



SPF Series

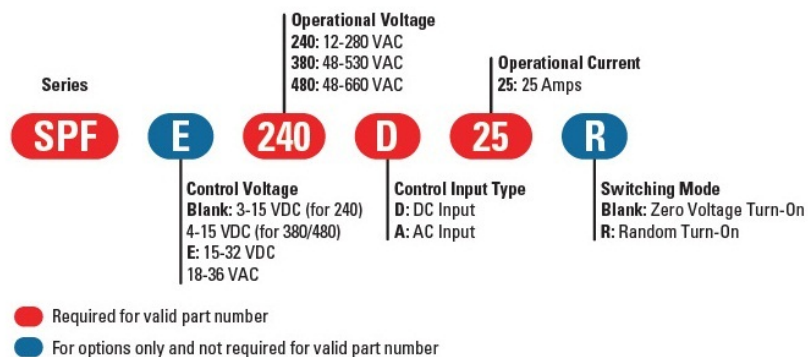


- SIP SSR
- Ratings to 25A (forced air) @ 480 VAC
- SCR output for heavy industrial loads
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output

PRODUCT SELECTION

Control Voltage	25A	25A	25A
	SPF240D25		
4-15 VDC		SPF380D25	SPF480D25
15-32 VDC	SPFE240D25	SPFE380D25	SPFE480D25
18-36 VAC	SPFE240A25		
90-140 VAC	SPF240A25		

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	SPF240	SPF380	SPF480
Operating Voltage (47-63Hz) [Vrms]	12-280	48-530	48-660
Transient Overvoltage [Vpk]	600	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2)	500	500	500
Maximum Load Current (Convection Air) [Arms] (3)	10	10	10
Maximum Load Current (Forced Air) [Arms] (3)	25	25	25
Minimum Load Current [Arms]	0.06	0.06	0.06
Maximum Surge Current (16.6ms) [Apk]	250	250	250
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6
Maximum I ² t for fusing (8.3 msec) [A ² sec]	260	260	260
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5

INPUT SPECIFICATIONS (1)

Description	SPF240D25	SPF380D/480D	SPFExxxD25	SPF240A25	SPFE240A25
Control Voltage Range	3-15 VDC	4-15 VDC	15-32 VDC	90-140 VAC	18-36 VAC
Maximum Turn On Voltage	3.0 VDC	4.0 VDC	15.0 VDC	90.0 Vrms	18.0 Vrms
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC	1.0 VDC	10.0 Vrms	2.0 Vrms
Typical Input Current @ Nominal Voltage	15 mAdc	15 mAdc	15 mAdc	10 mAdc	10 mAdc
Nominal Input Impedance	300 Ohm	240 Ohm	1500 Ohm	14.1 k Ohm	2.1 k Ohm
Maximum Turn-On Time [msec] (4)	1/2 Cycle	1/2 Cycle	1/2 Cycle	10	10
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle	1/2 Cycle	40	40

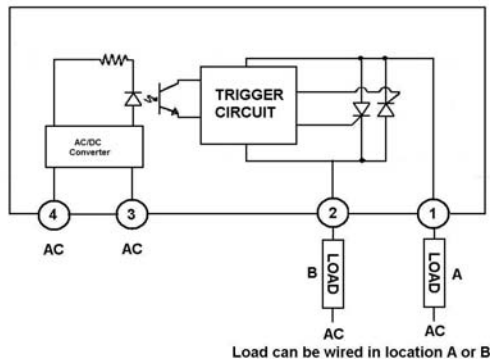
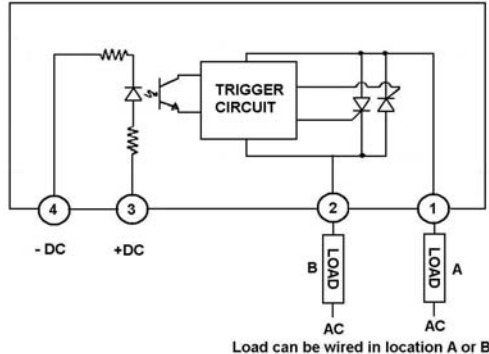
GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10^9 Ohm
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. (25g)
Encapsulation	Thermally Conductive Epoxy

