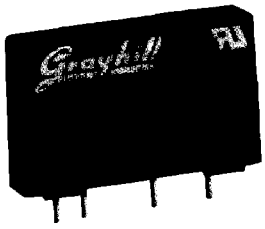
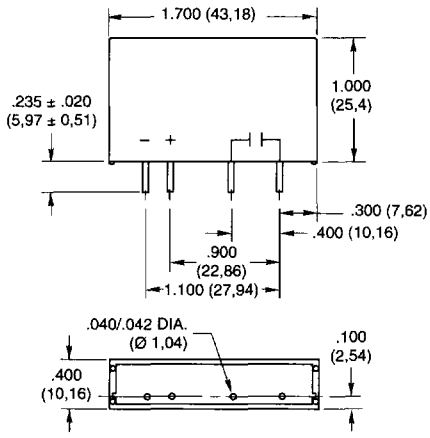
STYLE V





DIMENSIONS SHOWN IN INCHES AND (MM). ALL TOLERANCES ±.010 (0,25) UNLESS OTHERWISE SPECIFIED.

Figure 1: Maximum Continuous Current vs. Ambient Temperature

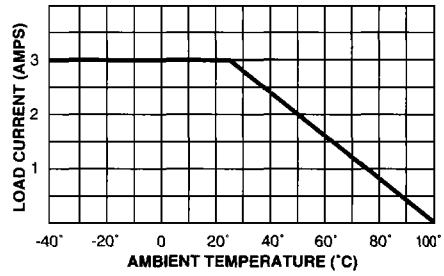
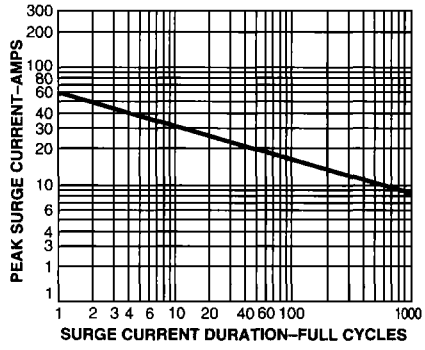


Figure 2: Maximum Peak Surge Current vs. Surge Duration



FEATURES

- Single In-Line Package Relay
- Optically Isolated
- PC Mount; Switches Up to 3 Amps
- Minimal Board Space Required
- UL Recognized and CSA Certified
- TUV Rheinland Certified to EN60947-5-1 Safety Requirements
- Lifetime Warranty

In Figure 1 the chart indicates continuous current to limit the junction temperatures to 100°C. Information is based on steady state heat transfer in a 2 cubic foot sealed enclosure.

In Figure 2 the information is based on a supply frequency of 60 Hertz sinusoidal and a resistive or inductive load. Application of maximum surge current may not be repeated until the relay temperature has returned to its steady state value.

SPECIFICATIONS

Output Circuit

Nominal Line Voltage (Vac):	24	120	240
Load Voltage Range (Vac):	10-50	24-140	24-280
Minimum Peak Blocking Voltage (Volts):	200	400	600
Maximum Zero Voltage Offset (Volts):	16	18	28
Max. Off State Leakage Current 60 Hz (mA rms):	4	6	6

Load Current Range: 65 mA to 3 Amps rms. See Figure 1 for derating.

One Cycle Surge Current: 60 Amps peak maximum. See Figure 2 for derating.

Static dV/dT: 3000 V/microsecond typical, measured under open circuit conditions. Not to exceed peak blocking voltage.

Load Power Factor Range: 0.5 to 1.0

Frequency Range: 25 to 70 Hz

On State Voltage Drop: 1.5V peak maximum

Thermal Resistance (Junction to Ambient): 25°C/Watt

Typical Power Dissipation: 1 Watt/Amp

Turn-On Time (60 Hz): 8.3 mS maximum

Turn-Off Time (60 Hz): 8.3 mS maximum

I^2t For Fusing (t =8.3 mS): 26.5 Amp^2Sec minimum

Maximum Recommended Fusing: F4A, 250V

Input Circuit

Control Voltage Range (Vdc):	3-32	6-32
Control Current Range (mA):	1.0-19.0	1.0-6.0
Ave. Input Impedance (Ohms):	2000	6000
Min. Drop Out Voltage (Vdc):	1.0	1.0
Max. Reverse Control Voltage (Vdc):	5	5

General Characteristics

Insulation Resistance (Input to Output; Input or Output to Case): 10^9 ohms minimum

Dielectric Strength (Input to Output): 3000 Vrms minimum

Capacitance (Input to Output): 6 pF typical

Vibration: 20 g's peak or .06" double amplitude 10-2000 Hz per MIL-STD-202, Method 204, Condition D

Mechanical Shock: 1500 g's 0.5 mS half-sine per MIL-STD-202, Method 213, Condition F

Operating Temperature Range: -40° to +100°C

Storage Temperature Range: -40°C to +125°C

Materials and Finishes

Terminals: Copper wire, Tin plated

Case: Solvent resistant thermoplastic, Polyester, meets UL94V-0

Potting: High thermal conductive epoxy

All specifications apply over the operation temperature range.

ORDERING INFORMATION

Nom. Load Vac	Max. Load, Amps	Control Voltage Vdc	Grayhill Part Number
24	3A	3-32	**70S2-04-D-03-V**
24	3A	6-32	**70S2-05-D-03-V**
120	3A	3-32	**70S2-04-B-03-V**
120	3A	6-32	**70S2-05-B-03-V**
240	3A	3-32	**70S2-04-C-03-V**
240	3A	6-32	**70S2-05-C-03-V**

Available from your local Grayhill Electronic and Industrial Distributors. For prices and discounts, contact a local Sales Office, an authorized local Distributor, or Grayhill.

TUV file number E9671910.01, UL file number E58632 and CSA file number LR38763 apply to all relays shown here.

This style is also available in DC to DC relays, see page I-11.