



TDA7360

22W BRIDGE / STEREO AUDIO AMPLIFIER WITH CLIPPING DETECTOR

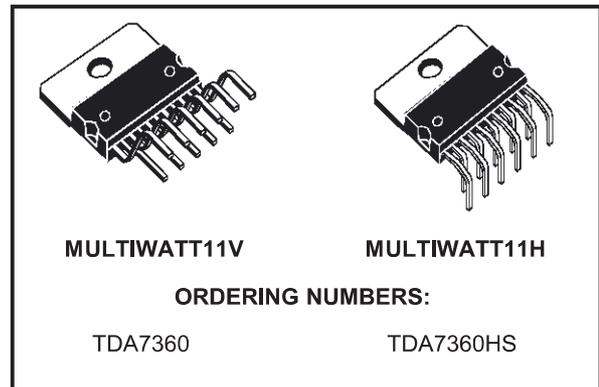
- VERY FEW EXTERNAL COMPONENTS
- NO BOUCHEROT CELLS
- NO BOOSTRAP CAPACITORS
- HIGH OUTPUT POWER
- NO SWITCH ON/OFF NOISE
- VERY LOW STAND-BY CURRENT
- FIXED GAIN (20dB STEREO)
- PROGRAMMABLE TURN-ON DELAY
- CLIPPING DETECTOR

Protections:

- OUTPUT AC-DC SHORT CIRCUIT TO GROUND AND TO SUPPLY VOLTAGE
- VERY INDUCTIVE LOADS
- LOUDSPEAKER PROTECTION
- OVERRATING CHIP TEMPERATURE
- LOAD DUMP VOLTAGE
- FORTUITOUS OPEN GROUND
- ESD

DESCRIPTION

The TDA7360 is a new technology class AB Audio Power Amplifier in the Multiwatt[®] package designed for car radio applications.

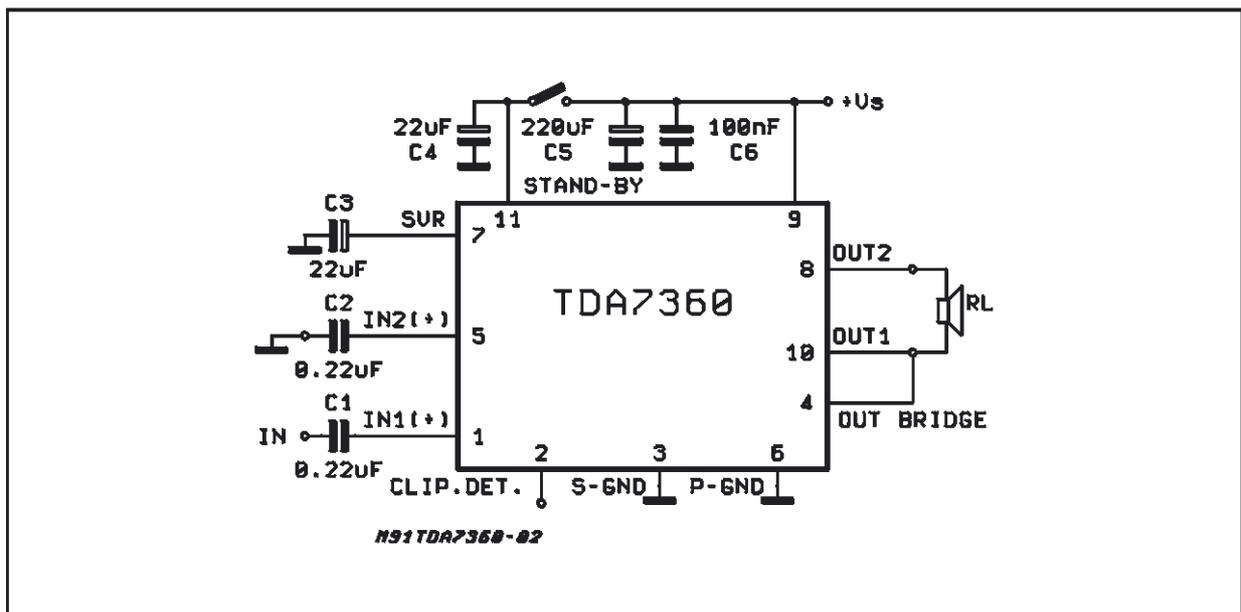


Thanks to the fully complementary PNP/NPN output configuration the high power performance of the TDA7360 is obtained without bootstrap capacitors.

