

5 6 2 1
SHIELD
GND

115 VAC
47-440Hz

POWER-ONE INC.



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POWER-ONE, INC.
D.C. Power Supplies

Power-One is Quality, Reliability, & Economy

POWER-ONE'S commitment is to supply our customers with the industry's finest OEM DC power supplies. To support this commitment, Power-One invests heavily in R&D activities, continually advancing the "state of the art" to provide the most reliable and economical series regulated units possible.

Our 15,000 sq. ft. Camarillo, California manufacturing facility is dedicated to the efficient high-volume production of OEM products exclusively. By specializing in one product area only, we achieve unparalleled control over all manufacturing processes including magnetics and P.C. board fabrication, final assembly, quality assurance, and test.

As a result of these efforts, we firmly believe our OEM DC power supplies to be the most reliable and economical products available anywhere.

We support this belief with our exclusive 2 year guarantee, which warrants any power supply we manufacture against defects in material and workmanship for 2 full years from date of delivery. Also, all terms of this warranty are fully transferable to your customer.

Compare These Important Features . . . Discover For Yourself Why Power-One Is Number-One

- 67 Standard Stocked Models — The industry's most comprehensive OEM product line.
- All units UL recognized.
- Full 2 year warranty — transferable to your customer.
- All models deliverable from stock — call your local Power-One Stocking Center for fast delivery.
- Computer grade capacitors used exclusively — rated for +85°C operation.
- Epoxy glass printed circuit boards — approved to UL 94VO.

- I.C. Regulated — Maximum reliability. Eliminates high component count and operating inconsistencies found in discrete designs.
- 2 hour Burn-in — all units undergo:
 1. Full function test.
 2. Minimum 2 hr. burn-in.
 3. Final full functional test.
- Balanced design — high efficiency transformer and circuit designs allow full rated operation at +50°C ambient temperature.
- Ideally suited for computer, industrial, and commercial applications.
- 100% American built — all units are manufactured in our Camarillo, California facility.
- Custom Designs — A full time R&D staff and complete in-house manufacturing capabilities for custom and modified standard products.
- Efficiency rated at 45%-70% — The absolute maximum efficiency available in a series pass design.
- Only the finest quality hermetic transistors — Used throughout all POWER-ONE units to enhance performance and reliability.
- Aluminum heat sink and chassis — For optimum performance and packaging density.
- Foldback current limit — Protects against overload or accidental shorts, automatic recovery.

Prices:

All prices quoted are F.O.B. Camarillo, California.

Terms:

Net 30 days to rated companies.

Discounts:

Liberal discounts are offered to quantity buyers. OEM contracts available. Consult Power-One or your local factory representative for a prompt quotation.

Shipping:

