

- 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) [A _{pk}]	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 2.
- ④ Input circuit incorporates active current limiter.

For recommended applications and more information contact:

USA: Sales Support (877) 502-5500 Tech Support (877) 702-7700 FAX (619) 710-8540
Crydom Corp, 2320 Paseo de las Americas, Ste. 201, San Diego, CA 92154

Email: sales@crydom.com **WEB SITE:** http://www.crydom.com

UK: +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham

Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, **Email:** intsales@crydom.com.

GERMANY: +49 (0)180 3000 506

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

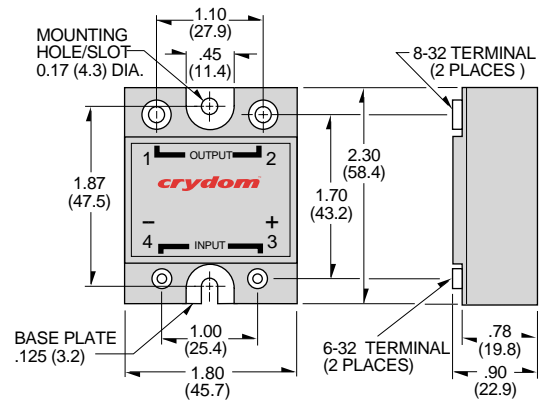
- G Input Status Indicator
Example: PSD2425G

Note: Control Voltage Range 4.5-32Vdc

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.

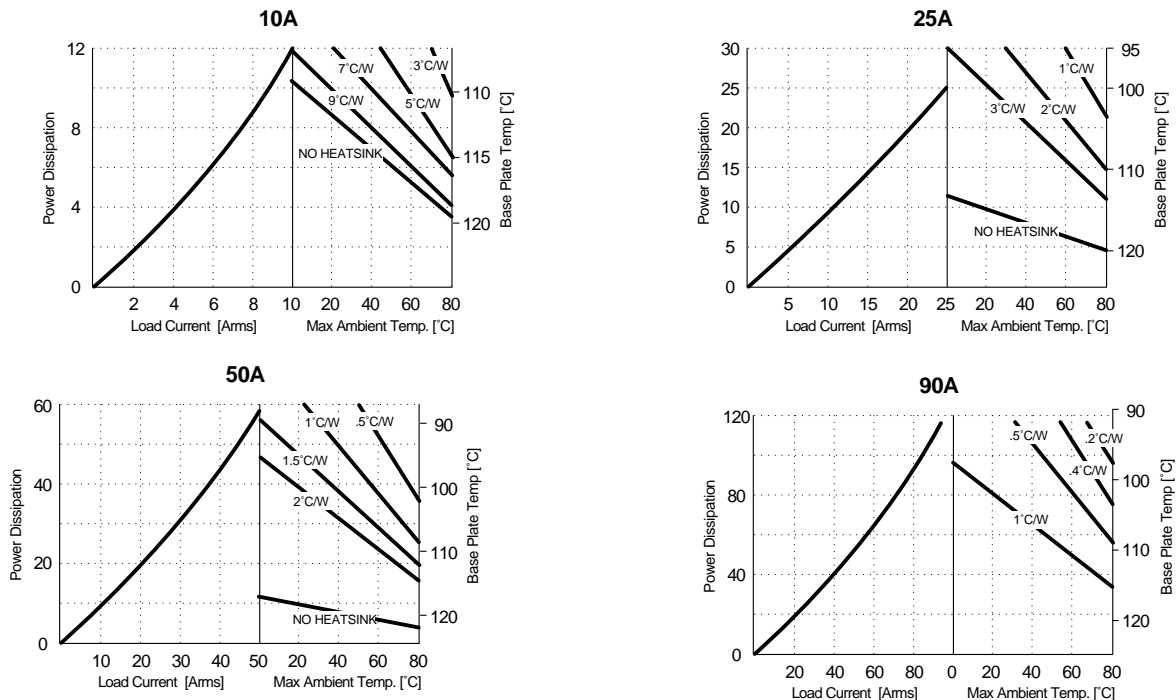
Screw Torque Requirements:
6-32 Screws - 10 in. lbs. max.
8-32 Screws - 20in. lbs. max.
(Screws dry without grease.)

MECHANICAL OUTLINE



All dimensions are in inches (millimeters)

CURRENT DERATING CURVES



APPROVALS

UL/cUL E116950



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