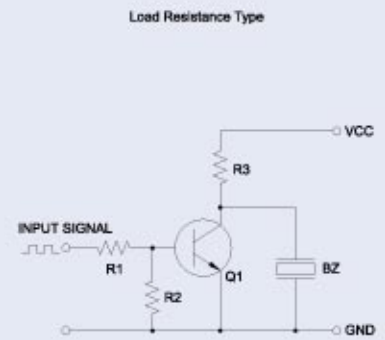
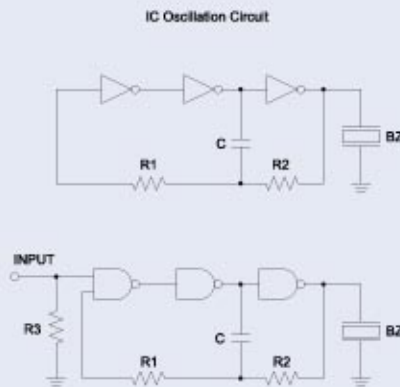
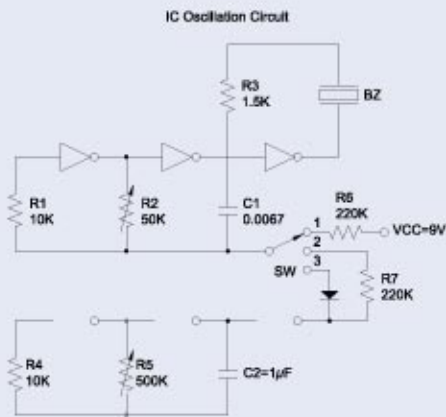
(1) Telephone Ringer Type



(2) Self-Oscillation Circuit (Tr-Type)



(3) External-Drive Circuits



PIEZO BUZZER

(DRIVE CIRCUIT BUILT-IN TYPE)

內含驅動線路式



SOUND PRESSURE LEVEL	輸出音壓
OSCILLATING FREQUENCY	諧振頻率
ALLOWABLE INPUT VOLTAGE	承受電壓
CURRENT CONSUMPTION	消耗電流
TONE	音調
CASE MATERIAL	塑膠規格
LEAD PIN MATERIAL	導針規格
OPERATING TEMP. RANGE	操作溫度
STORAGE TEMP. RANGE	儲存溫度
WEIGHT	重量

Dimensions (Unit: mm ± 0.5)

APPLICATIONS

- Data processing equipments
(i.e., Keyboards, disk drives, circuit boards, malfunction alarms)
- Electronic instruments
- Medical equipments
- Automatic control devices
- Cash registers

適用範圍

- 資料處理設備
(如鍵盤、磁碟機、線路板、多功能警示器)
- 電子儀器設備
- 醫療設備
- 自動化控制設備
- 收銀機

OBO-15210

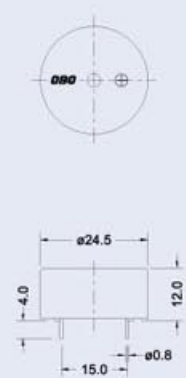
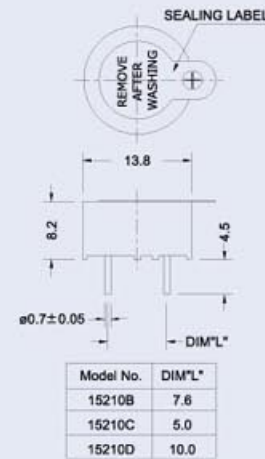
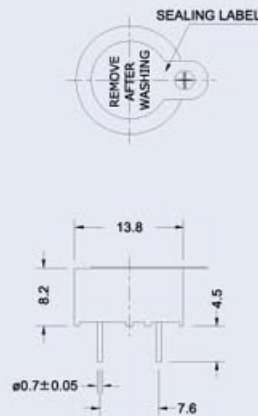
85dB min. / 10cm / DC 9V
4.4±0.5KHz
DC 3 to 15V
8mA max. / DC 9V
Single Tone
PBT (UL 94V-0)
Brass, Plated of Sn
-20°C to +70°C
-40°C to +85°C
1.0gm