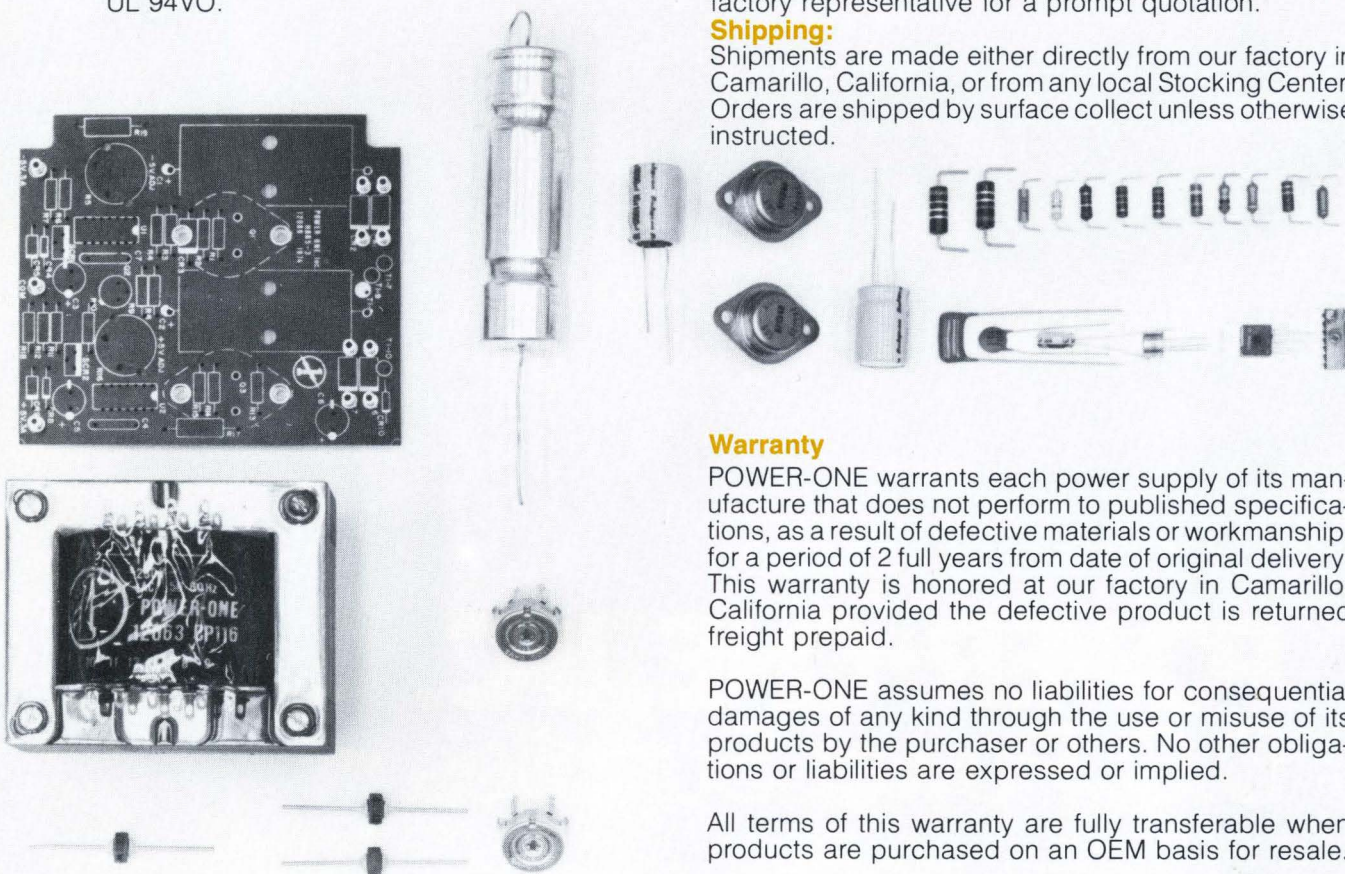
Shipments are made either directly from our factory in Camarillo, California, or from any local Stocking Center. Orders are shipped by surface collect unless otherwise instructed.

Warranty

POWER-ONE warrants each power supply of its manufacture that does not perform to published specifications, as a result of defective materials or workmanship, for a period of 2 full years from date of original delivery. This warranty is honored at our factory in Camarillo, California provided the defective product is returned freight prepaid.

POWER-ONE assumes no liabilities for consequential damages of any kind through the use or misuse of its products by the purchaser or others. No other obligations or liabilities are expressed or implied.

All terms of this warranty are fully transferable when products are purchased on an OEM basis for resale.

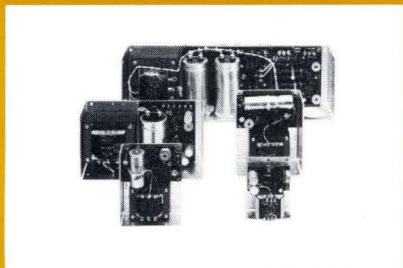


Power Supply Selection Guide

Power-One's applications engineers are always available to assist you in selecting the best approach to your specific requirements. For technical information on Standard Catalog items or application assistance on your special custom requirements, just contact Power-One or your local factory representative.

Please refer to page 15 for a complete listing of Power-One's Factory Representatives and Stocking Centers.

Prices and specifications subject to change without notice.



