

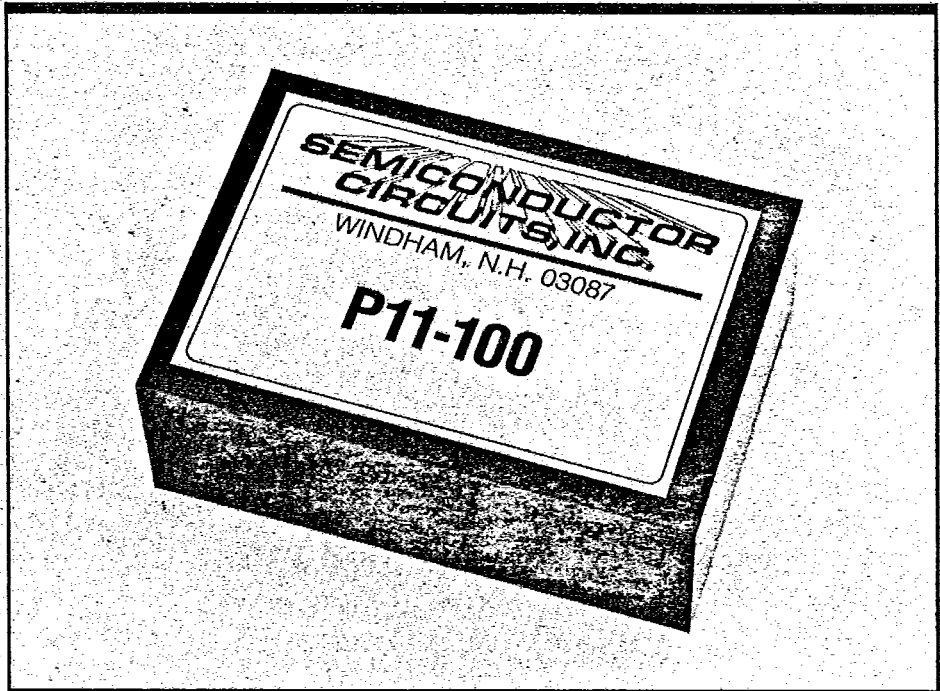
# AC/DC 6 Watts Single/Dual Outputs CM, ED, P, PA Series

- High performance design
- Ultra-low noise 1 mV RMS (Pard)
- 100 kHz switching regulation of 0.01%
- Continuous short circuit protection

The P, PA and CM Series boast over a decade of reliable, field proven service and are the recognized industry standard for high performance AC/DC power supplies. The PA Series is equipped with industry standard 2.2" pin spacing while the P Series is 2.0".

The CM Series are high performance chassis mount versions employing a top-mounted, five terminal barrier strip for power entry and exit. These units are ideal for systems that are best implemented with "hard wire" power cabling techniques. Features include MTBF's of greater than 150,000 hours, lower case temperature rise (to 18°C cooler) and the high in-circuit performance. This higher efficiency results in lower ambient temperatures and greater system reliability. Dual output tracking is standard.

The ED Series delivers 180 Vdc outputs for powering a variety of the more widely used plasma digital displays. The components used in the ED Series allow use of over broad temperature ranges with a high degree of stability.



## Specifications

### INPUT

Voltage and Frequency	105 to 125 Vac - 50 to 440 Hz (standard) 200 to 252 Vac - 50 to 60 Hz Add Suffix I 90 to 110 Vac - 50 to 60 Hz Add Suffix N 105 to 125/210 to 250 Vac Add Suffix K2
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### OUTPUT

Voltage Tolerance	± 1% (Fixed) P ± 2% (Fixed) ED, PA, CM
Ripple and Noise	1 mV RMS*
Dual Tracking	1 mV/mV (typ)
Temperature Coefficient	0.02%/°C max.

\*30 mV RMS - ED Series

### GENERAL

I/O Isolation	Voltage 1500 V RMS 2500 Vac - Suffix I (200 to 252 Vac only)
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### ENVIRONMENTAL

Operating Temperature Range	-25°C to +71°C (No derating)
Storage Temperature Range	-40°C to +85°C



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All specifications are typical at nominal line and full load at 25° unless otherwise noted.

