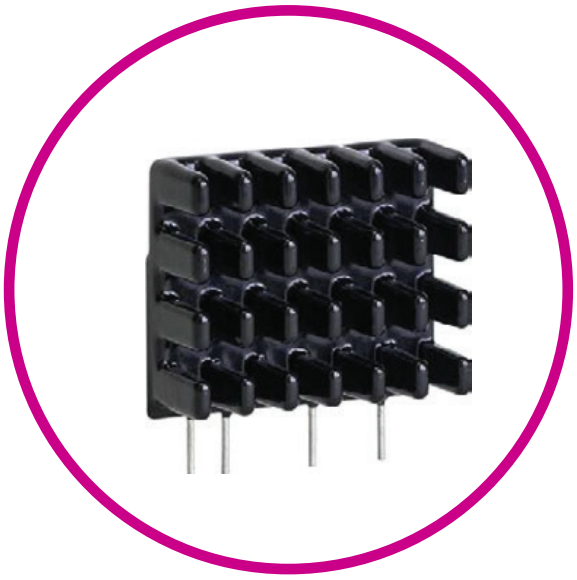
| SPF SERIES

PCB MOUNT SOLID STATE RELAYS



Features

- SIP SSR
- Ratings to 25A (forced air) @ 480 VAC
- SCR output for heavy industrial loads
- Zero turn-on (resistive loads) or instantaneous turn-on (inductive loads) output
- DC Control

PRODUCT SELECTION

Control Voltage	240 VAC	480 VAC
3-15 VDC	SPF240D25	
4-15 VDC		SPF480D25
15-32 VDC	SPFE240D25	SPFE480D25

SPECIFICATIONS

Output [1]

Description	SPF(E)240	SPF(E)480
Operating Voltage (47-63Hz) [Vrms]	12-280	48-660
Transient Overvoltage [Vpk]	600	1200
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec] [2]	500	500
Maximum Load Current (Convection Air) [Arms] [3]	10	
Minimum Load Current (Forced air) [mArms] [3]	25	25
Minimum Load Current [mArms]	0.06	0.06
Maximum Surge Current (16.6msec) [Apk]	250	250
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6
Maximum I^2t for Fusing (8.3msec) [A^2 sec]	260	260
Minimum Power Factor (at Maximum load)	0.5	0.5

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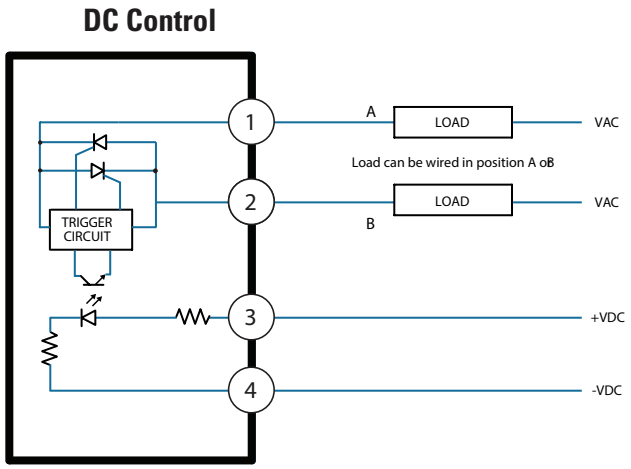
Input [1]

Description	SPF240D25	SPF480D25	SPFExxxD25
Control Voltage Range	3-15 VDC	4-15 VDC	15-32 VDC
Maximum Turn-on Voltage	3.0 VDC	4.0 VDC	15 VDC
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC	1.0 VDC
Typical Input Current @ Nominal Voltage	15 mA	15 mA	15 mA
Nominal Input Impedance	300 Ohm	240 Ohm	1500 Ohm
Maximum Turn-On Time [msec] [4]	1/2 Cycle	1/2 Cycle	1/2 Cycle
Maximum Turn-Off Time [msec] 40	1/2 Cycle	1/2 Cycle	1/2 Cycle

General [1]

Description	Parameters
Dielectric Strength, Input/Output (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10^9 Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-30 to 80 °C
Ambient Storage Temperature Range	-30 to 125 °C
Weight (typical)	0.85 oz. (25 g)
Encapsulation	Thermally conductive epoxy

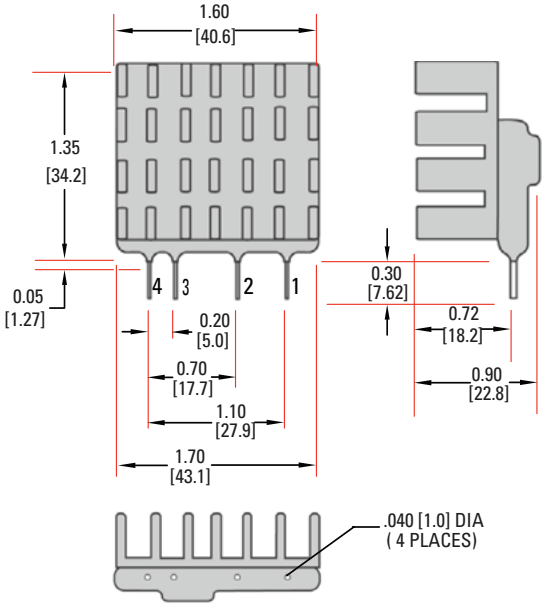
WIRING DIAGRAM



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MECHANICAL SPECIFICATIONS

Tolerances: ±0.02 in / 0.5 mm
All dimensions are in millimeters [inches]