PAGE 4-5

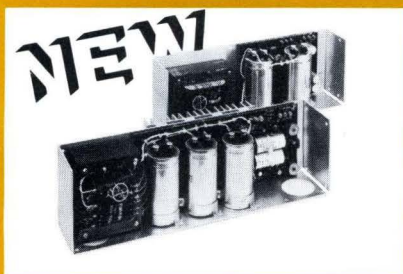
SINGLE OUTPUT — Standard • Voltages from 5V to 24V • Current from 1.2A to 18A • Remote sensing • $\pm 0.02\%$ regulation

PAGE 6-7

SINGLE OUTPUT — Hi-Vol • Voltages from 2V to 250V • Current from 0.1A to 18A • 115/230 VAC input • OVP built-in on 5V models • $\pm 0.05\%$ regulation

PAGE 8

SINGLE OUTPUT — High Power • Voltages from 2V to 28V • Current from 10A to 35A • 115/230 VAC input • OVP built-in on 5V models • Remote sensing • $\pm 0.01\%$ regulation • True master/slave operation • TTL controlled inhibit



Power-One's new R Series High Efficiency 5V logic power supplies

PAGE 9

HIGH EFFICIENCY • Efficiency up to 66% • Ultra-reliable linear design • RFI/EMI free operation • Low power dissipation • High packing density • Extended AC "brown-out" capability

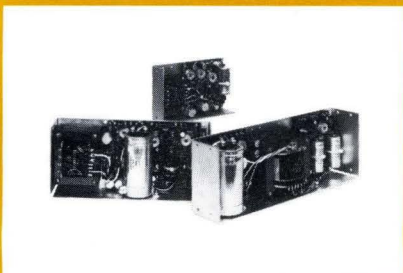


PAGE 10

DUAL OUTPUT — Standard • Voltages from $\pm 12V$ to $\pm 15V$ • Current from 0.8A to 3.4A • $\pm 0.1\%$ tracking accuracy • Remote sensing • $\pm 0.02\%$ regulation

PAGE 11

DUAL OUTPUT — Hi-Vol • Voltages from $\pm 5V$ to $\pm 15V$ • Current from 0.5A to 6A • 115/230 VAC input • OVP built-in on 5V outputs • $\pm 0.05\%$ regulation

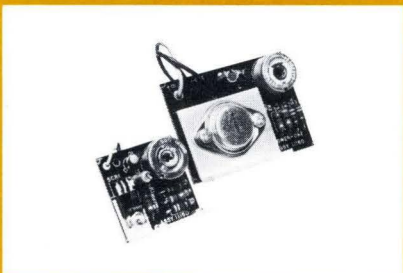


PAGE 12

TRIPLE OUTPUT — Standard • Voltages: 5V and $\pm 12V$ to $\pm 15V$ • Current: 3A to 12A on 5V outputs; 0.8A to 1.7A on $\pm 12V$ to $\pm 15V$ outputs • $\pm 0.1\%$ tracking accuracy on $\pm 12V$ to $\pm 15V$ outputs • Remote sensing • $\pm 0.2\%$ regulation

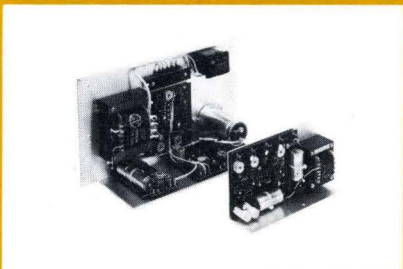
PAGE 13

TRIPLE OUTPUT — Hi-Vol • Voltages: 5V and $\pm 9V$ to $\pm 15V$ • Current: 2A to 12A on 5V outputs; 0.2A to 1.7A on $\pm 9V$ to $\pm 15V$ outputs • 115/230 VAC input • OVP built-in on 5V outputs • $\pm 0.05\%$ regulation



PAGE 14

OVERVOLTAGE PROTECTION OPTION • Provides for maximum load protection • For use on all units without built-in OVP • 12A & 24A models • Firing level adjustable from 6.4V to 36V



