

PART NUMBERING SYSTEM

OBO-TE 27 3 44 -18

Material identification

Appropriate oscillating frequency, unit : 100Hz

ex. 700Hz numbering by 07

4,400Hz numbering by 44

For electrode driving

2 : without feedback electrode (External drive type)

3 : with feedback electrode (Self drive type)

Diameter of of plate

Special requirement

TE : for regular piezo ceramic element only

TW : for piezo ceramic soldering with lead wires

SE : element for speaker application

SW : Speaker element soldering with lead wires

RE : element for Telephone Receiver application

RW : Receiver element solering with lead wires

蜂鳴片對照表

OBO-TE 27 3 44 -18

振動板材料類別

表示共振頻率：單位100Hz

例：700Hz以07表示

1,200Hz以12表示

4,400Hz以44表示

表示外部驅動式：2（二接點）

表示自激式：3（三接點）

表示金屬片外徑，單位m/m（四捨五入）

特殊類別

TE：表示蜂鳴器用蜂鳴片

TW：表示蜂鳴片焊線

SE：表示喇叭用途之蜂鳴片（含高音喇叭）

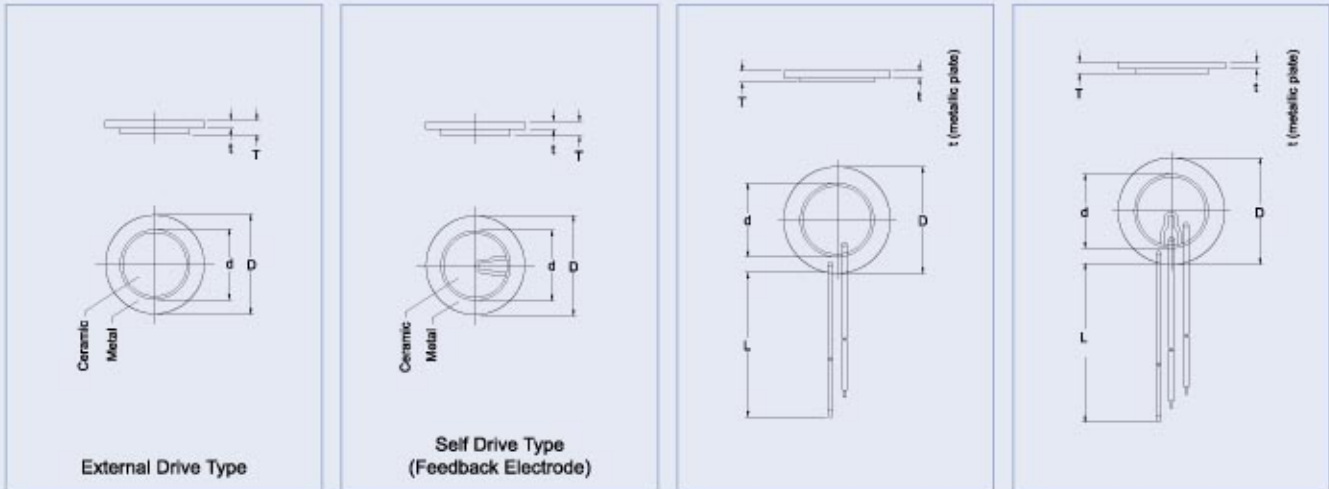
SW：SE焊線

RE：表示受話器用蜂鳴片

RW：RE焊線

PIEZOELECTRIC CERAMIC ELEMENT

蜂鳴片



1. Input Voltage : operating AC voltage only.
2. It's available to supply the piezo element with lead wires. Please specify the P/N by "TW" instead of "TE" and the wire length you required.
ex. OBO-TW15230-16 w/lead wires 85±5m/m long. (# Dia. 11-12mm elements are not available with lead wire.)

