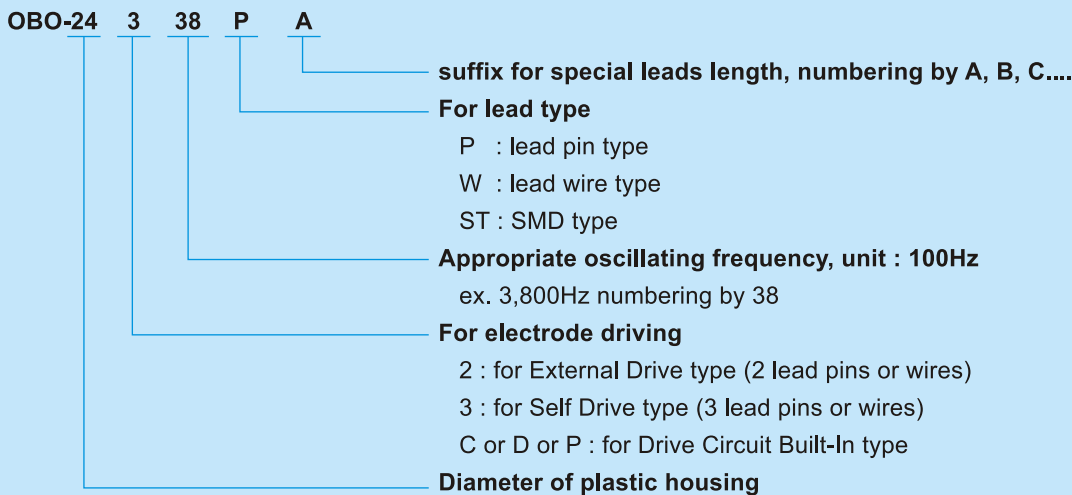
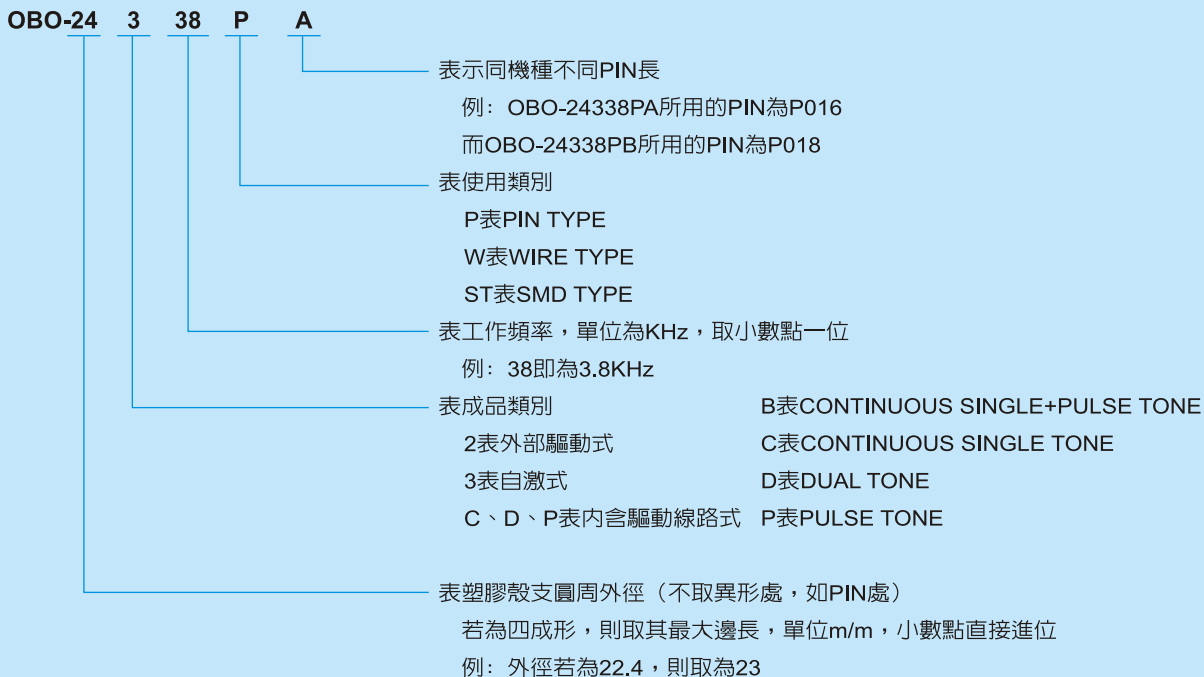


