

- Zero Voltage and Random Turn-On Switching
- Extra High Steady-State Current
- Panel Mount
- Internal Snubber

Featuring state-of-the-art Surface Mount Technology, this SPST-NO relay delivers proven reliability in the most demanding applications. Output consists of an SCR AC switch and is available in zero-cross and random turn-on (phase controllable) versions.

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

MODEL NUMBERS	DC CONTROL AC CONTROL	PRGD24150 PRGA24150	PRGD48150 PRGA48150	PRGD60150 PRGA60150
<b>OUTPUT SPECIFICATIONS</b> ①				
Operating Voltage (47-63 Hz) [Vrms]		24-280	48-530	48-660
Load Current Range ③ [Arms]		.15-150	.15-150	.15-150
Transient Overvoltage [Vpk]		600	1200	1200
Max. Surge Current, (16.6ms) [Apk]		1750	1750	1750
Max. On-State Voltage Drop @ Rated Current [Vpk]		1.7	1.7	1.7
Thermal Resistance Junction to Case (R <sub>θJC</sub> ) [°C/W]		0.15	0.15	0.15
Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> sec]		12,700	12,700	12,700
Max. Off-State Leakage Current @ Rated Voltage [mArms]		5	5	1.0
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②		500	500	500
Max. Turn-On Time ④		1/2 cycle (DC Control), 10 msec (AC Control)		
Max. Turn-Off Time		1/2 cycle (DC Control), 40 msec (AC Control)		
Power Factor (Min.) with Max. Load		0.5	0.5	0.5

INPUT SPECIFICATIONS ①	DC (240V Models)	DC (480/600V Models)	AC
Control Voltage Range	3-15 Vdc	4-15 Vdc	90-140 Vac
Max. Turn-On Voltage	3.0 Vdc	4.0 Vdc	90 Vac
Min. Turn-Off Voltage	1.0 Vdc	1.0 Vdc	10 Vac
Nominal Input Impedance	300 Ohms	300 Ohms	14.1K Ohms
Typical Input Current	15 mA @ 5 Vdc	15 mA @ 5 Vdc	10 mA @ 120 Vac

## GENERAL NOTES

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- ① All parameters at 25°C and per section unless otherwise specified.  
 ② Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1  
 ③ Heat sinking required, see derating curves on page 2.  
 ④ Turn-On time for Random versions is 0.02 msec. (DC Control Models).

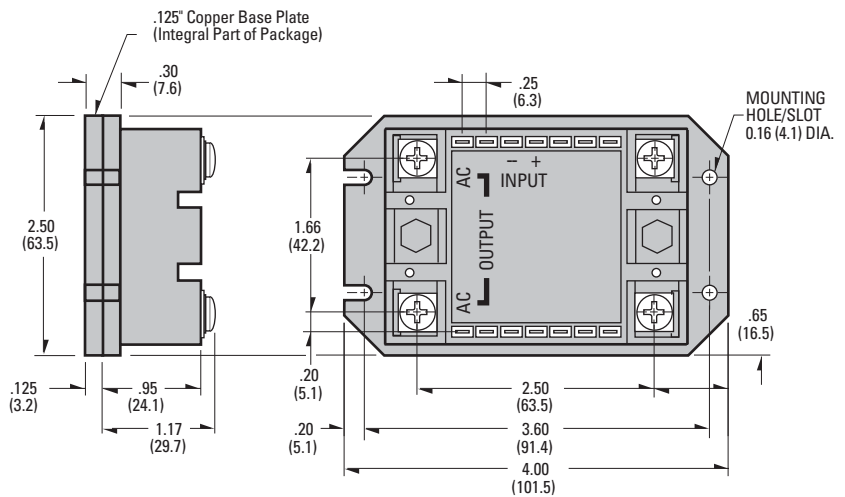
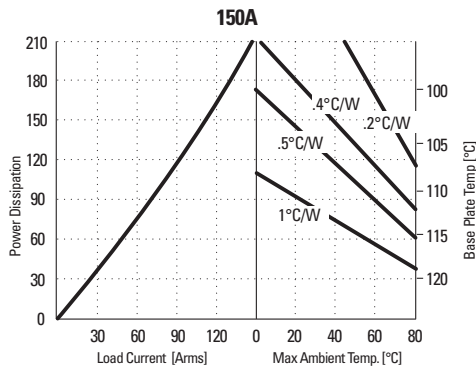
## GENERAL SPECIFICATIONS

Dielectric Strength (min.)	4000 Vac
Insulation Resistance (Min.) @ 500 Vdc	10 <sup>10</sup> Ohm
Max. Capacitance Input/Output	10 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

## MECHANICAL SPECIFICATIONS

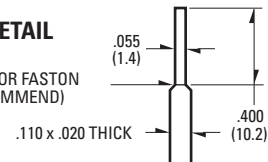
Weight: (typical)	12 oz. (340g)
Encapsulation:	Thermally Conductive Epoxy
Power Terminals:	M5 Screws Furnished, Mounted
Control Terminals:	.050 x .020 Square Pins

## CURRENT DERATING CURVES



## PIN DETAIL

CUT HERE FOR FASTON  
(AMP TYPE 61060-1 RECOMMEND)



All dimensions are in inches (millimeters)

**Crydom Heat Sinks** offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.

## AVAILABLE OPTIONS

- 10 Random Turn-On (AC & DC Control)  
Phase Controllable (DC Control)  
Example: **PRGA24150-10**

## APPROVALS

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For recommended applications and more information contact:

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## ANNEX – ENVIRONMENTAL INFORMATION:

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

### 附件 - 环保信息:

此附件所标示的包括电子信息产品污染图标的环保信息符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**, 电子信息产品污染控制标识要求

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

