



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!



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FEATURES

- Transient Protection: Meets the requirements of IEEE 472, "Surge Withstanding Capability Test"*
- Non-Polarized Types Provide Inputs For AC or DC
- UL, CSA, CE, TÜV Certified (TÜV not available on OpenLine)
- Optical Isolation
- OpenLine® and G5 Modules have Built-in Status LED



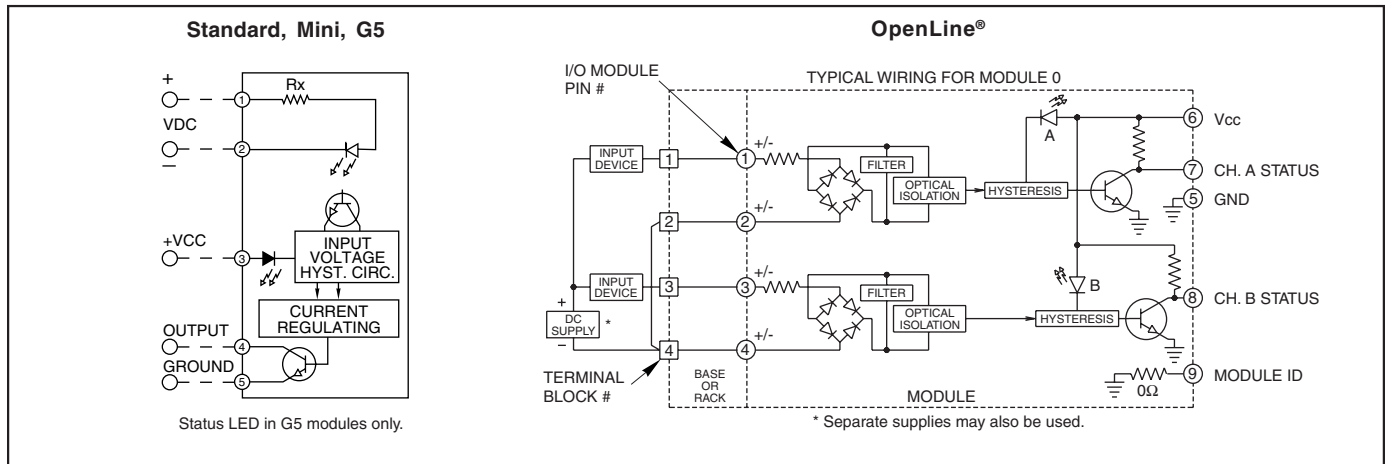
70L-IDC

70G-IDC

70-IDC

70M-IDC

CIRCUITRY



SPECIFICATIONS: By Package Style

Package Style		Std (70-)	Mini (70M-)	G5 (70G-)	OL (70L-)
Specifications	Units				
Output Current Range	mA	1-50	1-50	1-50	1-50
Min. Output Breakdown Voltage	Vdc	50	50	50	50
Isolation Voltage ¹	Vrms	4000	4000	4000	2500
Vibration ²		MIL-STD-202	MIL-STD-202	MIL-STD-202	IEC68-2-6
Mechanical Shock ³		MIL-STD-202	MIL-STD-202	MIL-STD-202	IEC68-2-27
Storage Temp. Range	°C	-40 to +125	-40 to +125	-40 to +125	-40 to +100
Operating Temp. Range	°C	-40 to +100	-40 to +100	-40 to +100	-40 to +85
Warranty		Lifetime	Lifetime	Lifetime	Lifetime

¹ Field to logic and channel-to-channel if Grayhill racks are used.

² MIL-STD-202, Method 204, 20 G, 10-2000 Hz or IEC68-2-6, 0.15 mm/sec², 10-150 Hz.

³ MIL-STD-202, Method 213, Condition F, 1500 G or IEC68-2-27, 11 mS, 15g.

SPECIFICATIONS: By Part Number
 Standard and Miniature Modules

Type/Function		Grayhill Part Number			
Miniature, Non-Polarized		70M-IDC5G	70M-IDC5NP	70M-IDC15NP	
Standard, Non-Polarized		70-IDC5G	70-IDC5NP	70-IDC15NP	70-IDC24NP
Specifications	Units	Units			
Maximum Input Voltage	Vac/Vdc	60	32	32	32
Input Voltage Range ¹	Vac/Vdc	35-60	15-32/10-32	15-32/10-32	15-32/10-32
Input Current @ Max. Input Voltage	mA	6	18	18	18
Maximum Turn-on Time	mSec	10	5	5	5
Maximum Turn-off Time	mSec	10	5	5	5
Nominal Input Resistance (Rx)	W	10K	1.8K	1.8K	1.8K
Maximum Pick Up Voltage (Output Low)	Vac/Vdc	35	15/10	15/10	15/10
Minimum Drop Out Voltage (Output High)	Vac/Vdc	9	3	3	3
Nominal Logic Voltage (Vcc)	Vdc	5	5	15	24
Logic Voltage Range	Vdc	3-6	3-6	8-18	15-30
Max. Logic Supply Current @ Nominal Vcc	mA	10	10	10	10

G5 Modules

Type/Function		Grayhill Part Number		
G5, Non-Polarized, Status LED		70G-IDC5G	70G-IDC5NP	70G-IDC15NP
Specifications	Units	Units		
Maximum Input Voltage	Vac/Vdc	60	32	32
Input Voltage Range ¹	Vac/Vdc	35-60	15-32/10-32	15-32/10-32
Input Current @ Max. Input Voltage	mA	6	18	18
Maximum Turn-on Time	mSec	10	5	5
Maximum Turn-off Time	mSec	10	5	5
Nominal Input Resistance (Rx)	W	10K	1.8K	1.8K
Maximum Pick Up Voltage (Output Low)	Vac/Vdc	35	15/10	15/10
Minimum Drop Out Voltage (Output High)	Vac/Vdc	9	3	3
Nominal Logic Voltage (Vcc)	Vdc	5	5	15
Logic Voltage Range: Std & Mini	Vdc	4.5-6	4.5-6	10-18
Max. Logic Supply Current @ Nominal Vcc	mA	10	10	10

OpenLine® Modules

Type/Function		Grayhill Part Number
Dual, Non-Polarized, Status LED		70L-IDCNP
Specifications	Units	
Maximum Input Voltage	Vac/Vdc	32
Input Voltage Range ¹	Vac/Vdc	15-32/10-32
Input Current @ Max. Input Voltage	mA	17
Maximum Turn-on Time	mSec	5
Maximum Turn-off Time	mSec	5
Nominal Input Resistance (Rx)	W	1.9K
Maximum Pick Up Voltage (Output Low)	Vac/Vdc	5/10
Minimum Drop Out Voltage (Output High)	Vac/Vdc	3
Nominal Logic Voltage (Vcc)	Vdc	5
Logic Voltage Range	Vdc	4.5-28
Max. Logic Supply Current @ Nominal Vcc	mA	6/CH
Module ID Resistance to Logic Ground	W	0

¹ For input voltages in the range of 90 to 140 Vdc, use AC input modules 70-IAC5, 70M-IAC5, 70G-IAC5 or 70L-IAC. For input voltages in the range of 180 to 280 Vdc, use AC input modules 70-IAC5A, 70M-IAC5A, 70G-IAC5A or 70L-IACA.

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