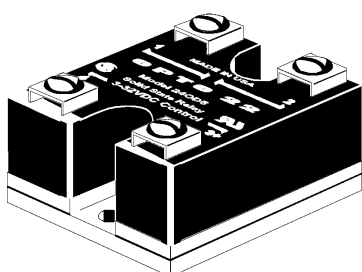


Form 859-040726

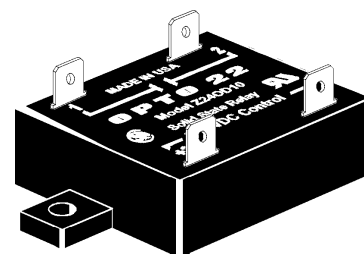
Overview

In 1974, Opto 22 introduced the first liquid epoxy-filled line of power solid-state relays (SSR). This innovation in SSR design greatly improved the reliability and reduced the cost of manufacturing. At that time, we also incorporated into our manufacturing process 100% testing of every relay produced under full load conditions. By 1978, Opto 22 had gained such a

reputation for reliability that we were recognized as the world's leading manufacturer of solid-state relays. Through continuous manufacturing improvements and the same 100% testing policy established 22 years ago, Opto 22 is still recognized today for the very high quality and reliability of its complete line of solid-state relays.



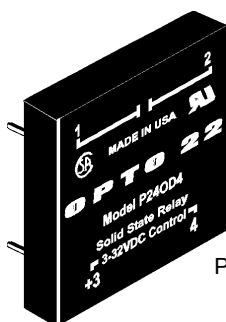
Power Series



Z Series

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P Series



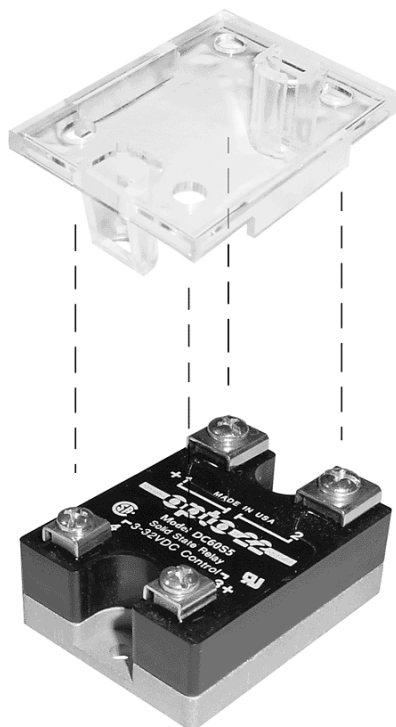
MP Series

Specifications

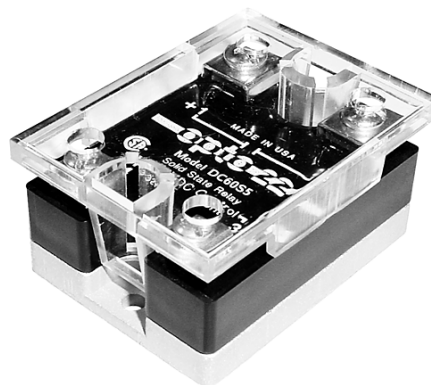
All Models

- 4,000 V optical isolation input to output
- Zero voltage turn-on
- Turn-on time: ½ cycle maximum
- Turn-off time: ½ cycle maximum
- Operating frequency: 25 to 65 Hz
(operates at 400 Hz with six times off-state leakage)
- Coupling capacitance input to output: 8 pF maximum
- Hermetically sealed
- DV/DT Off-state: 200 volts per microsecond
- DV/DT commutating: snubbed for rated current at 0.5 power factor
- UL recognized
- CSA certified
- CE component
- See Opto 22 form #986 for torque specifications.

Safety Cover for Power Series SSRs



A plastic safety cover (Opto 22 part number SAFETY COVER) is optionally available for Opto 22 Power Series SSRs. The safety cover reduces the chance of accidental contact with relay terminals, while providing access holes for test instrumentation.



Optional plastic safety cover installed
on a Power Series SSR

OPTO 22

DATA SHEET

Form 859-040726

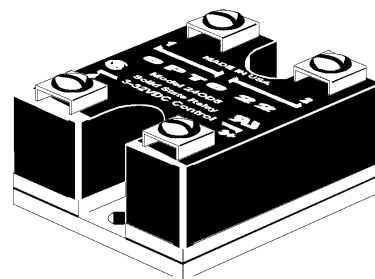
SOLID-STATE RELAYS

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Specifications

AC Power Series - 120/240 Volt

Opto 22 provides a full range of power series relays with a wide variety of voltage (110–575) and current options (3–45 amps). All Power Series relays feature 4,000 volts of optical isolation and have a high PRV rating.