OBO-15210B/OBO-15210C OBO-15210D

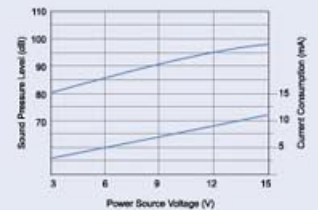
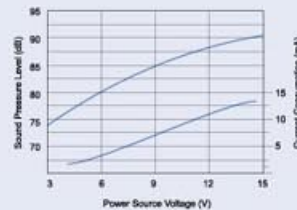
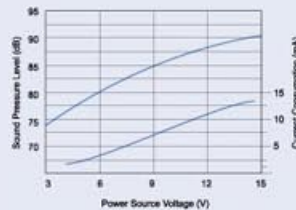
82dB min. / 10cm / DC 9V
4.4±0.5KHz
DC 3 to 15V
7mA max. / DC 9V
Single Tone
PBT (UL 94V-0)
Brass(Plated of Sn)
-20°C to +70°C
-40°C to +85°C
1.2gms

OBO-20C1-15

90dB min. / 30cm / DC 9V
3.4±0.5KHz
DC 3 to 15V
7mA max. / DC 9V
Continuous Tone
PC (UL 94V-2)
Bronze
-20°C to +70°C
-40°C to +85°C
3.9gms



Sound Pressure Level
& Current Consumption
vs. Input Voltage



PIEZO BUZZER

(DRIVE CIRCUIT BUILT-IN TYPE)

內含驅動線路式

圓柱式壓電式 Piezoelectric Buzzer



SOUND PRESSURE LEVEL	輸出音壓
OSCILLATING FREQUENCY	諧振頻率
ALLOWABLE INPUT VOLTAGE	承受電壓
CURRENT CONSUMPTION	消耗電流
TONE	音調
CASE MATERIAL	塑膠規格
LEAD PIN MATERIAL	導針規格
OPERATING TEMP. RANGE	操作溫度
STORAGE TEMP. RANGE	儲存溫度
WEIGHT	重量

APPLICATIONS

- Data processing equipments
(i.e., Keyboards, disk drives, circuit boards, malfunction alarms)
- Electronic instruments
- Medical equipments
- Automatic control devices
- Cash registers

適用範圍

- 資料處理設備
(如鍵盤、磁碟機、線路板、多功能警示器)
- 電子儀器設備
- 醫療設備
- 自動化控制設備
- 收銀機

OBO-20C3

83dB min. / 30cm / DC 9V
3.8±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
Continuous Tone
PC (UL 94V-2)
Bronze
-20°C to +70°C
-40°C to +85°C
3.6gms

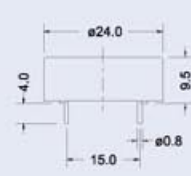
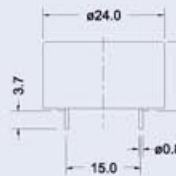
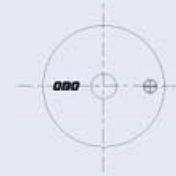
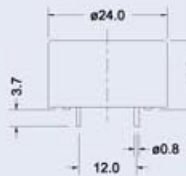
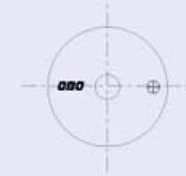
OBO-20C4

83dB min. / 30cm / DC 9V
3.8±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
Continuous Tone
PC (UL 94V-2)
Bronze
-20°C to +70°C
-40°C to +85°C
3.6gms

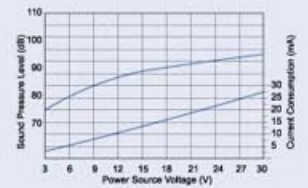
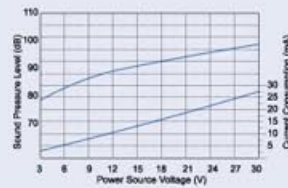
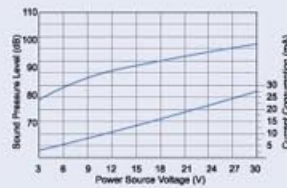
OBO-20C5