PIEZOELECTRIC CERAMIC ELEMENT

MODEL NO.	RESONANT FREQUENCY (KHZ)	RESONANT FREQUENCY (max. Ω)	CAPACITANCE (PF)	DIMENSIONS(mm)				PLATE
				D	d	T	t	
OBO-TE15241-16	4.1±0.6/-0	500	21,000±30%	15.00	11.30	0.17	0.10	Brass
OBO-TE15260-16	6.0±0.6	500	14,000±30%	15.00	11.30	0.22	0.10	Brass
OBO-TE18236-16	3.6±0.5	1,000	14,000±30%	18.00	11.30	0.23	0.10	Brass
OBO-TE20239-16	3.9±0.5	400	25,000±30%	20.00	15.00	0.22	0.10	Brass
OBO-TE20265-16	6.5±0.5	350	12,000±30%	20.00	14.80	0.40	0.20	Brass
OBO-TE21222-16	2.2±0.5	500	38,000±30%	21.00	14.80	0.18	0.10	Brass
OBO-TE21334-16	3.4±0.5	500	18,000±30%	21.00	14.80	0.22	0.10	Brass
OBO-TE27226-16	2.6±0.3	300	45,000±30%	27.00	19.80	0.28	0.15	Brass
OBO-TE27234-16	3.4±0.5	400	24,000±30%	27.00	19.80	0.40	0.20	Brass
OBO-TE27241-16	4.1±0.5	300	20,000±30%	27.00	19.80	0.45	0.22	Brass
OBO-TE27326-16	2.6±0.4	400	33,000±30%	27.00	19.80	0.32	0.20	Brass
OBO-TE27335-16	3.5±0.4	400	19,000±30%	27.00	19.80	0.42	0.20	Brass
OBO-TE27340-16	4.0±0.5	500	17,000±30%	27.00	19.80	0.48	0.25	Brass
OBO-TE31213-26	1.3±0.3	500	47,000±30%	31.00	19.80	0.22	0.10	Ni-alloy
OBO-TE31216-16	1.6±0.3	1,000	40,000±30%	31.00	19.80	0.22	0.10	Brass
OBO-TE32211-16	1.1±0.3	500	47,000±30%	32.00	19.80	0.22	0.10	Ni-alloy
OBO-TE35211-16	1.1±0.5	1,200	72,000±30%	35.00	24.80	0.23	0.10	Brass
OBO-TE35229-16	2.9±0.4	300	30,000±30%	35.00	24.80	0.58	0.30	Brass
OBO-TE35329-16	2.9±0.4	350	26,000±30%	35.00	24.80	0.58	0.30	Brass
OBO-TE35334-36	3.4±0.5	250	35,000±30%	35.00	24.80	0.58	0.40	SUS
OBO-TE35329-46	2.9±0.5	200	25,000±30%	35.00	25.00	0.50	0.25	Tin
OBO-TE50228-16	2.8±0.5	400	35,000±30%	50.00	25.00	0.42	0.20	Brass

PIEZOELECTRIC BUZZER

壓電式蜂鳴器

PIEZOELECTRIC BUZZER

MODEL NO.	Min. SPL @RESONANT FREQUENCY @10cm	DIMENSIONS D(ø)×H(mm)	PAGE NO.
PIEZO. SPEAKER & RINGER			
OBO-RW220334	300~3,400Hz Ceramic Speaker	22.0×3.4	7
OBO-33214PB	85dB at 1.4KHz / 9Vp-p Square Wave	33.0×14.0	8
OBO-35T2	80dB at 1.2KHz / 9Vp-p Square Wave	34.5×9.0	8
OBO-35T4	80dB at 800Hz / 9Vp-p Square Wave	44.0×14.0	9
OBO-35T9	80dB at 800Hz / 9Vp-p Square Wave	44.0×14.0	9
OBO-50240	80dB at 700Hz / 9Vp-p Square Wave	50.0×2.0	9
SMD PIEZO BUZZER			
OBO-13240ST	80dB at 4.0KHz / 9Vp-p Square Wave	13.0×13.0×2.5	10
OBO-14240ST	80dB at 4.0KHz / 9Vp-p Square Wave	14.0×14.0×4.8	11
OBO-17240STB	82dB at 4.0KHz / 9Vp-p Square Wave	17.0×5.0	11
EXTERNAL DRIVE TYPE			
OBO-11250PA/PB	80dB at 5.0KHz / 9Vp-p Square Wave	10.5×4.0	12
OBO-11250WA	80dB at 5.0KHz / 9Vp-p Square Wave	10.5×3.0	12
OBO-13240PA	80dB at 4.0KHz / 9Vp-p Square Wave	12.6×7.5	13
OBO-152	80dB at 4.0KHz / 9Vp-p Square Wave	16.5×3.6	13
OBO-14240PA/PB/PC	80dB at 4.0KHz / 9Vp-p Square Wave	14.0×7.5	14
OBO-14240WA	80dB at 4.0KHz / 9Vp-p Square Wave	13.8×4.0	14
OBO-15230	80dB at 3.5KHz / 9Vp-p Square Wave	14.0×7.5	15
OBO-15240PA/PB	80dB at 4.0KHz / 9Vp-p Square Wave	17.0×8.0	15
OBO-202	90dB at 5.0KHz / 9Vp-p Square Wave	24.0×5.5	16
OBO-20235	85dB at 4.0KHz / 9Vp-p Square Wave	24.0×5.5	16
OBO-20205PA/PB	85dB at 4.0KHz / 9Vp-p Square Wave	22.0×8.0	17
OBO-22220PA/PB	80dB at 2.0KHz / 9Vp-p Square Wave	22.0×12.0	17
OBO-22240PA/PB	80dB at 4.0KHz / 9Vp-p Square Wave	22.0×12.0	17
OBO-25220	80dB at 2.0KHz / 9Vp-p Square Wave	22.0×9.2	18
OBO-272	90dB at 4.4KHz / 9Vp-p Square Wave	30.0×5.5	18
OBO-27218	85dB at 2.5KHz / 9Vp-p Square Wave	30.0×5.5	19
OBO-27220	85dB at 3.5KHz / 9Vp-p Square Wave	30.0×5.5	19
OBO-27221	85dB at 3.5KHz / 9Vp-p Square Wave	30.0×5.1	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
SELF DRIVE TYPE			
OBO-20335/20336	83dB at 3.4±0.5KHz/9VDC	23.7×11.0	21
OBO-273	83dB at 4.4±0.5KHz/9VDC	30×5.5	21
OBO-27325	83dB at 2.5±0.5KHz/9VDC	29.5×10.0	22
OBO-27335	83dB at 3.5±0.5KHz/9VDC	29.5×10.0	22
OBO-27336	83dB at 3.5±0.5KHz/9VDC	29.5×10.0	23
OBO-27346	83dB at 4.4±0.5KHz/9VDC	30.0×5.1	23
OBO-30325	80dB at 2.5±0.5KHz/9VDC	30.5×7.7	24
OBO-35332	88dB at 3.2±0.5KHz/9VDC	39.0×16.5	24

