

**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

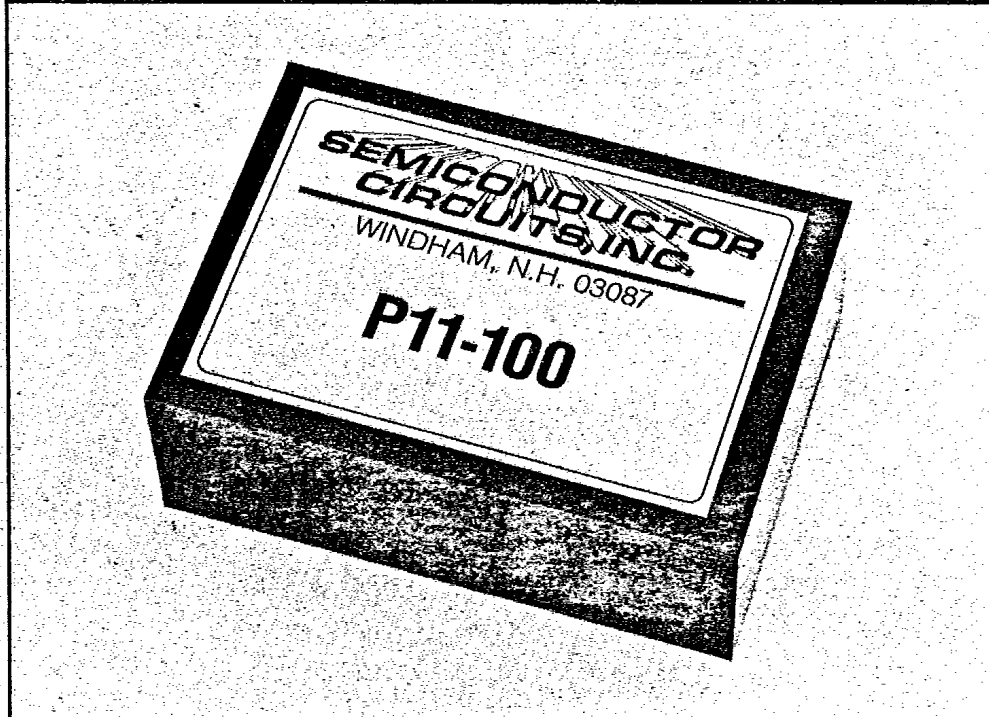
The P, PA and CM Series boast over a decade of reliable, field proven service and are the recognized industry standard for high performance AC/DC power supplies. The PA Series is equipped with industry standard 2.2" pin spacing while the P Series is 2.0".

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.

**SEMICONDUCTOR  
CIRCUITS, INC.**

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## 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

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

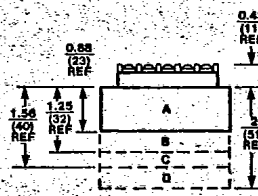
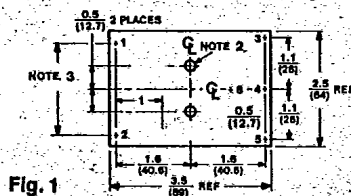
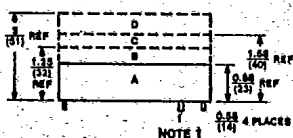
# CM, ED, P, PA Ordering Information

T-57-05

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

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

## Dimensions and Connections



**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\*

**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\*

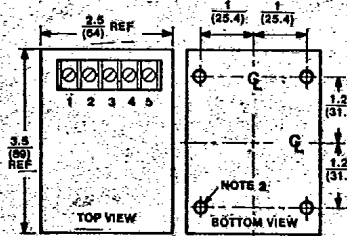


Fig. 2

**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 6 is provided in J option only

**NOTES:**

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

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

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