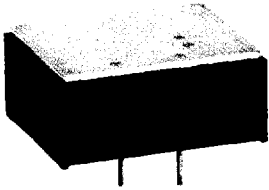


STYLE H



STYLE L

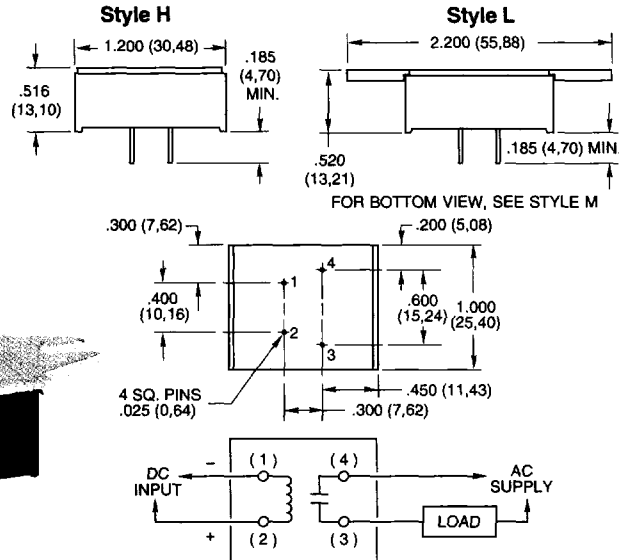
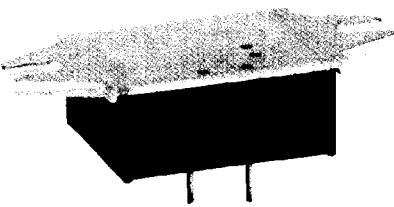


Figure 1: Maximum Continuous Current vs. Ambient Temperature

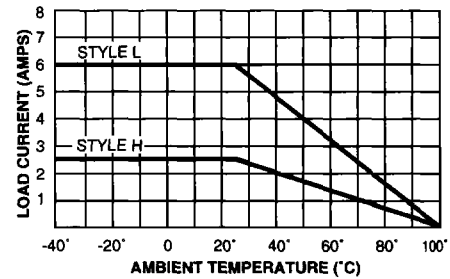
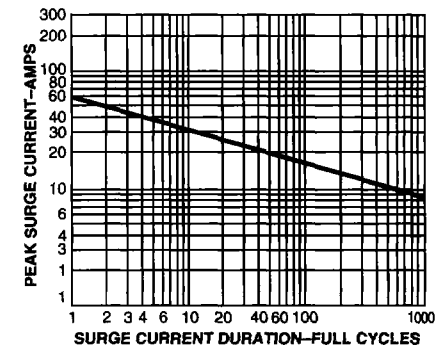


Figure 2: Maximum Peak Surge Current vs. Surge Duration



FEATURES

- Micro Cube® Solid State Relay
- Optically Isolated
- PC Mount; Only .5" Above Board
- Minimal Board Space Required
- UL Recognized and CSA Certified
- Lifetime Warranty

In Figure 1 the chart indicates continuous current to limit the junction temperatures to 100°C. All information is based on steady state heat transfer in a 2 cubic foot sealed enclosure. Style L assumes 12" x 12" x 1/8" aluminum heatsink.

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):	6	8	18
Max. Off State Leakage Current 60 Hz (mA rms):	4	6	6

Load Current Range: Style H: .75 mA to 2.5 Amps rms. Style L: 75 mA to 6.0 Amps rms. See Figure 1 for derating.

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

Thermal Resistance (Junction to Ambient): Style H: 22°C/Watt. Style L: 4.6°C/Watt

On State Voltage Drop: 1.5V peak maximum

Typical Power Dissipation: 1.2 Watt/Amp

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

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

I²t For Fusing (t = 8.3 ms): 26.5 Amp²Sec minimum

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

Input Circuit

Control Voltage Range (Vdc):	3-30	6-30
Control Current Range (mA):	1.0-18.0	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

All specifications apply over the operation temperature range.

General Characteristics

Insulation Resistance (Input to Output; Input or Output to Case): 10⁹ ohms minimum

Dielectric Strength:

(Input to Output): 2500 Vrms minimum

(Input or Output to Case): 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

Heat Sink: Aluminum

ORDERING INFORMATION

Nom. Load Vac	Control Voltage Vdc	Style H		Style L	
		Max. Load Amps	Grayhill Part Number	Max. Load Amps	Grayhill Part Number
24	3-30	2.5A	70S2-04-D-02-H	—	—
24	6-30	2.5A	70S2-05-D-02-H	—	—
120	3-30	2.5A	70S2-04-B-02-H	6.0A	70S2-04-B-06-L
120	6-30	2.5A	70S2-05-B-02-H	6.0A	70S2-05-B-06-L
240	3-30	2.5A	70S2-04-C-02-H	6.0A	70S2-04-C-06-L
240	6-30	2.5A	70S2-05-C-02-H	6.0A	70S2-05-C-06-L

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

UL file number E58632 and CSA file number LR38763 apply to all relays shown here.

For relays with this footprint for larger loads, see page I-9.