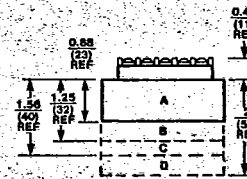
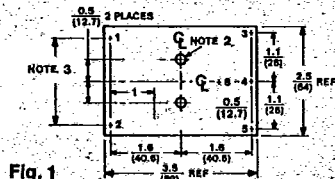
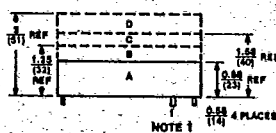
# CM, ED, P, PA Ordering Information

T-57-05

Output Voltage (Vdc)	Output Current (mA)	Regulation Line (%)	Regulation Load (%)	AC Pin Spacing Inches (mm)	Pkg.	Model Number	
5V	500	0.05	0.05	2.0 (51)	1A	P11-050	
		0.05	0.05	2.2 (56)	1A	PA11-050	
	1000	0.05	0.1	2.0 (51)	1B	P11-100	
		0.05	0.1	2.2 (56)	1B	PA11-100	
		0.05	0.1	—	2C	CM11-100	
		0.05	0.1	—	2C	CM11-100	
12V	500	0.05	0.1	2.0 (51)	1B	P12-050	
		0.05	0.1	—	2C	CM12-050	
±5V	±500	0.05	0.05	2.0 (51)	1B	P21-100	
		0.05	0.05	2.2 (56)	1B	PA21-100	
	±100	0.1	0.05	2.0 (51)	1A	P22-020	
		0.1	0.05	2.2 (56)	1A	PA22-020	
	±12V	±200	0.05	0.1	—	2C	CM22-040
			0.05	0.1	—	2C	CM22-040
±200		0.1	0.05	2.0 (51)	1B	P22-040	
		0.1	0.05	2.2 (56)	1B	PA22-040	
±15V	±300†	0.01	0.05	2.0 (51)	1C	P22-060	
		0.01	0.05	2.2 (56)	1C	PA22-060	
	±100	0.05	0.1	—	2D	CM22-060	
		0.05	0.1	—	2D	CM22-060	
	±200	0.01	0.05	2.0 (51)	1A	P23-020	
		0.01	0.05	2.2 (56)	1A	PA23-020	
0.01		0.05	2.0 (51)	1B	P23-040		
0.01		0.05	2.2 (56)	1B	PA23-040		
±300†	0.05	0.1	—	2C	CM23-040		
	0.05	0.1	—	2C	CM23-040		
	0.01	0.05	2.0 (51)	1C	P23-060		
	0.01	0.05	2.2 (56)	1C	PA23-060		
180V	30	1.0	1.0	2.0 (51)	1B	ED16-003	

†NOTE: ±300 mA units feature standard foldback current limiting

## Dimensions and Connections

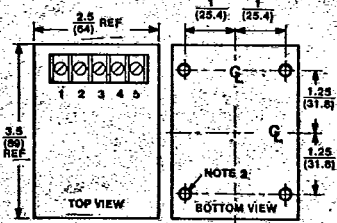


- CM Series (Figure 2)**  
**Single Output TERM**  
 1. AC in  
 2. AC in  
 3. + Vdc out  
 4. Do Not Connect  
 5. -Vdc out

- Dual Output TERM**  
 1. AC in  
 2. AC in  
 3. + Vdc out  
 4. Common out  
 5. -Vdc out

- PIN CONNECTIONS**  
**P, PA, ED SERIES (Figure 1)**  
**Single Output**  
**2.0" AC Pin Spacing**  
**PIN**  
 1. AC in  
 2. AC in  
 3. -Vdc out  
 4. Do Not Connect  
 5. +Vdc out  
 6. High Isolation\*

- Dual Outputs**  
**2.0" & 2.2" AC Pin Spacing**  
**PIN**  
 1. AC in  
 2. AC in  
 3. -Vdc out  
 4. Common out  
 5. +Vdc out  
 6. High Isolation\*



\*PIN 6 is provided in J option only

- NOTES:**  
 1. Pins 0.040 (1) Dia x 0.20 (5.1) Lg Min  
 2. Mounting Inserts No. 4-40 x 0.10 (2.5) Dp Min  
 3. See Pin Spacing in Ordering Information  
 4. Suffix K2 Pin-out — consult factory

- Single Output**  
**2.2" AC Pin Spacing**  
**PIN**  
 1. AC in  
 2. AC in  
 3. Do Not Connect  
 4. -Vdc out  
 5. +Vdc out  
 6. High Isolation\*

\*Measured with 33 MF 25V tantalum capacitor across each output. Specifications subject to change without notice.



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