



ASPF SERIES

PCB MOUNT



Features

- Mini-SIP SSR
- Ratings to 3A @ 280 VAC
- SCR output
- DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output



PRODUCT SELECTION

| Control Voltage | Zero Crossing | Random Fire |
|-----------------|---------------|-------------|
| 4-10 VDC | ASPF240D3 | ASPF240D3R |



SPECIFICATIONS

Output ⁽¹⁾

| | | |
|---|--------|--------|
| Operating Voltage (47-63Hz) [Vrms] | 24-280 | 24-280 |
| Transient Overvoltage [Vpk] | 600 | 600 |
| Maximum Off-State Leakage Current @ Rated Voltage [mArms] | 0.1 | 0.1 |
| Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ³ | 500 | 500 |
| Maximum Load Current [Arms] | 3.0 | 3.0 |
| Minimum Load Current [Arms] | 0.1 | 0.1 |
| Maximum Surge Current (16.6ms) [A _{pk}] | 100 | 100 |
| Maximum On-State Voltage Drop @ Rated Current [Vpk] | 1.5 | 1.5 |
| Minimum Power Factor (with Maximum Load) | 0.5 | 0.5 |

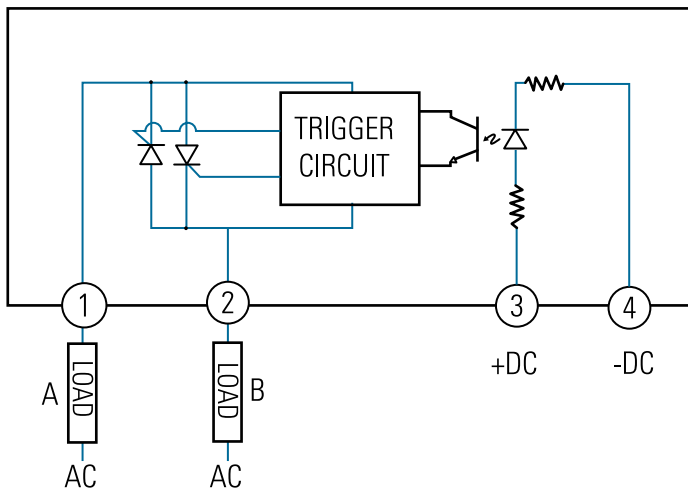
Input ⁽¹⁾

| | |
|--|---------------------|
| Control Voltage Range | 4-10 VDC |
| Must Turn On Voltage | 4.0 VDC |
| Must Turn Off Voltage | 1.0 VDC |
| Typical Input Current @ 5 VDC | 15 mA _{dc} |
| Nominal Input Impedance | 300 Ohm |
| Maximum Turn-On Time [msec] ⁴ | 1/2 Cycle |
| Maximum Turn-Off Time [msec] | 1/2 Cycle |

General ⁽¹⁾

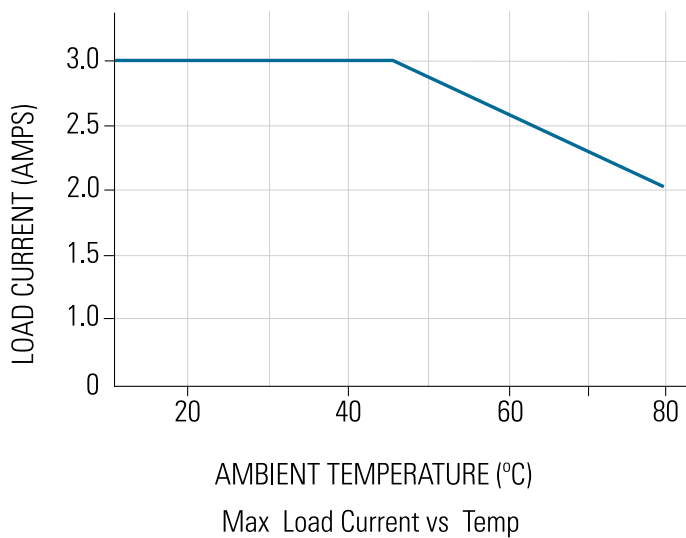
| | |
|--|----------------------------|
| Dielectric Strength, Input/Output/Base (50/60Hz) ² | 3750 Vrms |
| Minimum Insulation Resistance (@ 500 V DC) ² | 10 ⁹ Ohms |
| Maximum Capacitance, Input/Output | 8 pF |
| Ambient Operating Temperature Range | -30°C to 80°C |
| Ambient Storage Temperature Range | -30°C to 125°C |
| Weight (typical) | 0.35 oz. (10g) |
| Encapsulation | Thermally Conductive Epoxy |

WIRING DIAGRAM



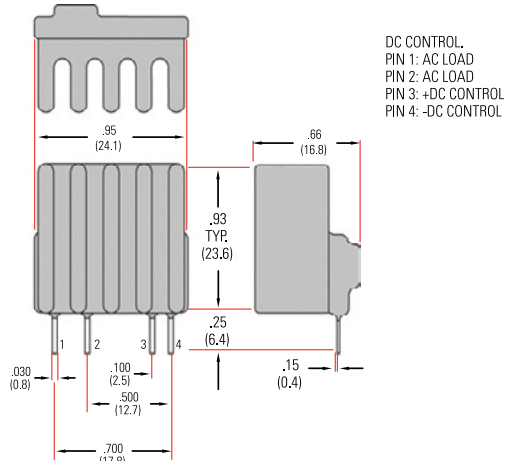
Load can be wired in location A or B

THERMAL DERATE INFORMATION



MECHANICAL SPECIFICATIONS

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



GENERAL NOTES

- (1) All parameters at 25°C unless otherwise specified.
- (2) Dielectric and insulation resistance are measured between input and output
- (3) Off-State dv/dt test method per EIA/NARM standard RS-443
- (4) Turn-On time for random turn-on versions is 0.01 msec (DC C)

AGENCY APPROVALS & CERTIFICATIONS



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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