## PART NUMBERING SYSTEM



## 蜂鳴器產品編號原則



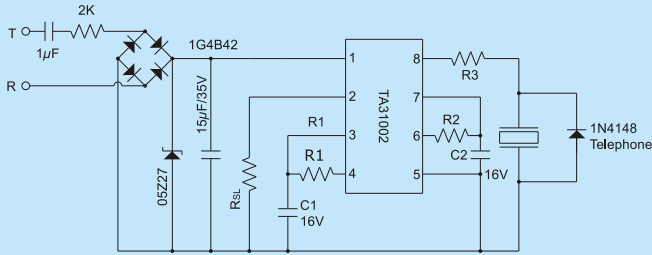
### PIEZOELECTRIC BUZZER

MODEL NO.	Min. SPL @RESONANT FREQUENCY @10cm	DIMENSIONS D(ø)×H(mm)	PAGE NO.
<b>PIEZO. SPEAKER &amp; RINGER</b>			
OBO-RW220334	300~3,400Hz Ceramic Speaker	22.4×3.4	9
OBO-33214PB	85dB at 1.4KHz / 9Vp-p Square Wave	33.0×14.0	10
OBO-35T2	80dB at 1.2KHz / 9Vp-p Square Wave	34.5×9.0	10
OBO-50240	80dB at 700Hz / 9Vp-p Square Wave	50.0×2.0	10
<b>SMD PIEZO BUZZER</b>			
OBO-10252SA	70dB at 5.2KHz / 5Vp-p Square Wave	10.0×10.0×3.0	11
OBO-11241SB	75dB at 4.1KHz / 5Vp-p Square Wave	11.0×9.0×1.7	11
OBO-12241SA	78dB at 4.1KHz / 9Vp-p Square Wave	12.0×12.0×2.5	11
OBO-13240ST	80dB at 4.0KHz / 9Vp-p Square Wave	13.0×13.0×2.5	12
OBO-14240ST	80dB at 4.0KHz / 9Vp-p Square Wave	14.0×14.0×4.8	12
OBO-15236SA	85dB at 3.65KHz / 7Vp-p Square Wave	14.8×14.8×7.0	12
OBO-16240ST	75dB at 4KHz / 5Vp-p Square Wave	16.0×20.0×2.5	13
OBO-17240STB	82dB at 4.0KHz / 9Vp-p Square Wave	17.5×5.0	13
<b>EXTERNAL DRIVE TYPE</b>			
OBO-11250PA/PB	80dB at 5.0KHz / 9Vp-p Square Wave	10.5×4.0	14
OBO-11250WA	80dB at 5.0KHz / 9Vp-p Square Wave	10.5×3.0	14
OBO-13240PA	80dB at 4.0KHz / 9Vp-p Square Wave	12.6×7.0	15
OBO-152	80dB at 4.0KHz / 9Vp-p Square Wave	16.5×3.6	15
OBO-14240PA/PB/PC	80dB at 4.0KHz / 9Vp-p Square Wave	14.0×7.5	16
OBO-14240WA	80dB at 4.0KHz / 9Vp-p Square Wave	13.8×4.0	16
OBO-15230	80dB at 3.5KHz / 9Vp-p Square Wave	14.0×7.5	17
OBO-15240PA/PB	80dB at 4.0KHz / 9Vp-p Square Wave	17.0×8.0	17
OBO-20205PA/PB	85dB at 4.0KHz / 9Vp-p Square Wave	22.0×8.0	18
OBO-22220PA/PB	80dB at 2.0KHz / 9Vp-p Square Wave	22.0×12.0	18
OBO-22240PA/PB	90dB at 4.0KHz / 9Vp-p Square Wave	22.0×12.0	18
OBO-25220	80dB at 2.0KHz / 9Vp-p Square Wave	22.0×9.2	19
OBO-272	90dB at 4.4KHz / 9Vp-p Square Wave	30.0×5.5	19
OBO-27225	85dB at 2.5KHz / 9Vp-p Square Wave	30.0×11.2	20
OBO-27246	90dB at 4.4KHz / 9Vp-p Square Wave	30.0×5.1	20
OBO-352	90dB at 2.5KHz / 9Vp-p Square Wave	42.0×16.0	20
<b>SELF DRIVE TYPE</b>			
OBO-20335/20336	83dB at 3.4±0.5KHz/9VDC	23.7×11.0	21
OBO-27335	85dB at 3.5±0.5KHz/9VDC	29.5×10.0	21
OBO-27336	85dB at 3.5±0.5KHz/9VDC	29.5×10.0	21
OBO-30325	80dB at 2.5±0.5KHz/9VDC	30.5×7.7	22
OBO-35332	88dB at 3.2±0.5KHz/9VDC	39.0×16.5	22

