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## Solid State Relays - PCB Mount: DPA



### Features

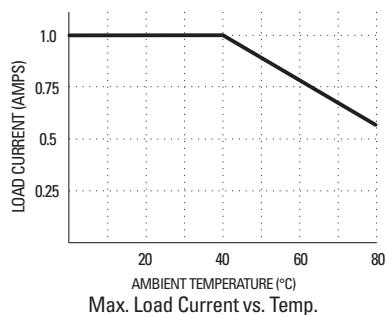
SCR output • 1.0Amp • 120/240 Vrms • 16 PIN DIP Package • Current and voltage control versions.

Product	INPUT SPECIFICATIONS		OUTPUT SPECIFICATIONS		
	Control Voltage Range	Load Current	Switching Voltage Type	Turn On	Load Voltage Range
DPA4111	10-35 mA DC	0.025-1 Amps RMS	AC	Zero cross	20-140 Volts RMS
DPA4119	3.5-10 Volts DC	0.025-1 Amps RMS	AC	Zero cross	20-140 Volts RMS
DPA6111	10-35 mA DC	0.025-1 Amps RMS	AC	Zero cross	20-280 Volts RMS
DPA6119	3.5-10 Volts DC	0.025-1 Amps RMS	AC	Zero cross	20-280 Volts RMS

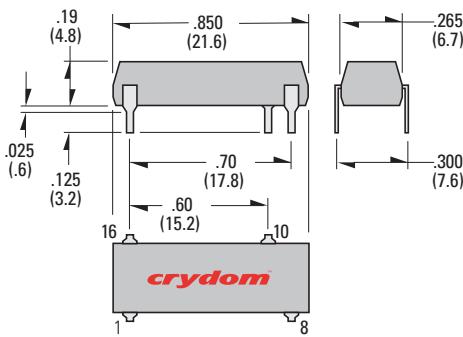
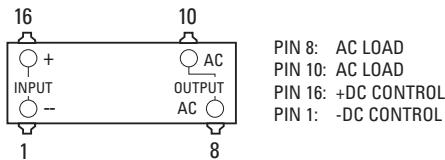
- Compact for High Density PCB Mount
- DC Control
- SCR Output
- Zero Cross Switching

The Series DPA solid state relays are rated at 1.0 Amp RMS at ambient temperatures up to 40°C. The compact 16 pin DIP package is perfect for high density printed circuit boards. The DPA is offered in your choice of either voltage or current operated versions. Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

### CURRENT DERATING CURVE



Max. Load Current vs. Temp.



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.

### APPROVALS

UL E116950  
CSA LR81689



MODEL NO.	DPA4111	DPA4119	DPA6111	DPA6119
<b>INPUT SPECIFICATIONS ①</b>				
Control Voltage Range	—	3.5-10 Vdc	—	3.5-10 Vdc
Control Current Range	10-35 mA	—	10-35 mA	—
Nominal Input Impedance	—	270 Ohm	—	270 Ohm
Typical Input Current @ 5 Vdc	—	15 mAdc	—	15 mAdc
Must Turn On Voltage	—	3.5 Vdc	—	3.5 Vdc
Must Turn On Current	10 mA	—	10 mA	—
Must Turn Off Voltage	—	1.0Vdc	—	1.0Vdc
Must Turn Off Current	1 mA	—	1 mA	—
<b>OUTPUT SPECIFICATIONS ①</b>				
Operating Voltage Range (47-63 Hz)	20-140 Vrms	20-280 Vrms	—	—
Load Current Range	.025 - 1.0 Arms	—	—	—
Transient Over-Voltage	400 Vpk	600 Vpk	—	—
Max. Surge Current, (16.6ms)	30 Apk	—	—	—
Min. Off-State dv/dt @ Max. Rated Voltage ③	500 V/μsec	—	—	—
Max. Off-State Leakage @ Rated Voltage	.01 mArms	—	—	—
Max. On-State Voltage Drop @ Rated Current	1.2 Vpk	—	—	—
Max. Turn-On Time	1/2 cycle	—	—	—
Max. Turn-Off Time	1/2 cycle	—	—	—
Power Factor (Min.) With Max. Load	0.5	—	—	—
<b>GENERAL SPECIFICATIONS</b>				
Dielectric Strength ②	3750 Vrms	—	—	—
Insulation Resistance (Min.) @ 500 Vdc ②	10 <sup>9</sup> Ohm	—	—	—
Max. Capacitance, Input-Output	2.0 pF	—	—	—
Ambient Operating Temperature Range	-30 to 80°C	—	—	—
Ambient Storage Temperature Range	-30 to 125°C	—	—	—
<b>MECHANICAL SPECIFICATIONS</b>				
Weight: (typical)	.10 oz. (2.9 g)	—	—	—
Encapsulation:	Thermally Conductive Epoxy	—	—	—