Model Number	Nominal AC Line Voltage	Nominal Current Rating (Amps)	1 cycle Surge (Amps) Peak	Nominal Signal Input Resistance (Ohms)	Signal Pick-up Voltage	Signal Drop-out Voltage	Peak Repetitive Voltage Maximum	Maximum Output Voltage Drop	Off-State Leakage (mA) Maximum **	Operating Voltage Range (Volts AC)	I ² t Rating t=8.3 (ms)	Isolation Voltage	qjc* (°C/Watt)	Dissipation (Watts/Amp)
120D3	120	3	85	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	2.5mA	12-140	30	4,000V _{RMS}	11	1.7
120D10	120	10	110	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	7 mA	12-140	50	4,000V _{RMS}	1.3	1.6
120D25	120	25	250	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	7 mA	12-140	250	4,000V _{RMS}	1.2	1.3
120D45	120	45	650	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	7 mA	12-140	1750	4,000V _{RMS}	0.67	0.9
240D3	240	3	85	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	5 mA	24-280	30	4,000V _{RMS}	11	1.7
240D10	240	10	110	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	14 mA	24-280	50	4,000V _{RMS}	1.3	1.6
240D25	240	25	250	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	14 mA	24-280	250	4,000V _{RMS}	1.2	1.3
240D45	240	45	650	1000	3VDC (32V allowed)	1 VDC	600	1.6 volts	14 mA	24-280	1750	4,000V _{RMS}	0.67	0.9
380D25	380	25	250	1000	3VDC (32V allowed)	1 VDC	800	1.6 volts	12 mA	24-420	250	4,000V _{RMS}	1.2	1.3
380D45	380	45	650	1000	3VDC (32V allowed)	1 VDC	800	1.6 volts	12 mA	24-420	1750	4,000V _{RMS}	0.67	0.9
120A10	120	10	110	33K	85 VAC (280 allowed)	10 VAC	600	1.6 volts	7 mA	12-140	50	4,000V _{RMS}	1.3	1.6
120A25	120	25	250	33K	85 VAC (280 allowed)	10 VAC	600	1.6 volts	7 mA	12-140	250	4,000V _{RMS}	1.2	1.3
240A10	240	10	110	33K	85 VAC (280 allowed)	10 VAC	600	1.6 volts	14 mA	24-280	50	4,000V _{RMS}	1.3	1.6
240A25	240	25	250	33K	85 VAC (280 allowed)	10 VAC	600	1.6 volts	14 mA	24-280	250	4,000V _{RMS}	1.2	1.3
240A45	240	45	650	33K	85 VAC (280 allowed)	10 VAC	600	1.6 volts	14 mA	24-280	1750	4,000V _{RMS}	0.67	0.9

Notes: qjc* = Thermal resistance junction to base. Maximum junction temperature is 110°C.

** Operating Frequency: 25 to 65 Hz (operates at 400 Hz with 6 times the offstate leakage)

Form 859-040726

Specifications:

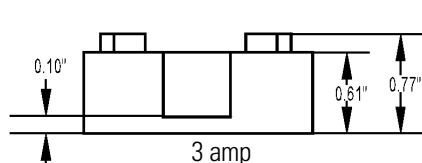
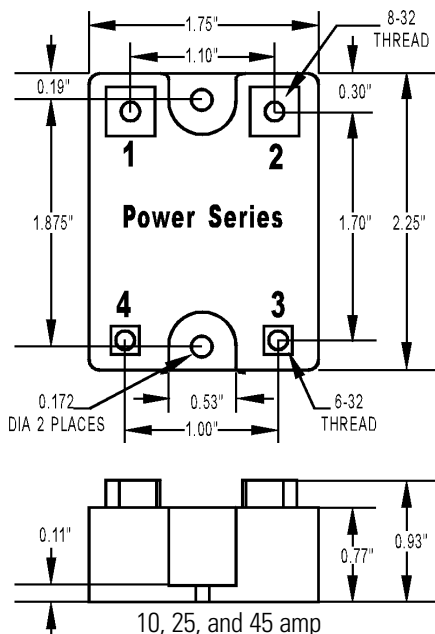
AC Power Series - 120/240 Volt (Continued)

Surge Current Data

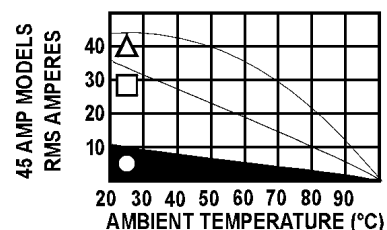
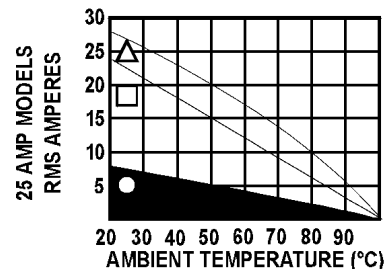
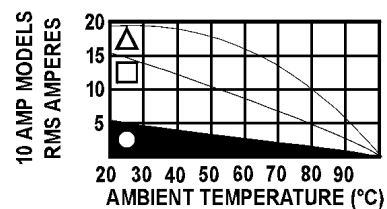
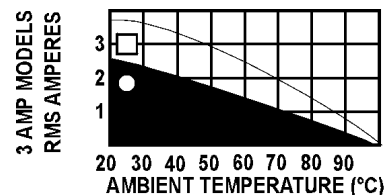
Time (Seconds)	Time* (Cycles)	3-Amp Peak Amps	10-Amp Peak Amps	25-Amp Peak Amps	45-Amp Peak Amps
0.017	1	85	110	250	650
0.050	3	66	85	175	420
0.100	6	53	70	140	320
0.200	12	45	60	112	245
0.500	30	37	50	80	175
1	60	31	40	67	134
2	120	28	33	53	119
3	180	27	32	49	98
4	240	26	31	47	95
5	300	25	30	45	91
10	600	24	28	42	84

Note: *60 Hz.

Dimensional Drawings



Thermal Ratings



- FREE AIR
- MOUNTED ON 6" X 6" PLATE (2°c/watt)
- MOUNTED ON 12" X 12" PLATE (1°c/watt)