# ACS108

# Overvoltage protected AC switch (ACS™)





## Features

- Enables equipment to meet IEC 61000-4-5 surge with overvoltage crowbar technology
- High noise immunity against static dV/dt and IEC 61000-4-4 burst
- Needs no external protection snubber or varistor
- Reduces component count by up to 80% and Interfaces directly with the micro-controller
- Common package tab connection supports connection of several alternating current switches on the same cooling pad
- V<sub>CL</sub> gives headroom before clamping then crowbar action

# Applications

- Alternating current on/off static switching in appliances and industrial control systems
- Driving low power high inductive or resistive loads like:
  - relay, valve, solenoid, dispenser,
  - pump, fan, low power motor, door lock
  - lamp

## Description

The ACS108 belongs to the AC switch range (built with A. S. D.<sup>®</sup> technology). This high performance switch can control a load of up to 0.8 A. The ACS108 switch includes an overvoltage crowbar structure to absorb the inductive turn-off energy, and a gate level shifter driver to separate the digital controller from the main switch. It is triggered with a negative gate current flowing out of the gate pin.

### Figure 1. Functional diagram



#### Table 1. Device summary

Symbol	Value	Unit
I <sub>T(RMS)</sub>	0.8	A
V <sub>DRM</sub> , V <sub>RRM</sub>	600 and 800	V
I <sub>GT</sub>	10	mA