80dB min. / 30cm / DC 9V
3.4±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
Continuous Tone
PC (UL 94V-2)
Bronze
-20°C to +70°C
-40°C to +85°C
2.9gms

Dimensions (Unit: mm ± 0.5)



Sound Pressure Level
& Current Consumption
vs. Input Voltage



PIEZO BUZZER

(DRIVE CIRCUIT BUILT-IN TYPE)

內含驅動線路式



SOUND PRESSURE LEVEL	輸出音壓
OSCILLATING FREQUENCY	諧振頻率
ALLOWABLE INPUT VOLTAGE	承受電壓
CURRENT CONSUMPTION	消耗電流
CASE MATERIAL	塑膠規格
TONE	音調
LEAD PIN MATERIAL	導針規格
LEAD WIRE	導線規格
OPERATING TEMP. RANGE	操作溫度
STORAGE TEMP. RANGE	儲存溫度
WEIGHT	重量

Dimensions (Unit: mm ± 0.5)

APPLICATIONS

- Data processing equipments
(i.e., Keyboards, disk drives, circuit boards, malfunction alarms)
- Electronic instruments
- Medical equipments
- Automatic control devices
- Cash registers

適用範圍

- 資料處理設備
(如鍵盤、磁碟機、線路板、多功能警示器)
- 電子儀器設備
- 醫療設備
- 自動化控制設備
- 收銀機

OBO-20C6

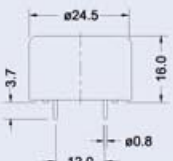
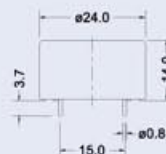
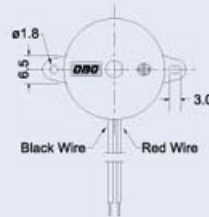
80dB min. / 30cm / DC 9V
3.4±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
PC (UL 94V-2)
Continuous Tone
UL 1095 AWG28
135mm ± 5mm
-20°C to +70°C
-40°C to +85°C
3.4gms

OBO-20C7

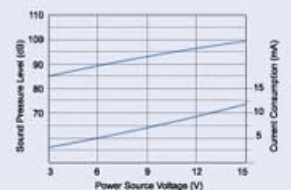
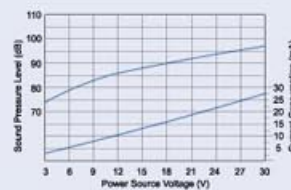
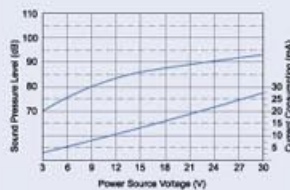
83dB min. / 30cm / DC 9V
3.4±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
PC (UL 94V-2)
Continuous Tone
Bronze
-20°C to +70°C
-40°C to +85°C
3.5gms

OBO-20C9

93dB min. / 30cm / DC 9V
3.4±0.5KHz
DC 3 to 15V
7mA max. / DC 9V
PC (UL 94V-2)
Continuous Tone
Bronze
-20°C to +70°C
-40°C to +85°C
4.2gms



Sound Pressure Level
& Current Consumption
vs. Input Voltage



PIEZO BUZZER

(DRIVE CIRCUIT BUILT-IN TYPE)

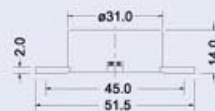
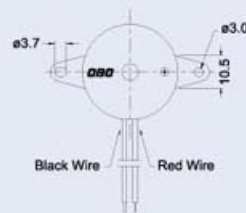
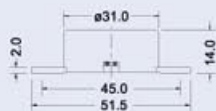
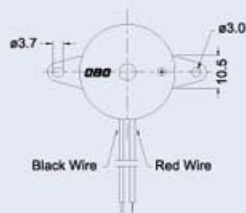
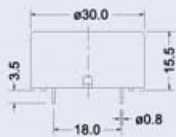
內含驅動線路式

