RE46C100

Piezoelectric Horn Driver Circuit

Product Specification

General Description

This product is intended for applications using a self oscillating piezoelectric horn although it can be used in direct drive applications. Feedback control and a driver circuit are provided as well as a horn enable function.

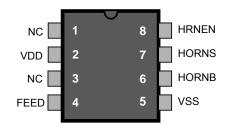
Applications

Smoke detectors CO Detectors Personal Security Products Electronic Toys

Features

- Low Quiescent Current (<100na)
- Low Driver Ron 20Ω typical at 9V
- Wide Operating Voltage Range
- 8 Pin DIP and SO Packages
- Available in Standard Packaging or RoHS Compliant Pb Free Packaging

Pin Configuration



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNITS
Supply Voltage	V_{DD}	18	V
Input Voltage Range Except FEED	V_{in}	3 to $V_{DD} + .3$	V
FEED Input Voltage Range	V_{INFD}	-10 to +22	V
Input Current except FEED	I _{IN}	10	mA
Operating Temperature	T_A	-40 to 85	°C
Storage Temperature	T_{STG}	-55 to 125	°C
Maximum Junction Temperature	T_J	150	°C

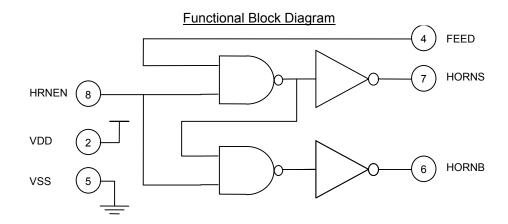
Stresses beyond those listed under Absolute Maximum Ratings may cause permanent damage to the device. These are stress ratings only and operation at these conditions for extended periods may affect device reliability.

This product utilizes CMOS technology with static protection; however, proper ESD prevention procedures should be used when handling this product. Damage can occur when exposed to extremely high static electrical charge.



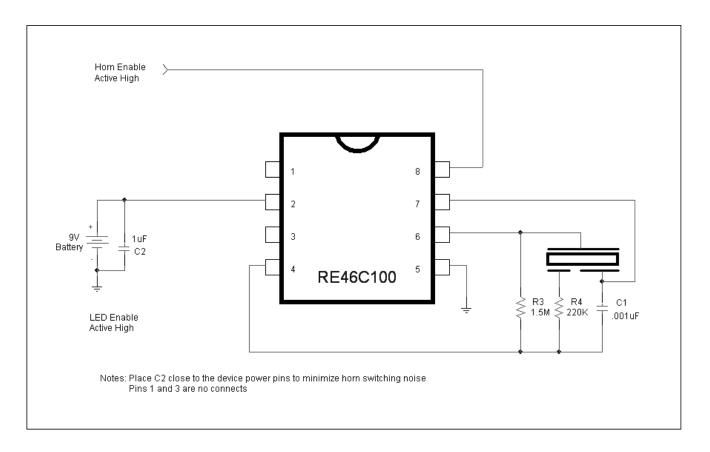
DC Electrical Characteristics at TA = 25°C, VDD = 9V, Typical Application (unless otherwise noted)

		Test		Limits			
Parameter	Symbol	Pin	Test Conditions	Min	Тур	Max	Units
Supply Voltage	V_{DD}	2	Operating	6	9	16	V
Supply Current	I _{DD1}	2	HRNEN and FEED=0V			100	nA
Input Voltage Low	V _{IL1}	8				1	V
Input Voltage High	V _{IH1}	8		2.3			V
Input Leakage Low	I _{IL1}	8	Vin=VSS			-100	nA
	I_{LFD}	4	FEED=-10V			-50	uA
Input Leakage High	I _{IH1}	8	Vin=VDD			100	nA
	I _{HFD}	4	FEED=22V			50	uA
Output Voltage Low	V _{OL1}	6,7	IoI=16mA		.3	.5	V
	V _{OL2}	6,7	IoI=16mA, VDD=7.2V			.9	V
Output Voltage High	V _{Oh1}	6,7	Ioh=-16mA	8.5	8.7		V
	V _{Oh2}	6,7	Ioh=-16mA, VDD=7.2V	6.3			V





Typical Application



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