



## 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 <sup>(1)</sup>

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] <sup>3</sup>	500	500
Maximum Load Current [Arms]	3.0	3.0
Minimum Load Current [Arms]	0.1	0.1
Maximum Surge Current (16.6ms) [A <sub>pk</sub> ]	100	100
Maximum On-State Voltage Drop @ Rated Current [V <sub>pk</sub> ]	1.5	1.5
Minimum Power Factor (with Maximum Load)	0.5	0.5

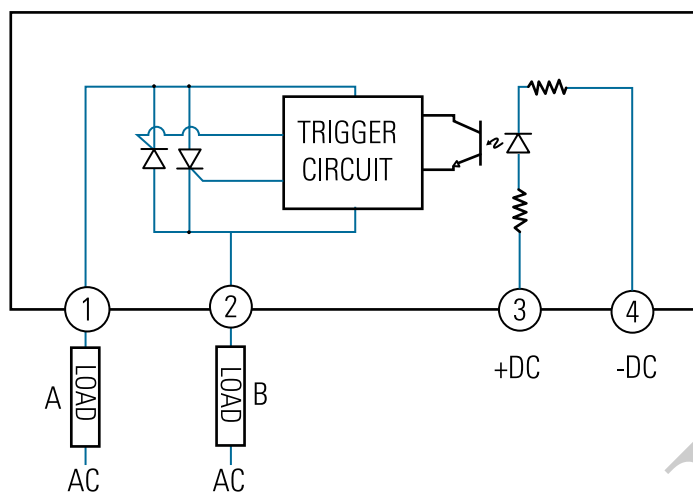
Input <sup>(1)</sup>

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 mAdc
Nominal Input Impedance	300 Ohm
Maximum Turn-On Time [msec] <sup>4</sup>	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle

## General <sup>(1)</sup>

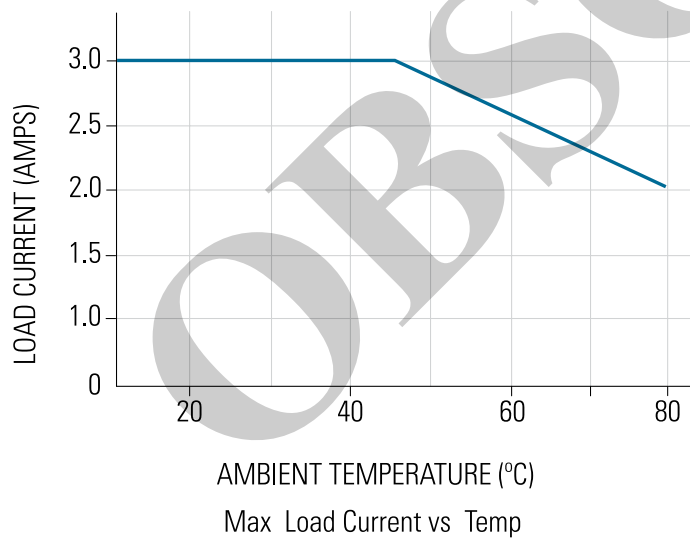
<b>Dielectric Strength, Input/Output/Base (50/60Hz) <sup>2</sup></b>	3750 Vrms
<b>Minimum Insulation Resistance (@ 500 V DC) <sup>2</sup></b>	10 <sup>9</sup> Ohms
<b>Maximum Capacitance, Input/Output</b>	8 pF
<b>Ambient Operating Temperature Range</b>	-30°C to 80°C
<b>Ambient Storage Temperature Range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

## WIRING DIAGRAM



Load can be wired in location A or B

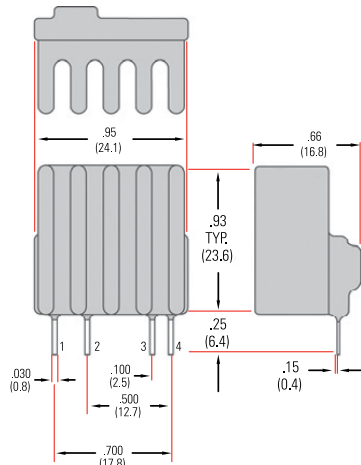
## THERMAL DERATE INFORMATION



## MECHANICAL SPECIFICATIONS

\*Tolerances:  $\pm 0.02$  in / 0.5 mm

All dimensions are in: inches [millimeters]



DC CONTROL  
PIN 1: AC LOAD  
PIN 2: AC LOAD  
PIN 3: +DC CONTROL  
PIN 4: -DC CONTROL

## 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



E116950



LR81689



## 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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