

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









FEATURES

- Transient Protection: Meets the requirements of IEEE 472, "Surge Withstanding Capability Test"
- SPST, Normally Open
- Zero Crossing Turn-On
- UL, CSA, CE, TÜV Certified
- Optical Isolation
- OpenLine® and G5 Modules Provide Replaceable 5x20 mm Glass Fuses
- Built-in Status LED
- Lifetime Warranty

DIMENSIONS

For complete dimensional drawings, see pages L-4 or L-5.

FUSES

G5 Fuses are 5 Amp Littelfuse part number 217005 or equivalent. OpenLine® fuses are 3.15 Amp Littelfuse part number 2173.15.



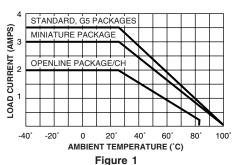
70L-OAC

70G-OAC 70-OAC

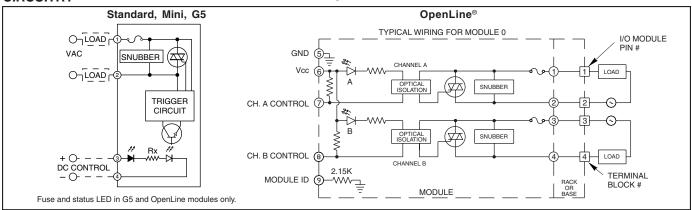
70M-OAC

Maximum Current Versus Ambient Temperature

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.



CIRCUITRY



SPECIFICATIONS: By Package Style

Package Style		Std (70-)	Mini (70M-)	G5 (70G-)	OL (70L-)
Specifications	Units				
Load Current Range¹ Maximum 1 Cycle Surge² Maximum Turn-On-Time (60 Hz)³ Maximum Turn-Off Time (60 Hz) Static dv/dt² Typ. Power Dissipation Isolation Voltage⁴ Vibration⁵ Mechanical Shock⁶ Storage Temp. Range Operating Temp. Range Warranty	A rms A rms mSec mSec V/µsec W/A V rms	0.03 to 3.5 80 8.33 8.33 3000 1.0 4000 MIL-STD-202 MIL-STD-202 -40 to 125 -40 to 100 Lifetime	0.03 to 3.0 80 8.33 8.33 3000 1.0 4000 MIL-STD-202 MIL-STD-202 -40 to 105 -40 to 100 Lifetime	0.03 to 3.5 80 8.33 8.33 3000 1.0 4000 MIL-STD-202 MIL-STD-202 -40 to 125 -40 to 100 Lifetime	0.03 to 2.0/CH 30 8.33 8.33 3000 1.0 2500 IEC68-2-6 IEC68-2-27 -40 to 100 -40 to 85 Lifetime

- See Figure 1 for derating.
- Maximum 10 cycle surge is 50% of 1 cycle surge. Application of maximum surge may not be repeated until module temperature has returned to its steady state value.
- Except 70-ÓAC5A5 which is 200 µSec and 70-OAC5A-11, 70M-OAC5A-11, and 70G-OAC5A-11 which are 100 µSec.
- ⁴ Field to logic and channel-to-channel if Grayhill racks are used.
- MIL-STD-202, Method 204, 20 , 10-2000 Hz or IEC68-2-6, 0.15 mm/sec², 10-150 Hz. MIL-STD-202, Method 213, Condition F, 1500G or IEC68-2-27, 11 mS, 15g.
- 7 Except part numbers with -L suffix which have a dv/dt rating of 200 V/ μ Sec.



SPECIFICATIONS: By Part Number Standard and Miniature Modules

Type/Function	Grayhill Part Number						
Miniature, Normally Open, Random Turn-on			70M-OAC5A-11				
Miniature, Normally Open, Zero Voltage Turn-on (ZVT)		70M-OAC5	70M-OAC5A	70M-OAC15		70M-OAC24	70M-OAC24A
Miniature, Normally Open, ZVT, Inductive Load		70M-OAC5-L	70M-OAC5A-L				
Standard, Normally Closed, Random Turn-on			70-OAC5A5				
Standard, Normally Open, Random Turn-on			70-OAC5A-11				70-OAC24A-11
Standard, Normally Open, ZVT		70-OAC5	70-OAC5A	70-OAC15	70-OAC15A	70-OAC24	70-OAC24A
Standard, Normally Open, ZVT, Inductive Load		70-OAC5-L	70-OAC5A-L				
Specifications	Units						
Nominal Line Voltage	Vac	120	240	120	240	120	240
Load Voltage Range	Vac	24-140	24-280	24-140	24-280	24-140	24-280
Minimum Peak Blocking Voltage	Volts	400	600	400	600	400	600
Maximum Off-state Leakage @ 60Hz	mA, rms	2	4	2	4	2	4
Nominal Logic Voltage (Vcc)	Vdc	5	5	15	15	24	24
Logic Voltage Range	Vdc	2.5-10	2.5-10	10-18	10-18	15-30	15-30
Max. Logic Supply Current @ Nominal Vcc	mA	16	16	9	9	9	9
Nominal Input Resistance (Rx)	W	240	240	1800	1800	2700	2700
Minimum Drop Out Voltage	Vdc	1	1	1	1	1	1
Maximum Reverse Logic Voltage	Vdc	-5	-5	-5	-5	-5	-5

G5 Modules

Type/Function	Grayhill Part Number						
G5 Fusible, Normally Open, ZVT	70G-OAC5	70G-OAC5A	70G-OAC15		70G-OAC24	70G-OAC24A	
G5 Fusible, Normally Open, ZVT, Inductive Load		70G-OAC5-L	70G-OAC5A-L	70G-OAC15-L	70G-OAC15A-L		
Specifications	Units						
Nominal Line Voltage	Vac	120	240	120	240	120	240
Load Voltage Range	Vac	24-140	24-280	24-140	24-280	24-140	24-280
Minimum Peak Blocking Voltage	Volts	400	600	400	600	400	600
Maximum Off-state Leakage @ 60Hz	mA, rms	2	4	2	4	2	4
Nominal Logic Voltage (Vcc)	Vdc	5	5	15	15	24	24
Logic Voltage Range	Vdc	4-6	4-6	8-20	8-20	18-32	18-32
Max. Logic Supply Current @ Nominal Vcc	mA	20	20	12	12	8	8
Nominal Input Resistance (Rx)	W	100	100	1000	1000	2700	2700
Minimum Drop Out Voltage	Vdc	1	1	1	1	1	1
Maximum Reverse Logic Voltage	Vdc	-5	-5	-5	-5	-5	-5

OpenLine® Modules

Type/Function	Grayhill Part Number			
Dual, Fusible, Normally Open, ZVT		70L-OAC	70L-OACA	
Dual, Fusible, Normally Open, ZVT, Inductive Load		70L-OAC-L	70L-OACA-L	
Specifications	Units			
Nominal Line Voltage	Vac	120	240	
Load Voltage Range	Vac	24-140	24-280	
Minimum Peak Blocking Voltage	Volts	600	600	
Maximum Off-State Leakage @ 60 Hz	mA, rms	2	4	
Nominal Logic Voltage	Vdc	5	5	
Logic Voltage Range	Vdc	4.5-28	4.5-28	
Max. Logic Supply Current @ Nominal Vcc	mA	7/CH	7/CH	
Module ID Resistance to Logic Ground	w	2.15K	2.15K	
Minimum Drop Out Voltage	Vdc	1	1	

 $\label{thm:control_problem} \begin{tabular}{ll} Available from your local Grayhill Distributor. For prices and discounts, contact a local Sales Office, \\ \end{tabular}$ an authorized local Distributor or Grayhill.