圓筒式壓電器 Piezoelectric Buzzer

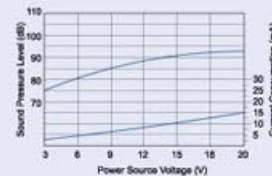
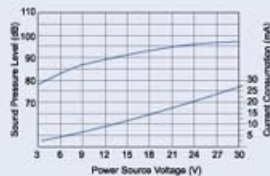
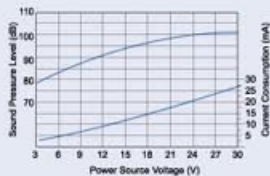


SOUND PRESSURE LEVEL	輸出音壓
OSCILLATING FREQUENCY	諧振頻率
ALLOWABLE INPUT VOLTAGE	承受電壓
CURRENT CONSUMPTION	消耗電流
CASE MATERIAL	塑膠規格
TONE	音調
LEAD PIN MATERIAL	導針規格
LEAD WIRE	導線規格
OPERATING TEMP. RANGE	操作溫度
STORAGE TEMP. RANGE	儲存溫度
WEIGHT	重量

Dimensions (Unit: mm ± 0.5)



Sound Pressure Level
& Current Consumption
vs. Input Voltage



APPLICATIONS

- Data processing equipments
(i.e., Keyboards, disk drives, circuit boards, malfunction alarms)
- Electronic instruments
- Medical equipments
- Automatic control devices
- Cash registers

適用範圍

- 資料處理設備
(如鍵盤、磁碟機、線路板、多功能警示器)
- 電子儀器設備
- 醫療設備
- 自動化控制設備
- 收銀機

OBO-27C8

87dB min. / 30cm / DC 9V
3.5±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
PC (UL 94V-2)
Continuous Tone

-20°C to +70°C

-40°C to +85°C

6.0gms

OBO-27C9

87dB min. / 30cm / DC 9V
3.5±0.5KHz
DC 3 to 30V
10mA max. / DC 9V
ABS (UL 94HB)
Continuous Tone

UL 1095 AWG28

100mm ±5mm

-20°C to +60°C

-30°C to +70°C

6.9gms

OBO-27P1

85dB min. / 30cm / DC 9V
3.4±0.5KHz
DC 3 to 20V
6mA max. / DC 9V
ABS (UL 94HB)
Pulse Tone;
420ms ±20% / period / DC 9V

UL 1095 AWG28

100mm ±5mm

-20°C to +60°C

-30°C to +70°C

7.0gms

PIEZO BUZZER

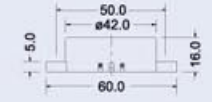
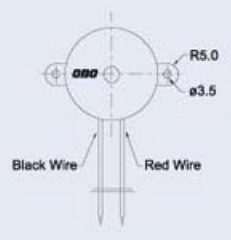
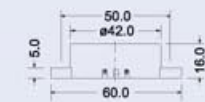
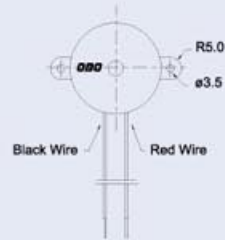
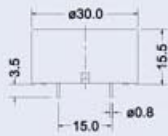
(DRIVE CIRCUIT BUILT-IN TYPE)

內含驅動線路式

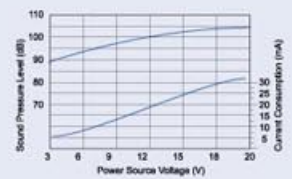
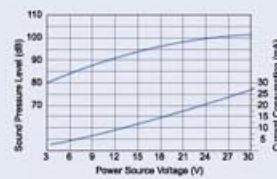
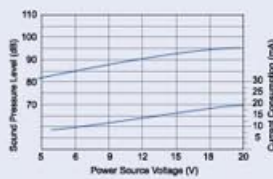


