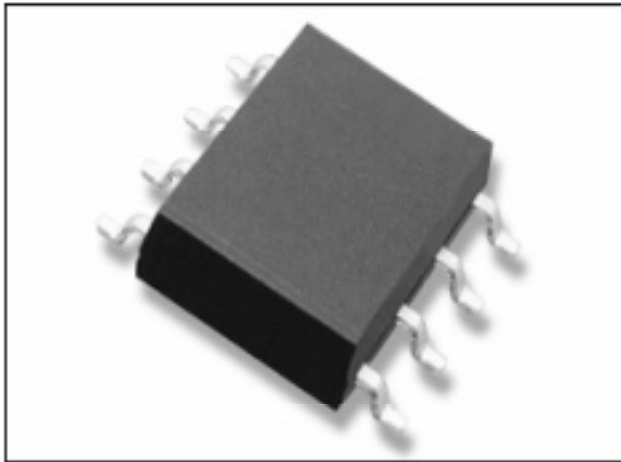


**G2 Series / Solid State Relays****DESCRIPTION**

The G2 Series relays (SSRs) are solid state devices. No moving parts or mechanical activation is required for operation. Each relay is comprised of a light emitting diode (LED) input and metal oxide semiconductor field effect transistor (MOSFET) output. The input is optically isolated from the output. Operation of the relay is accomplished through the control circuitry on a photo diode array (PDA) semiconductor chip. This PDA chip converts the light energy from the LED into voltage required to operate the MOSFETs. Additional circuitry built into the PDA controls fast operation and current limiting in the output.

**FEATURES**

- MOSFET Output Design
- Switching Voltage up to 400 VDC/Peak-AC
- Switching Current up to 1Amp DC / 500mA AC
- On Resistance as low as 3Ω
- Form A or B Contact Configuration
- Dual Pole Versions (2 single pole relays in one 8-pin package)
- Fast Turn-off Circuit
- Internal Current Limit Circuit Available

**BENEFITS**

- AC or DC Switching Capability
- 3750 Vrms I/O Isolation
- Solid State Switching:
  - Long Life
  - High Reliability
- Small size
- Arc-less, bounce-less switching
- Low Input Power Consumption
- Meets agency standards:
  - UL, CSA, VDE, BABT

**G2 SERIES GENERAL INFORMATION**

The G2 Series of Solid State Relays are designed with the highest level of quality and reliability in mind. Each model is comprehensively tested and meets the strictest of standards as dictated by international safety organizations such as UL, VDE and BABT (See details in the "Agency Approvals" section on page 64 regarding specific information about the G2 Series approvals.). The G2 Series utilizes back-to-back MOSFETs for the output circuit. This enables the relay to switch AC or DC signals. Some models are available with internal current limiting. This feature helps to protect both the relay and any associated circuitry during overcurrent conditions. Long life and reliability are inherent because of the solid state construction. The use of solid state components

eliminates mechanical wear or arcing during switching. These conditions typically lead to the reduced life of mechanical relays.

The G2 Series Solid State Relays are optically isolated switching devices. The relays operate by applying a small DC signal to the input of the device which changes the state of the output. The input is a light emitting diode (LED) and the output is a MOSFET switch. The switches are available in Form-A or Form-B, configurations. (Form-A = Normally Open, Form-B = Normally Closed.) These devices act the same way that a Reed or Electromechanical Relay would. The main advantages of the solid state relay are the extended life expectancy, increased reliability, reduced size, and arc-less switching.