

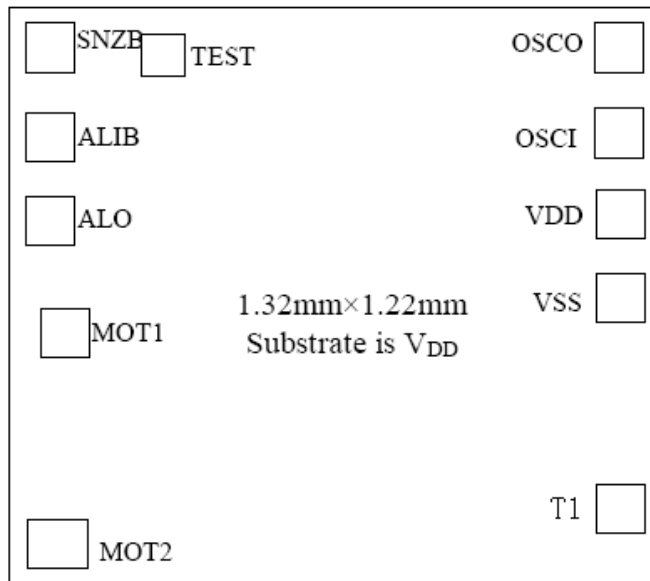
Analog alarm clock with snooze

The **SDL1125** 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



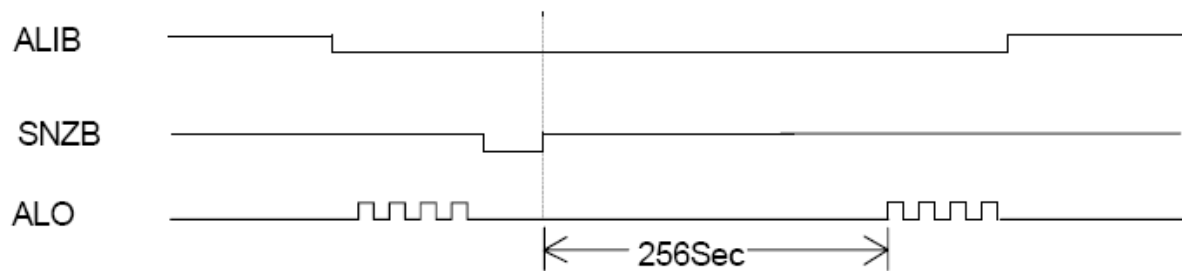
PAD No.	PAD Name.	X	Y
1	SNZB	75	1075
2	ALIB	75	911
3	ALO	75	760
4	MOT1	105	553
5	MOT2	93	75
6	T1	1175	186
7	VSS	1175	628
8	VDD	1175	778
9	OSCI	1175	923
10	OSCO	1175	1075
11	TEST	249	1065

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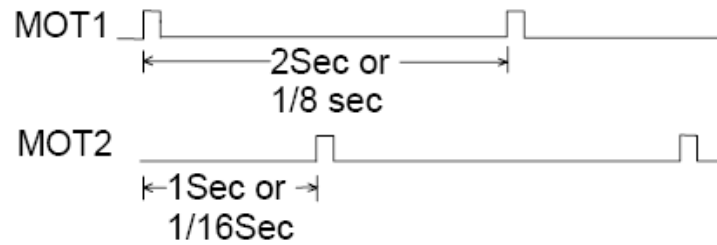
TYPE LIST

TYPE	ALO	MOT frequency	MOT pulse width
SDL1125	SINGLE	16Hz	31.25ms

Snooze Waveform



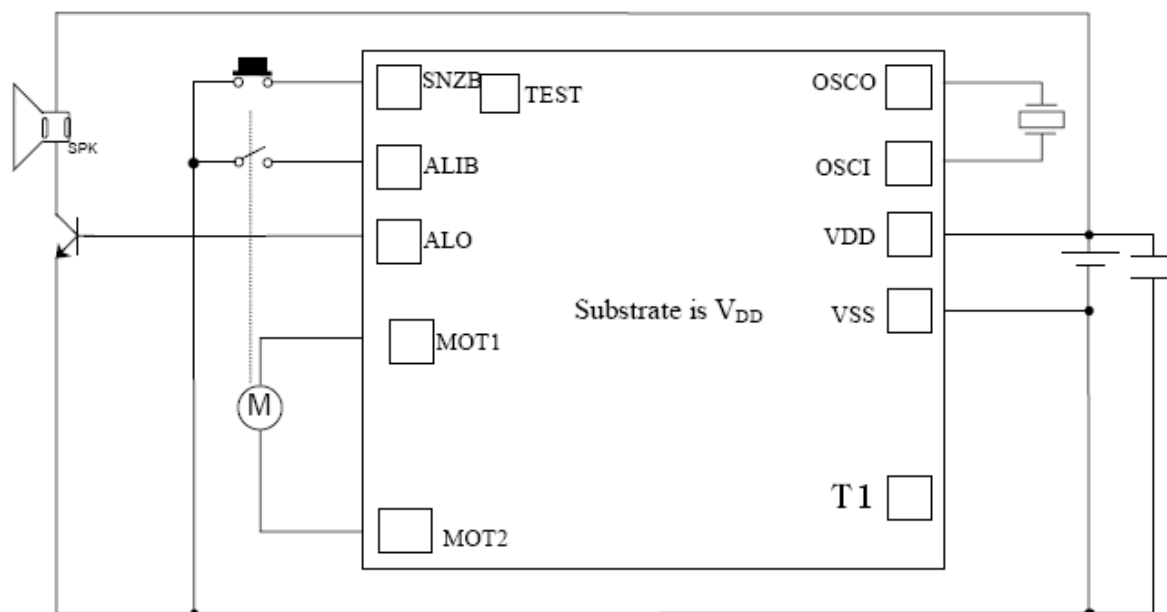
Motor Output Driving



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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	μA
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