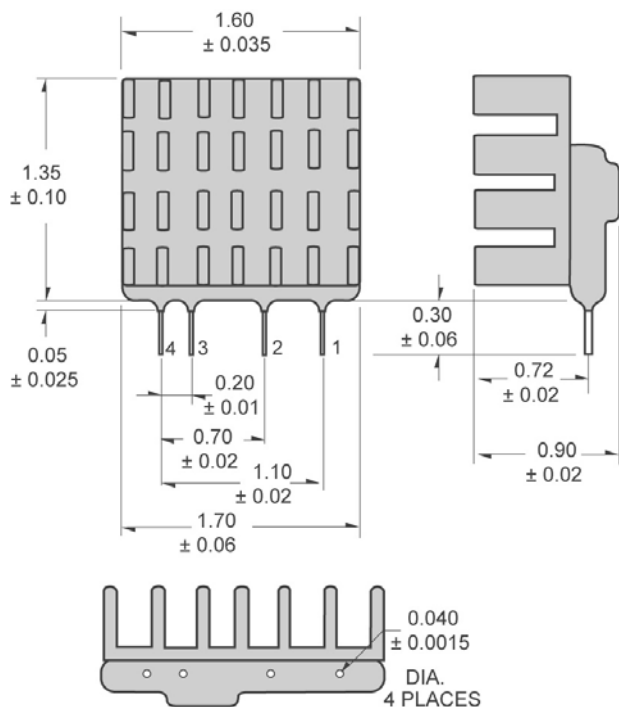
GENERAL NOTES

- 1) All parameters at 25°C unless otherwise specified.
- 2) Off-State dv/dt test method per EIA/NARM standard RS-443,13.11.1
- 3) Heatsink temperature 85 °C Maximum.
- 4) Turn-On Time for Random Turn-On versions 0.1 msec (DC Control Models)

WIRING DIAGRAM



MECHANICAL SPECIFICATIONS



All dimensions are in inches (millimeters)

THERMAL DERATE INFORMATION

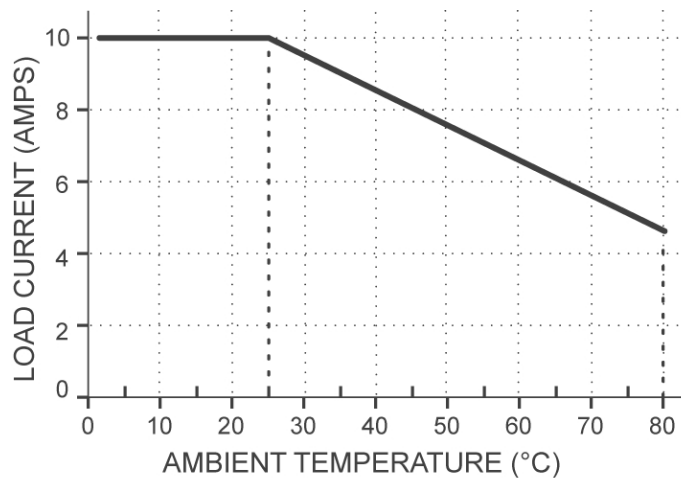


Fig.1 Convection Cooling

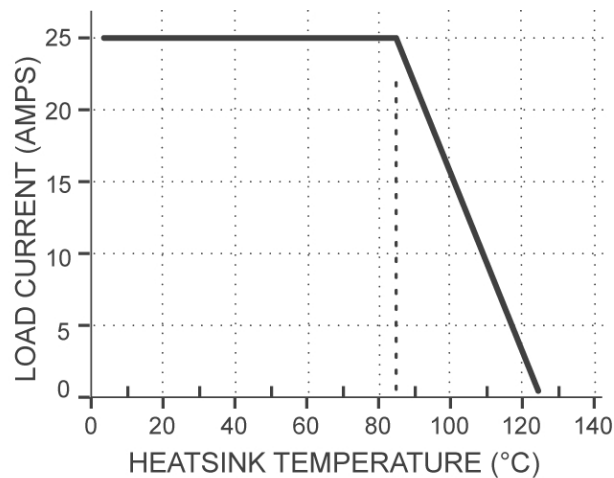


Fig.2 Forced Air Cooling

AGENCY APPROVALS



E116950



Rev. 112911