SOUND PRESSURE LEVEL	輸出音壓
OSCILLATING FREQUENCY	諧振頻率
ALLOWABLE INPUT VOLTAGE	承受電壓
CURRENT CONSUMPTION	消耗電流
CASE MATERIAL	塑膠規格
TONE	音調
LEAD PIN MATERIAL	導針規格
LEAD WIRE	導線規格
OPERATING TEMP. RANGE	操作溫度
STORAGE TEMP. RANGE	儲存溫度
WEIGHT	重量

Dimensions (Unit: mm ± 0.5)



Sound Pressure Level
& Current Consumption
vs. Input Voltage



APPLICATIONS

- Data processing equipments
(i.e., Keyboards, disk drives, circuit boards, malfunction alarms)
- Electronic instruments
- Medical equipments
- Automatic control devices
- Fire alarms, burglar alarms, gas detectors

適用範圍

- 資料處理設備
(如鍵盤、磁碟機、線路板、多功能警示器)
- 電子儀器設備
- 醫療設備
- 自動化控制設備
- 火災警報器、防盜警報器、氣體偵測器

OBO-27P2

87dB min. / 30cm / DC 9V
3.4±0.5KHz
DC 5 to 20V
6mA max. / DC 9V
PC (UL 94V-2)
Pulse Tone;
390ms±20% / period / DC 9V

OBO-35C1

88dB min. / 30cm / DC 9V
2.8±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
PBT(UL 94V-0)
Continuous Tone

OBO-35C2

97dB min. / 30cm / DC 9V
2.8±0.5KHz
DC 3 to 20V
12mA max. / DC 9V
PBT(UL 94V-0)
Continuous Tone

UL 1007 AWG26

120mm±5mm

-20°C to +70°C

-40°C to +85°C

13.0gms

UL 1007 AWG26

120mm±5mm

-20°C to +70°C

-40°C to +85°C

13.0gms

PIEZO BUZZER

(DRIVE CIRCUIT BUILT-IN TYPE)

內含驅動線路式

圖例說明書 Piezoelectric Buzzer



SOUND PRESSURE LEVEL	輸出音壓
OSCILLATING FREQUENCY	諧振頻率
ALLOWABLE INPUT VOLTAGE	承受電壓
CURRENT CONSUMPTION	消耗電流
CASE MATERIAL	塑膠規格
TONE	音調
LEAD PIN / WIRE MATERIAL	導針/線規格
OPERATING TEMP. RANGE	操作溫度
STORAGE TEMP. RANGE	儲存溫度
WEIGHT	重量

APPLICATIONS

- Automotive alarms
- Toys, game machines, etc.
- Electrical appliances
- Automatic control devices, conveyors, medical equipments
- Fire alarms, burglar alarms, gas detectors

適用範圍

- 自動化警報器
- 玩具、遊戲器材等
- 各類電子產品
- 自動化控制儀器、自動輸送裝置、醫療器材
- 火災警報器、防盜警報器、氣體偵測器

OBO-35C3

88dB min. / 30cm / DC 9V
2.8±0.5KHz
DC 3 to 30V
8mA max. / DC 9V
PC (UL 94V-2)
Continuous Tone
Phosphor Bronze
-20°C to +70°C
-40°C to +85°C
13.0gms

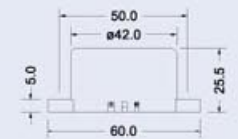
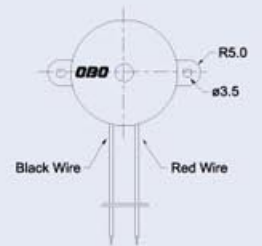
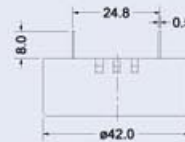
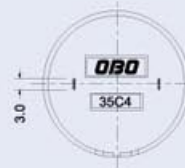
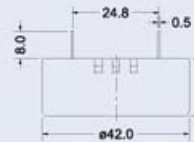
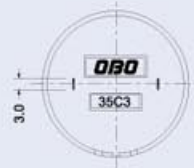
OBO-35C4

