

ZGFI7101 ADVANTAGES

- Safety and Standards Compliance
- Very Low Power Requirements
- Integrated Solution
- Zilog's Continuing Commitment to Supporting Our Customers

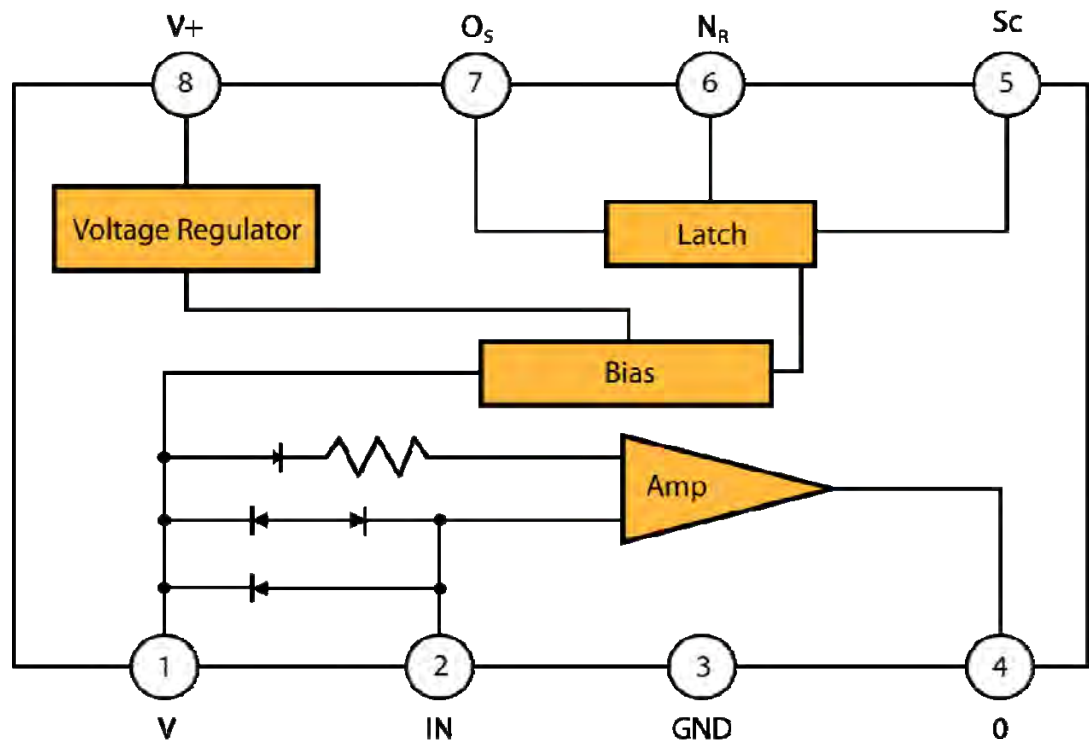
Zilog's ZGFI7101 Earth Leakage Detector

An Integrated Ground Fault Interrupt Solution

Overview

The ZGFI7101 Earth Leakage Detector prevents electrocution by detecting leakage current, and is designed for use in earth leakage circuit interrupters for operation directly off the AC line in circuit breakers. It contains a pre-regulator, main regulator, post-regulator, differential amplifier, level comparator and latch circuit. The differential amplifier input is connected to the secondary node of the zero-current transformer. The level comparator generates a high level signal when earth leakage current is greater than a pre-set level.

ZGFI7101 IC Block Diagram



KEY FEATURES

- Low Power Requirements
- Low External Part Count
- High Noise Immunity
- Latch Circuit

ZGFI7101 Earth Leakage Detector Feature Set

- Low Power Consumption (PD = 5mW) 100V/200V
- 100V/200V Common Built-In Voltage Regulator
- High-Gain Differential Amplifier
- High Input Sensitivity ($V_T = 13.5\text{mV Typ.}$)
- Minimal External Parts
- Large Surge Margin
- High Noise Immunity
- Pin-Compatible with GL7101, M54122 and KA2803
- Operating Temperature: -30°C to 85°C
- Packages: 8-Pin PDIP, 8-Pin SOP
- Lead-Free Manufacture

The Zilog ZGFI7101 Earth Leakage Detector: a flexible, industry-standard solution backed by Zilog's long-term commitment to supporting our customers.

APPLICATIONS

- Circuit Breakers
- Kitchen Appliances
- Outdoor Lighting

Ordering Information

The ZGFI7101 IC is offered in the following packages. Construct your part number based on the specific package you wish to order.

ZGFI7101 IC Part Number	Package
ZGFI7101JBT	8-pin SOP
ZGFI7101PBT	8-pin PDIP

Order the ZGFI7101 IC separately using part numbers from the above table. For complete ordering information, please refer to the ZGFI7101 Product Specification (PS0304).

For more information about Zilog's set of peripheral products, ordering or product collateral, please consult your local Zilog distributor or representative. You can find sales office locations and the most current product information on our website; please visit us at www.zilog.com.

Documentation

For a complete listing of all available application notes, data sheets, user manuals, and sample libraries, please visit us at www.zilog.com.

Document Number

Description

PS0304

ZGFI7101 Product Specification



Warning: DO NOT USE THIS PRODUCT IN LIFE SUPPORT SYSTEMS.

LIFE SUPPORT POLICY

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As used herein

Life support devices or systems are devices which (a) are intended for surgical implant into the body, or (b) support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in a significant injury to the user. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system or to affect its safety or effectiveness.

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