THERMAL DERATE INFORMATION

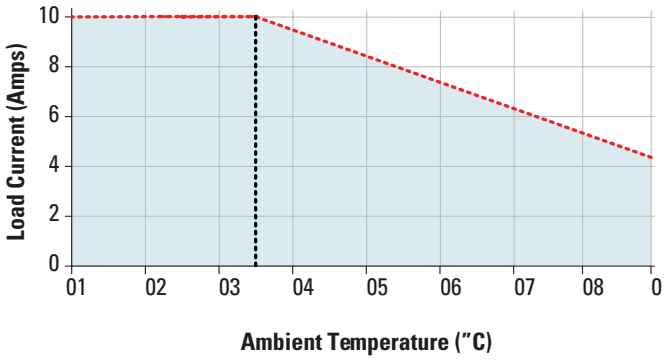


Figure 1 Convection Cooling

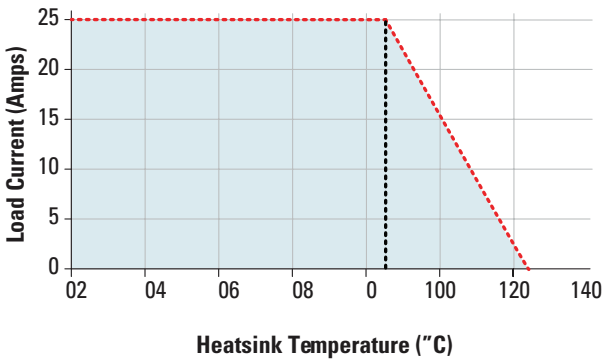
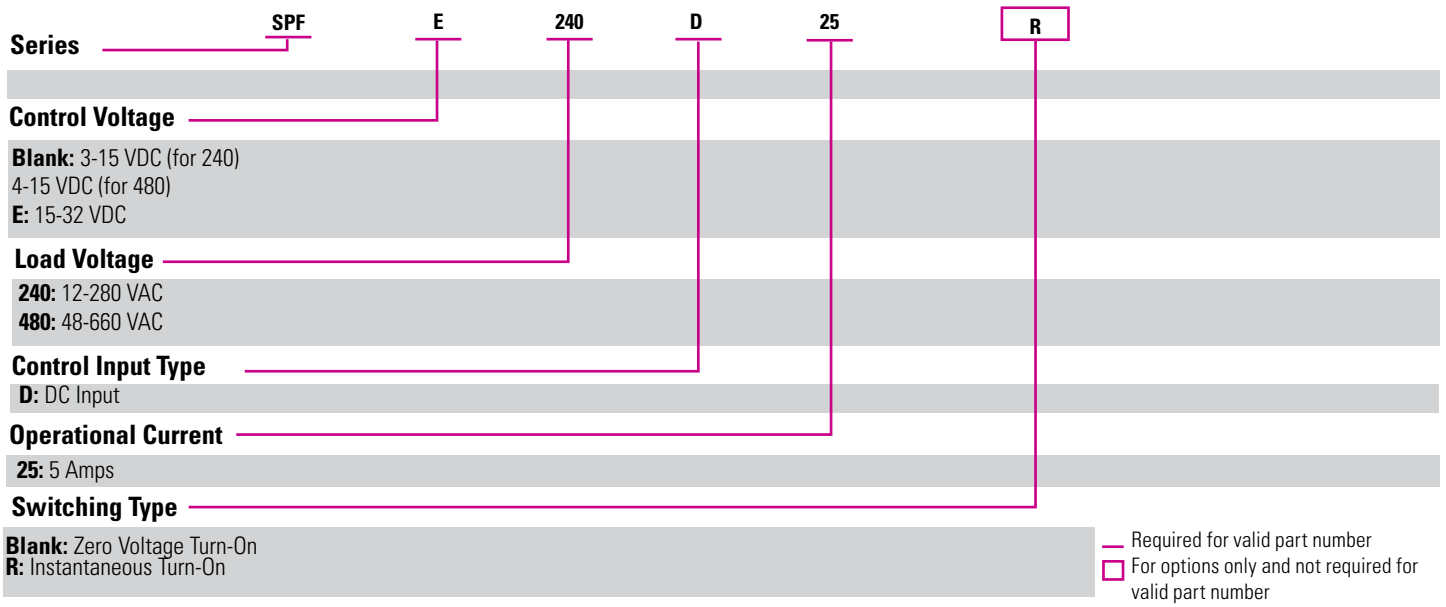


Figure 2 Forced Air Cooling

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ORDERING OPTIONS

Example : SPFE240D25R



GENERAL NOTES

(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) Heatsink temperature 85°C Maximum
(4) Turn-On Time for Instantaneous Turn-on versions 0.1 msec (DC Control Models)

AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314

c UL us E116950

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WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

Americas
+1 (877) 502 5500 - Option 2
sales.crydom@sensata.com
Europe, Middle East & Africa
+44 (1202) 416170
ssr-info.eu@sensata.com
Asia Pacific
sales.isasia@list.sensata.com
China +86 (21) 2306 1500
Japan +81 (45) 277 7117
Korea +82 (31) 601 2004
India +91 (80) 67920890
Rest of Asia +886 (2) 27602006 ext 2808

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