



Si875x

The **Si875x isolated MOSFET driver** is ideal for driving power switches used in a wide variety of applications, offering longer service life and dramatically higher reliability compared to common SSRs. The Si875x isolated MOSFET driver utilizes Silicon Laboratories' proprietary silicon isolation technology supporting up to 2.5 kVRMS withstand voltage per UL1577 and VDE0884. This technology enables reduced variation with temperature and age, better part-to-part matching, and extremely high reliability. High integration, low propagation delay, small installed size, flexibility, and cost-effectiveness make the Si875x ideal for a wide range of isolated MOSFET gate drive applications. The Si875x evaluation board allows designers to evaluate Silicon Labs' Si875x family of MOSFET drivers. The boards come populated with either the Si8751 (digital input) or Si8752 (LED emulator input) version of the family. The board includes screw terminals for quick evaluation of the device's key parameters and also includes test points on each of the device's pins to accommodate direct connection to the designer's end system. For more ISOdriver information, visit the Silicon Labs website at www.silabs.com/isolation.

The new Si8751/52 FET isolated FET driver offers a simple way for customers to replace solid-state relays (SSRs) or electromechanical relays (EMRs). The Si875x device provides robust isolation, a convenient interface, very efficient FET gate drive capability, and unique optional features for noise and power reduction.

- World's first, CMOS isolation based SSR solution
- Improving SSR performance is easy with Si875x
- Optimized, application FETs improve the capability vs. SSRs

KEY FEATURES OR KEY POINTS

- Easy to use
- Supports both dc or ac switching
- Jumper selectable power reduction options
- Jumper to evaluate Miller Clamp function
- Digital input or diode emulation options
 - Si8751-KIT (digital input)
 - Si8752-KIT (diode emulation)

Product Line	Part Number	Description	Pin Ct.	Pkg Typ
Isolation	Si8751AB-IS	Isolated FET driver with pin control.	8	SOIC
Isolation	Si8751AB-ISR	Isolated FET driver with pin control.	8	SOIC
Isolation	Si8751AB-AS	Isolated FET driver with pin control. Automotive processing and temperature.	8	SOIC
Isolation	Si8751AB-ASR	Isolated FET driver with pin control. Automotive processing and temperature.	8	SOIC
Isolation	Si8752AB-IS	Isolated FET driver with diode emulation.	8	SOIC
Isolation	Si8752AB-ISR	Isolated FET driver with diode emulation.	8	SOIC
Isolation	Si8752AB-AS	Isolated FET driver with diode emulation. Automotive processing and temperature.	8	SOIC
Isolation	Si8752AB-ASR	Isolated FET driver with diode emulation. Automotive processing and temperature.	8	SOIC



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