PIEZOELECTRIC BUZZER

MODEL NO.	Min. SPL @RESONANT FREQUENCY @10cm	DIMENSIONS D(ø)×H(mm)	PAGE NO.
DRIVE CIRCUIT BUILT-IN TYPE			
OBO-15210	85dB at 4.4±0.5KHz / 9VDC/10 cm	13.8×8.5	25
OBO-15210B/C/D	82dB at 4.4±0.5KHz / 9VDC/10VDC	13.8×8.5	25
OBO-20CI-15	90dB at 3.4±0.5KHz / 9VDC	24.5×12.0	25
OBO-20C3	83dB at 3.8±0.5KHz / 9VDC	24.0×14.0	26
OBO-20C4	83dB at 3.8±0.5KHz / 9VDC	24.0×14.0	26
OBO-20C5	80dB at 3.4±0.5KHz / 9VDC	24.0×9.5	26
OBO-20C6	80dB at 3.4±0.5KHz / 9VDC	24.0×9.5	27
OBO-20C7	83dB at 3.4±0.5KHz / 9VDC	24.0×14.0	27
OBO-20C9	93dB at 3.4±0.5KHz / 9VDC	24.5×16.0	27
OBO-27C0	97dB at 3.5±0.5KHz / 9VDC	31.0×14.0	28
OBO-27C1	83dB at 2.5±0.5KHz / 9VDC	30.0×15.5	28
OBO-27C2	87dB at 3.5±0.5KHz / 9VDC	30.0×15.5	28
OBO-27C3	80dB at 2.5±0.5KHz / 9VDC	30.0×10.0	29
OBO-27C4	85dB at 3.5±0.5KHz / 9VDC	30.0×10.0	29
OBO-27C7	83dB at 2.5±0.5KHz / 9VDC	30.0×15.5	29
OBO-27C8	87dB at 3.5±0.5KHz / 9VDC	30.0×15.5	30
OBO-27C9	87dB at 3.5±0.5KHz / 9VDC	31.0×14.0	30
OBO-27P1	85dB at 3.4±0.5KHz / 9VDC	31.0×14.0	30
OBO-27P2	87dB at 3.4±0.5KHz / 9VDC	30.0×15.5	31
OBO-35C1	88dB at 2.8±0.5KHz / 9VDC	42.0×16.0	31
OBO-35C2	97dB at 2.8±0.5KHz / 9VDC	42.0×16.0	31
OBO-35C3	88dB at 2.8±0.5KHz / 9VDC	42.0×16.5	32
OBO-35C4	100dB at 2.8±0.5KHz / 9VDC	42.0×16.5	32
OBO-35C5	103dB at 2.8±0.5KHz / 9VDC	42.5×25.5	32
OBO-35D1	97dB at 2.9/3.05KHz / 9VDC	42.0×16.0	33
OBO-35P2	93dB at 2.6±0.5KHz / 9VDC	42.0×16.0	33