

Solid State Relays - PCB Mount: DPA



Features

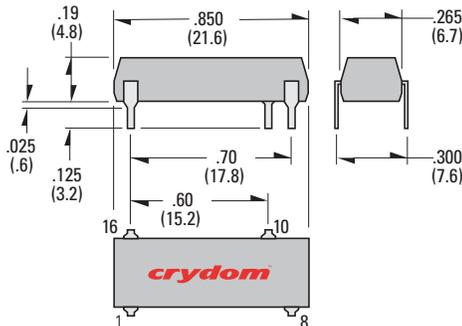
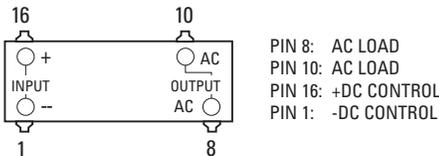
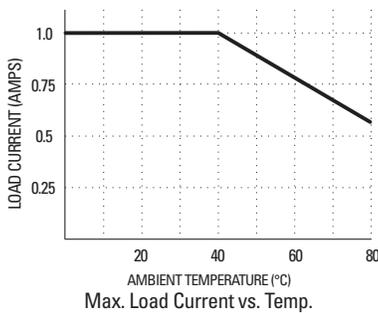
SCR output • 1.0Amp • 120/240 Vrms •
16 PIN DIP Package • Current and
voltage control versions.

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



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
INPUT SPECIFICATIONS ①				
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 mA _{dc}	—	15 mA _{dc}
Must Turn On Voltage	—	3.5 Vdc	—	3.5 Vdc
Must Turn On Current	10 mA	—	10 mA	—
Must Turn Off Voltage	—	1.0V _{dc}	—	1.0V _{dc}
Must Turn Off Current	1 mA	—	1 mA	—
OUTPUT SPECIFICATIONS ①				
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 mA _{rms}			
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.) W/Max. Load	0.5			
GENERAL SPECIFICATIONS				
Dielectric Strength ②	3750 Vrms			
Insulation Resistance (Min.) @ 500 Vdc ②	10 ⁹ Ohm			
Max. Capacitance, Input-Output	2.0 pF			
Ambient Operating Temperature Range	-30 to 80°C			
Ambient Storage Temperature Range	-30 to 125°C			
MECHANICAL SPECIFICATIONS				
Weight: (typical)	.10 oz. (2.9 g)			
Encapsulation:	Thermally Conductive Epoxy			

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