A delayed turn-on mute circuit eliminates audible on/off noise, and a novel short circuit protection system prevents spurious intervention with highly inductive loads.

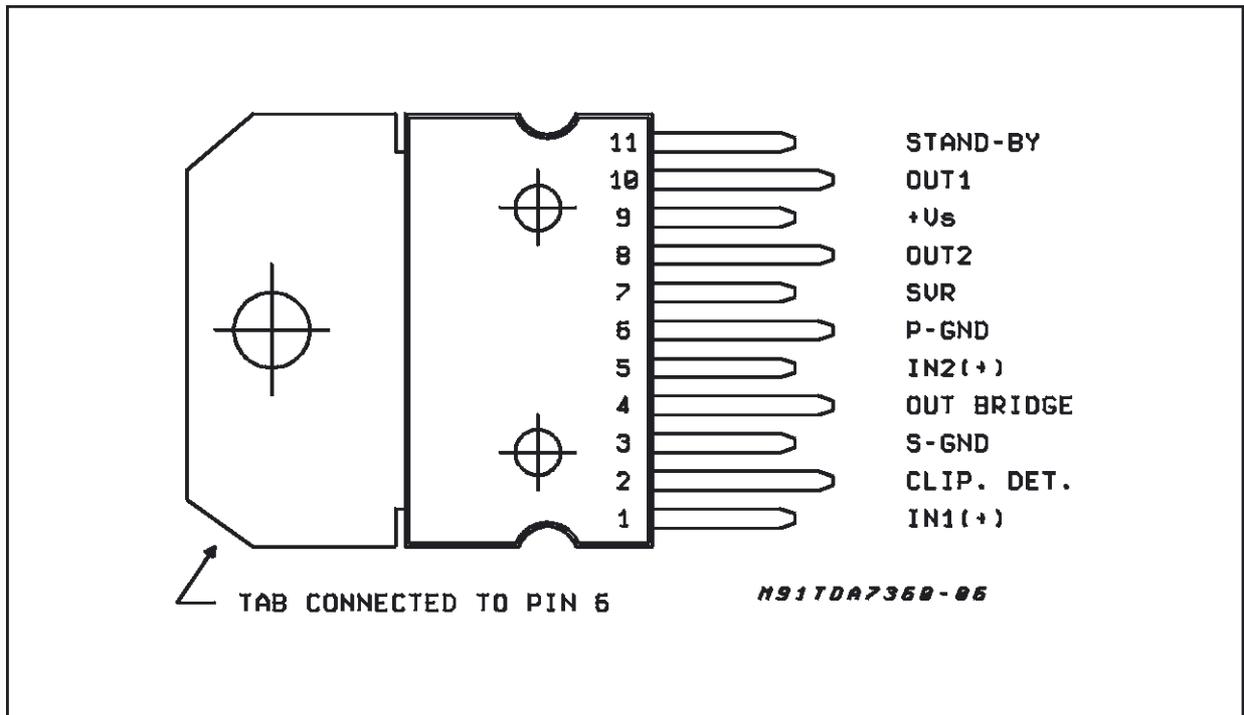
The device provides a circuit for the detection of clipping in the output stages. The output, an open collector, is able to drive systems with automatic volume control.

APPLICATION CIRCUIT (BRIDGE)



TDA7360

PIN CONNECTION (Top view)



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Test Conditions	Unit
V_S	Operating Supply Voltage	18	V
V_S	DC Supply Voltage	28	V
V_S	Peak Supply Voltage (for $t = 50\text{ms}$)	50	V
I_o	Output Peak Current (non rep. for $t = 100\mu\text{s}$)	5	A
I_o	Output Peak Current (rep. freq. > 10Hz)	4	A
P_{tot}	Power Dissipation at $T_{\text{case}} = 85^\circ\text{C}$	36	W
T_{stg}, T_J	Storage and Junction Temperature	-40 to 150	$^\circ\text{C}$

THERMAL DATA

Symbol	Description	Value	Unit
$R_{\text{th j-case}}$	Thermal Resistance Junction-case	Max 1.8	$^\circ\text{C/W}$