100dB min. / 30cm / DC 9V
2.8±0.5KHz
DC 3 to 20V
12mA max. / DC 9V
PC (UL 94V-2)
Continuous Tone
Phosphor Bronze
-20°C to +70°C
-40°C to +85°C
13.8gms

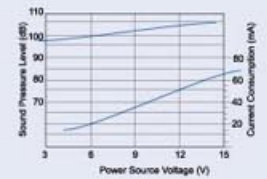
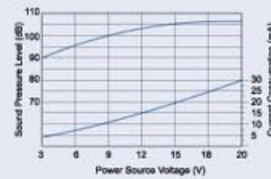
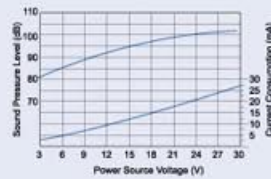
OBO-35C5

103dB min. / 30cm / DC 9V
2.8±0.5KHz
DC 3 to 15V
45mA max. / DC 9V
ABS (UL 94HB)
Continuous Tone
UL 1007 AWG26
115mm±5mm
-20°C to +60°C
-40°C to +70°C
16.7gms

Dimensions (Unit: mm ± 0.5)



Sound Pressure Level
& Current Consumption
vs. Input Voltage



PIEZO BUZZER

(DRIVE CIRCUIT BUILT-IN TYPE)

內含驅動線路式



SOUND PRESSURE LEVEL	輸出音壓
OSCILLATING FREQUENCY	諧振頻率
ALLOWABLE INPUT VOLTAGE	承受電壓
CURRENT CONSUMPTION	消耗電流
CASE MATERIAL	塑膠規格
TONE	音 調
LEAD PIN / WIRE MATERIAL	導針/線規格
OPERATING TEMP. RANGE	操作溫度
STORAGE TEMP. RANGE	儲存溫度
WEIGHT	重 量

Dimensions (Unit: mm ± 0.5)

Sound Pressure Level
& Current Consumption
vs. Input Voltage

APPLICATIONS

- Automotive alarms
- Toys, game machines, etc.
- Electrical appliances
- Automatic control devices, conveyors, medical equipments
- Fire alarms, burglar alarms, gas detectors

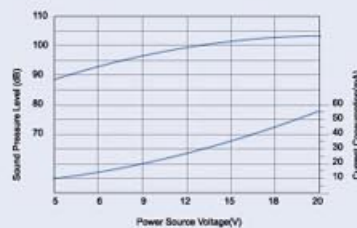
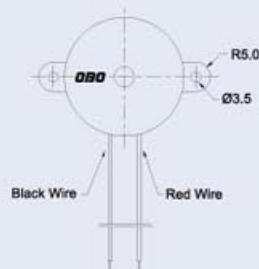
適用範圍

- 自動化警報器
- 玩具、遊戲器材等
- 各類電子產品
- 自動化控制儀器、自動輸送裝置、醫療器材
- 火災警報器、防盜警報器、氣體偵測器

OBO-35D1

97dB min. / 30cm / DC 9V
 Abt. 2.9 or 3.05 KHz / DC 9V
 DC 5 to 20V
 20mA max. / DC 9V
 PC (UL 94V-2)
 Dual Tone; 320ms ± 20%/DC 9V

UL 1007 AWG26
 120mm ± 5mm
 -20°C to +70°C
 -40°C to +85°C
 15.0gms



OBO-35P2

93dB min. / 30cm / DC 9V
 2.6 ± 0.5KHz
 DC 5 to 20V
 12mA max. / DC 9V
 PC (UL 94V-2)
 Pulse Tone :
 380ms ± 20%/Period/DC9V

UL 1007 AWG26
 120mm ± 5mm
 -20°C to +70°C
 -40°C to +85°C
 15.0gms

