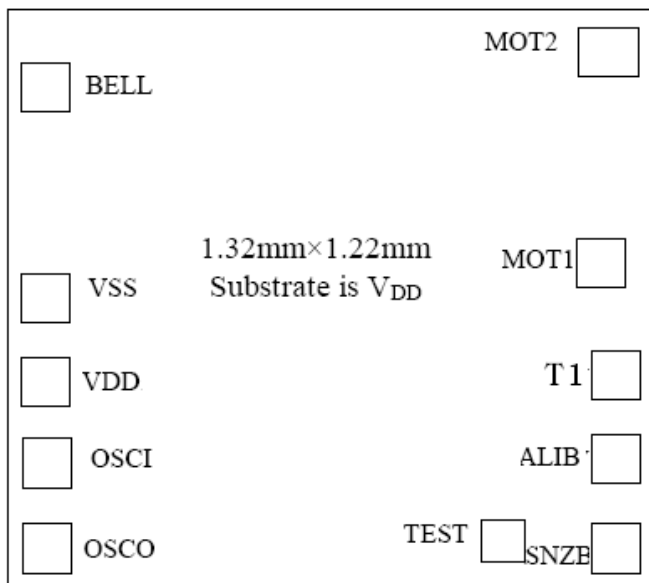


The DL1146 series are analog clock ICs that derive their timing from a 32KHz oscillator element. They feature alarm output snooze function and alarm auto-stop function. They can be configured to match a wide variety of clock specifications, motor outputs.

**Features**

- Single 1.5V battery operation
- 32,768 Hz crystal frequency
- Low power dissipation
- Built-in trim capacitor
- Output for 1Hz or 16Hz stepper motor with selectable pulse width
- 256 second snooze interval
- 128 second alarm output auto-stop function (Mask Option)
- electronic sound motor bells
- ALIB and SNZB use different pins
- Built-in debounce circuit (ALIB/SNZB pin)
- Fast test functions
- Power-on-clear function

**PAD LAYOUT**

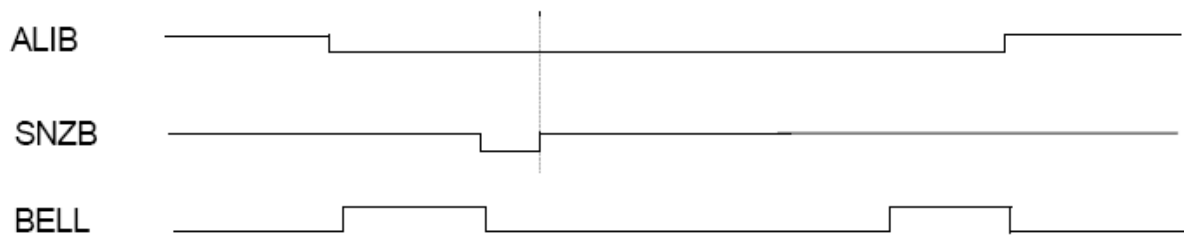


PAD No.	PAD Name.	X	Y
1	SNZB	75	1075
2	ALIB	75	911
3	T1	75	760
4	MOT1	105	553
5	MOT2	93	75
6	BELL	1175	186
7	VSS	1175	628
8	VDD	1175	778
9	OSCI	1175	923
10	OSCO	1175	1075
11	TEST	249	1065

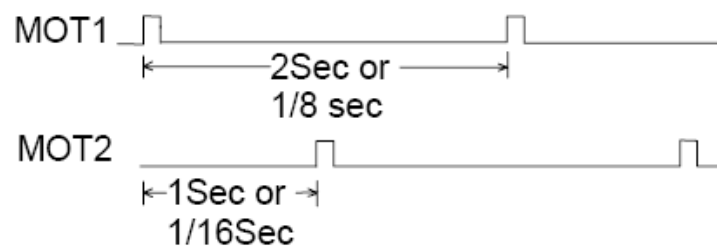
TYPE LIST

TYPE	BELL	MOT frequency	MOT pulse width
DL1146	SINGLE	16Hz	62.5ms

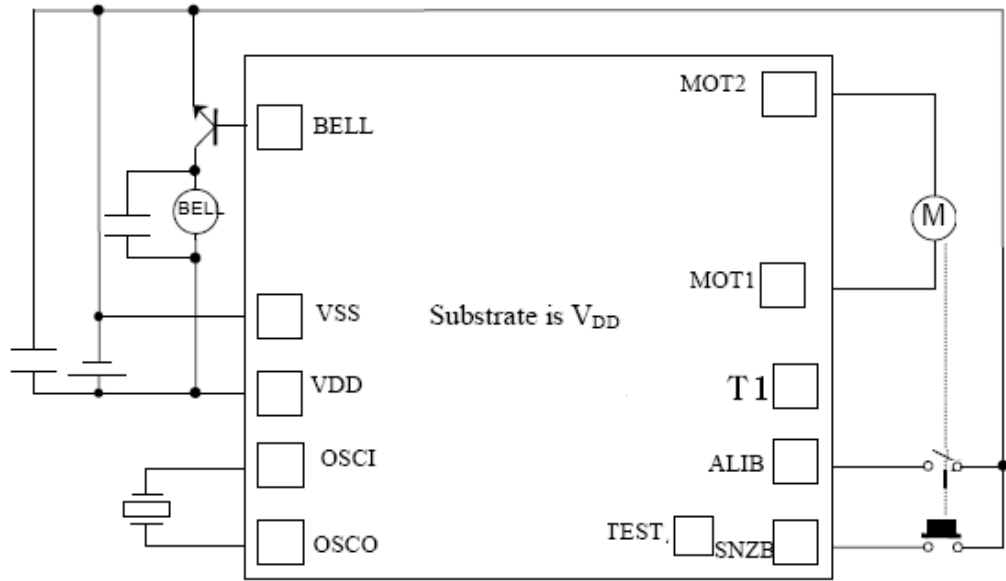
Snooze Waveform



Motor Output Driving



Bell application



**DC Characteristics**

( $V_{DD}=1.5V$ ,  $V_{SS}=0V$ ,  $F_{osc}=32768Hz$   $T_a=25^{\circ}C$  unless specified otherwise)

Item	Symb.	Condition	Min.	Typ.	Max.	Unit
Supply Voltage	$V_{DD}$		1.1		1.8	V
Operating Current	$I_{DD}$	No Load		1.2	2.0	$\mu A$
Output Current Motor	$I_M$	$V_{DD}=1.2V$ $R_L=200\Omega$	4.5			mA
Output Current Bell High	$I_{OHB}$	$V_{DD}=1.3V$ $V_{OHA}=0.5V$	1	1.5		mA
OSC. Start time		$V_{DD}=1.2V$			2	sec
OSC. Stability	$\Delta f/f$	$\Delta V_{DD}=0.1V$		0.5	1	ppm
Internal Cap.	$C_d$			25		pF
Internal Cap.	$C_g$	Mask Option	5		25	pF