

- Peak Switching
- Panel Mount
- 600V Transient Capability
- Internal Snubber
- Input Status Indicator Option Available

Featuring state-of-the-art Surface Mount Technology, these SPST-NO relays deliver proven reliability in the most demanding applications.

Output consists of an SCR AC switch turning ON at the next peak of sinusoidal AC wave form after the input has been activated. Continuing to conduct normally until the input is de-activated and then turning off at the next current zero cross Suitable for switching of transformers and other highly inductive loads where significant inrush current may otherwise cause problems. Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

MODEL NUMBER	PSD2410	PSD2425	PSD2450	PSD2490
OUTPUT SPECIFICATIONS ①				
Operating Voltage (47-63 Hz) [Vrms]	90-280	90-280	90-280	90-280
Max. Load Current ③ [Arms]	10	25	50	90
Min. Load Current, [mArms]	40	40	40	40
Transient Overvoltage [Vpk]	600	600	600	600
Max. Surge Current, (16.6ms) [Apk]	120	250	625	1200
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (R _{θJC}) [°C/W]	1.48	1.02	0.63	0.28
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]	60	260	1620	6000
Max. Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②	500	500	500	500
Max. Turn-On Time	1/2 Cycle			
Max. Turn-Off Time	1/2 Cycle			
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS

 ①

Control Voltage Range	3-32 Vdc
Max. Reverse Voltage	-32 Vdc
Max. Turn-On Voltage	3.0 Vdc
Min. Turn-Off Voltage	1.0 Vdc
Nominal Input Impedance	See Note ④
Typical Input Current	2mA ④

GENERAL NOTES

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- ① All parameters at 25° C unless otherwise specified.
- ② Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
- ③ Heat sinking required, for derating curves see page 3.
- ④ Input circuit incorporates active current limiter.

GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (86.5g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	Screws and Saddle Clamps Furnished, Unmounted

AVAILABLE OPTIONS

F Faston Terminals (Up to 50A Models)
Example: **PSD2425F**

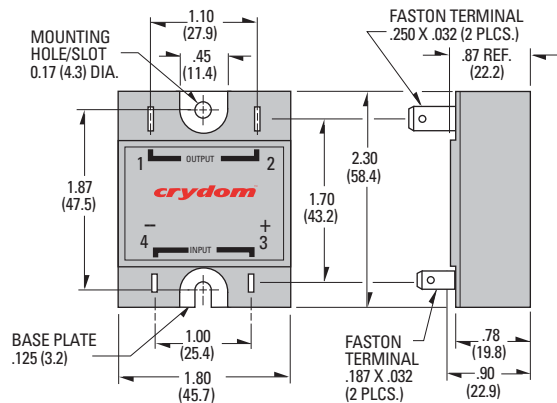
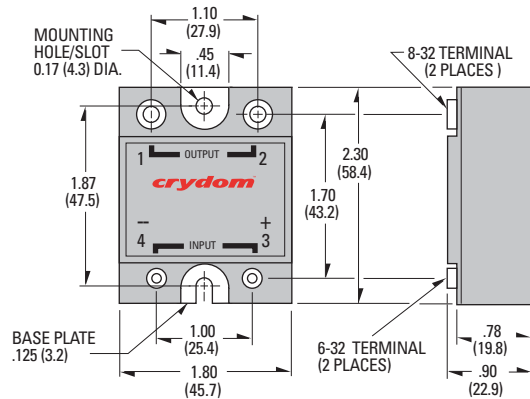
G Input Status Indicator
Example: **PSD2425G**

Ordering System: Combination of the suffixes should be made in the following order:

FG
Example: PSD2425FG

Note: Control Voltage Range 4.5-32Vdc

MECHANICAL OUTLINE



All dimensions are in inches (millimeters)

Screw Torque Requirements:

6-32 Screws - 10 in. lbs. max.
8-32 Screws - 20 in. lbs. max.
(Screws dry without grease.)

Fastons:

Single pair (up to 25A)
Double pair* (up to 50A).

*Caution: User must connect to both pairs

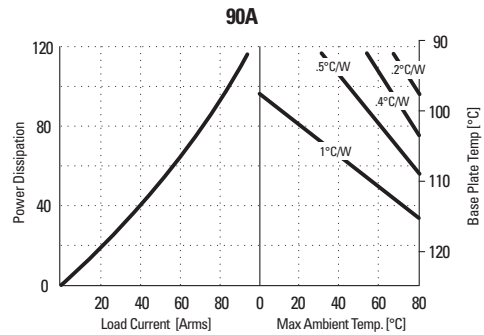
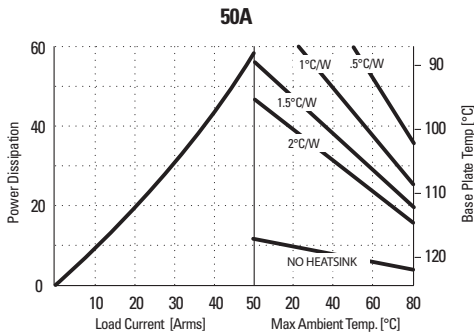
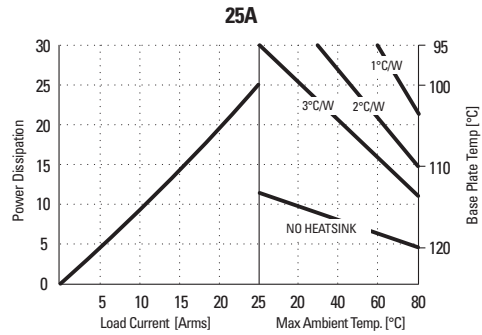
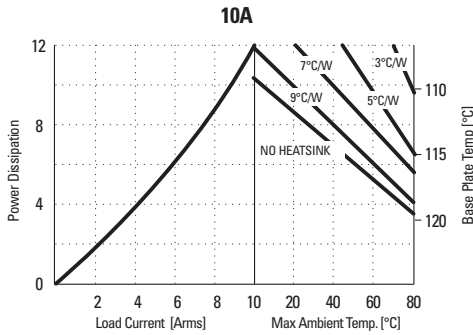
Crydom Heat Sinks offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.

APPROVALS

UL/cUL E116950



CURRENT DERATING CURVES



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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