### PIEZOELECTRIC BUZZER

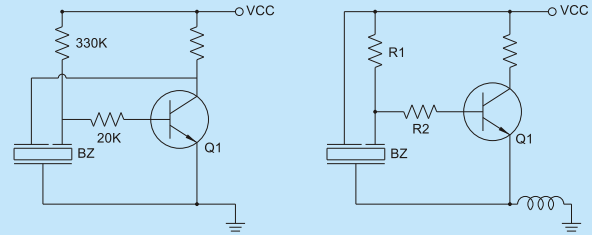
MODEL NO.	Min. SPL @RESONANT FREQUENCY @10cm	DIMENSIONS D(ø)×H(mm)	PAGE NO.
<b>DRIVE CIRCUIT BUILT-IN TYPE</b>			
OBO-15210	85dB at 4.4±0.5KHz / 9VDC	13.8×8.2	23
OBO-20CI-15	90dB at 3.4±0.5KHz / 9VDC	24.5×12.0	23
OBO-20C3	83dB at 3.8±0.5KHz / 9VDC	24.0×14.0	24
OBO-20C4	83dB at 3.8±0.5KHz / 9VDC	24.0×14.0	24
OBO-20C5	80dB at 3.4±0.5KHz / 9VDC	24.0×9.5	24
OBO-20C6	80dB at 3.4±0.5KHz / 9VDC	24.0×9.5	25
OBO-20C7	83dB at 3.4±0.5KHz / 9VDC	24.0×14.0	25
OBO-20C9	93dB at 3.4±0.5KHz / 9VDC	24.5×16.0	25
OBO-27C0	97dB at 3.5±0.5KHz / 9VDC	31.0×14.0	26
OBO-27C1	83dB at 2.5±0.5KHz / 9VDC	30.0×15.5	26
OBO-27C2	87dB at 3.5±0.5KHz / 9VDC	30.0×15.5	26
OBO-27C3	80dB at 2.5±0.5KHz / 9VDC	31.0×10.0	27
OBO-27C4	85dB at 3.5±0.5KHz / 9VDC	31.0×10.0	27
OBO-27C8	87dB at 3.5±0.5KHz / 9VDC	30.0×15.5	28
OBO-27C9	87dB at 3.5±0.5KHz / 9VDC	31.0×14.0	28
OBO-27P1	85dB at 3.4±0.5KHz / 9VDC	31.0×14.0	28
OBO-27P2	87dB at 3.4±0.5KHz / 9VDC	30.0×15.5	29
OBO-35C1	88dB at 2.8±0.5KHz / 9VDC	42.0×16.0	29
OBO-35C2	97dB at 2.8±0.5KHz / 9VDC	42.0×16.0	29
OBO-35C3	88dB at 2.8±0.5KHz / 9VDC	42.0×16.5	30
OBO-35C4	100dB at 2.8±0.5KHz / 9VDC	42.0×16.5	30
OBO-35C5	103dB at 2.8±0.5KHz / 9VDC	42.0×25.5	30
OBO-35D1	97dB at 2.9/3.05KHz / 9VDC	42.0×16.0	31
OBO-35P2	93dB at 2.6±0.5KHz / 9VDC	42.0×16.0	31

