

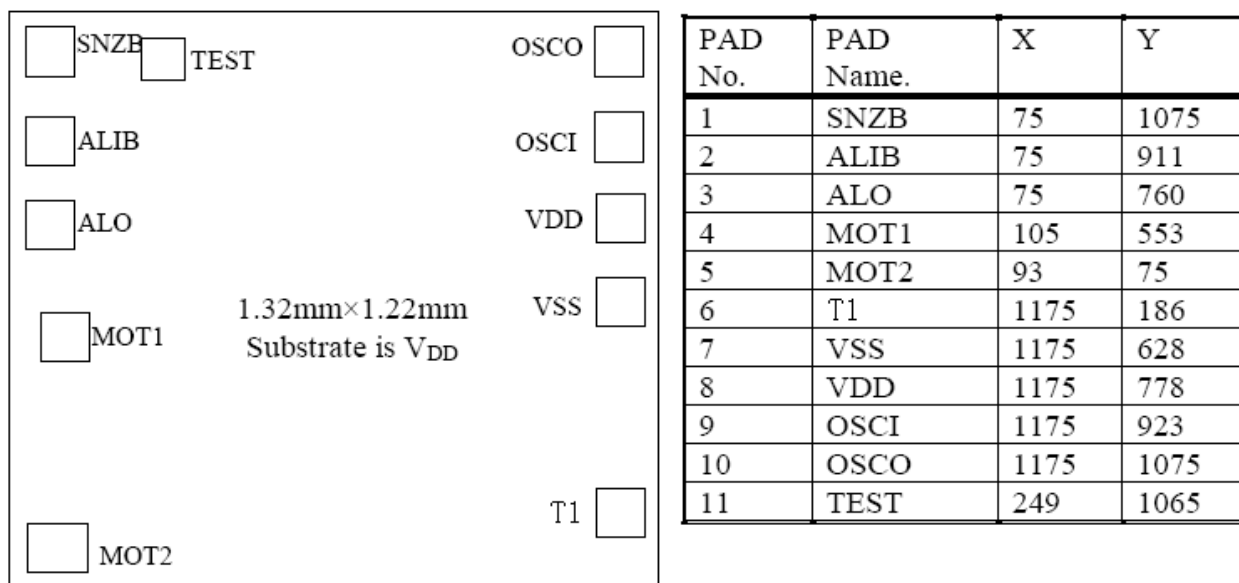
## Analog alarm clock with snooze

The DL1025 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, alarm functions 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)
- Alarm outputs compatible with both electronic sound alarms
- ALIB and SNZB use different pins
- Built-in debounce circuit (ALIB/SNZB pin)
- Fast test functions
- Power-on-clear function

### PAD LAYOUT

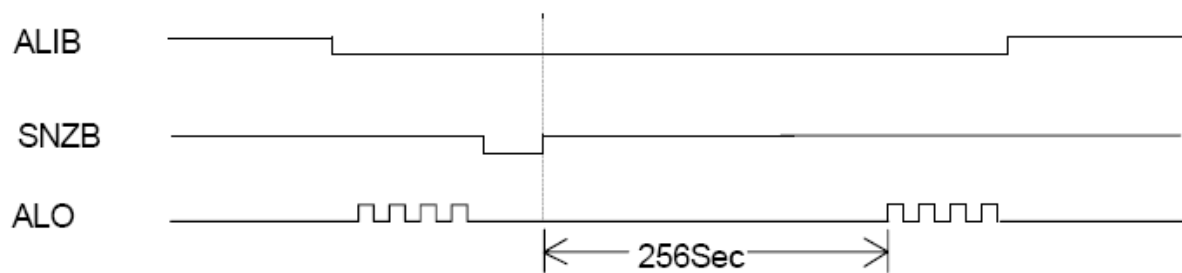


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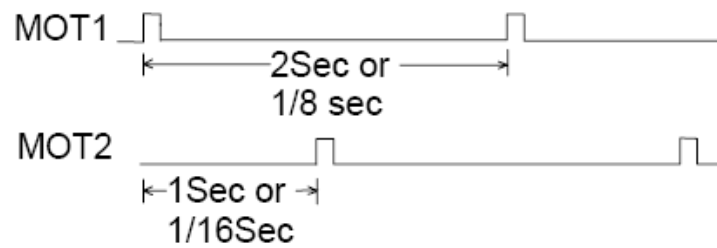
### TYPE LIST

TYPE	ALO	MOT frequency	MOT pulse width
SDL1025	SINGLE	1Hz	31.25ms

### Snooze Waveform



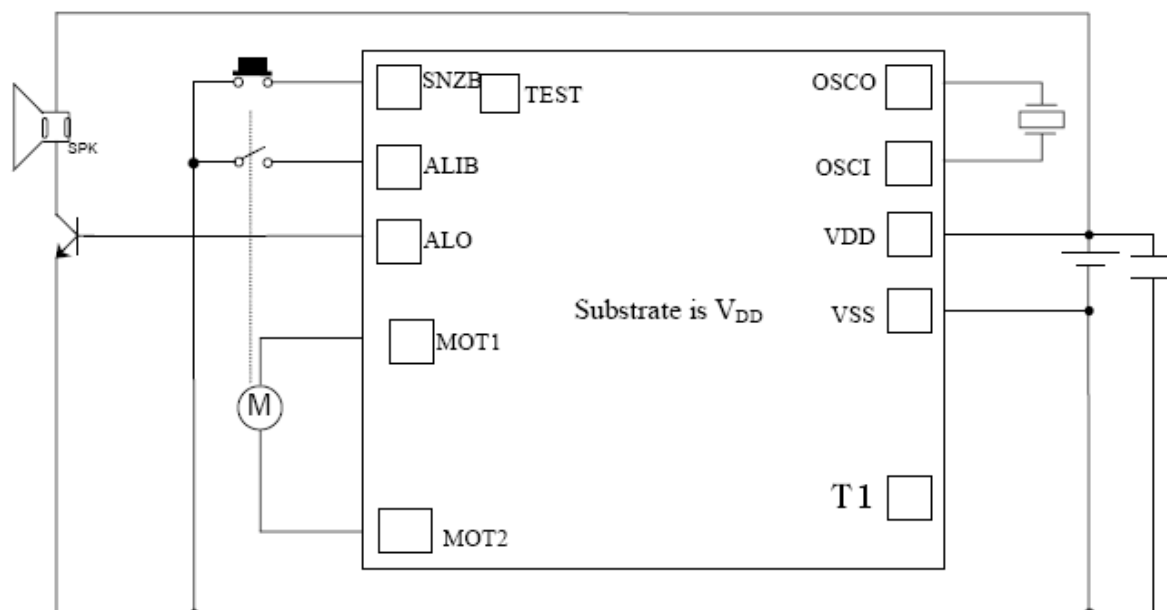
### Motor Output Driving



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### Application Diagram

Speaker 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		$V_{DD}=1.2V$				
Motor	$I_M$	$R_L=200\Omega$	4.5			mA
Alarm high	$I_{OHA}$	$V_{OHA}=0.7V$	0.1	0.25	0.35	mA
Alarm low	$I_{OLA}$	$V_{OLA}=0.5V$	0.1	0.25	0.35	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