**(1) Telephone Ringer Type (電話鈴產品)**

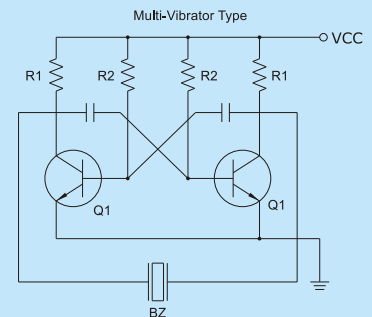
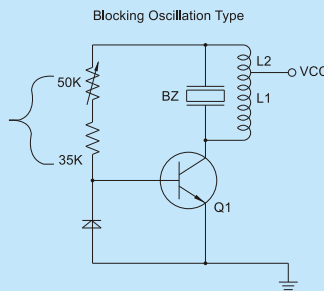
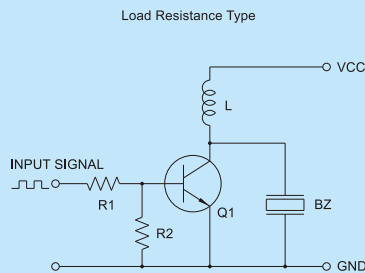
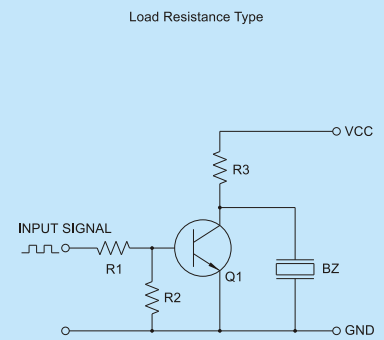
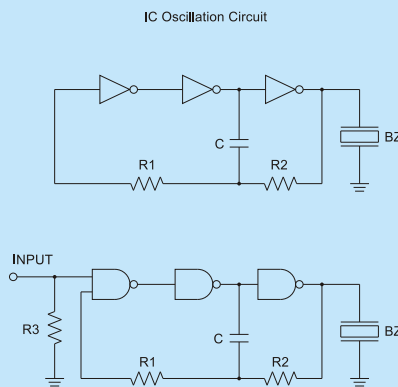
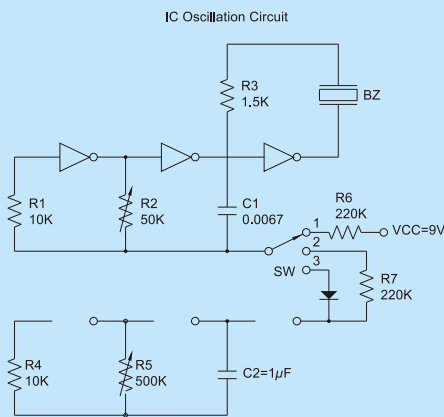


R1=165K R<sub>SL</sub>=6.8K  
R2=100K R2=100K  
R3=560 C2=0.0068µF

**(2) Self-Oscillation Circuit (Tr-Type) (自激式產品)**



**(3) External-Drive Circuits Type (外部驅動產品)**



壓電式蜂鳴器 Piezoelectric Buzzer