PAGE 14

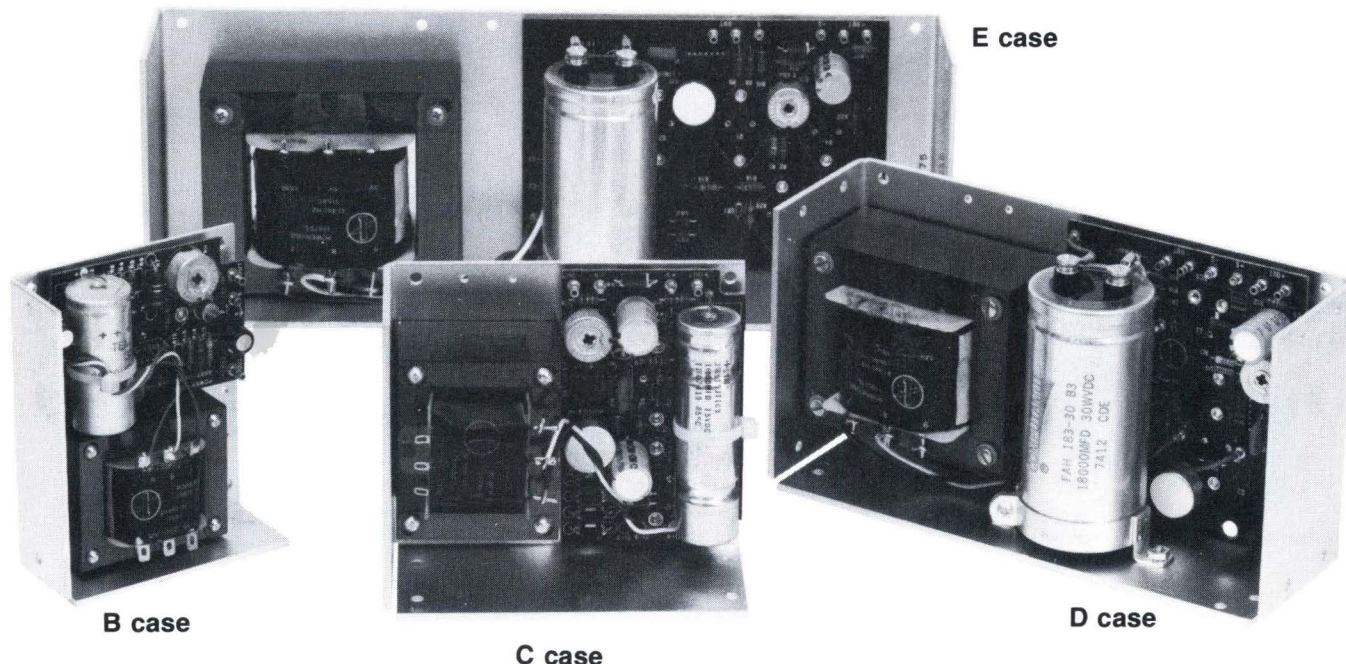
CUSTOM DESIGNS • Custom designed power supplies for high quantity applications requiring special electrical and mechanical configurations.

PAGE 14

MODIFIED STANDARD PRODUCTS • Modifications to Standard Catalog items to meet special customer requirements.

PAGE 15

REPRESENTATIVES & STOCKING CENTERS • Nationwide Representatives & Stocking Centers listed for your convenience.



Single Output Standard

FEATURES

- $\pm .02\%$ REGULATION
- REMOTE SENSING
- FOLDBACK CURRENT LIMIT
- INDUSTRY STANDARD SIZE
- FULL RATED TO 50°C
- I.C. REGULATED DESIGN
- REVERSE VOLTAGE PROTECTION
- REMOTE PROGRAMMING CAPABILITY
- TWO HOUR BURN-IN
- TWO YEAR WARRANTY

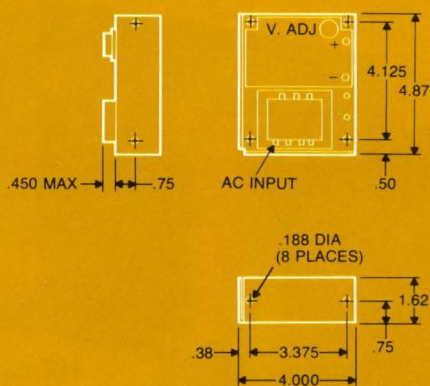
SINGLE OUTPUT - Standard

Designed to meet the specific requirements of OEM manufacturers large and small, Power-One's complete line of open-frame power supplies provide the quality, reliability, and economy you have come to expect from all Power-One products.

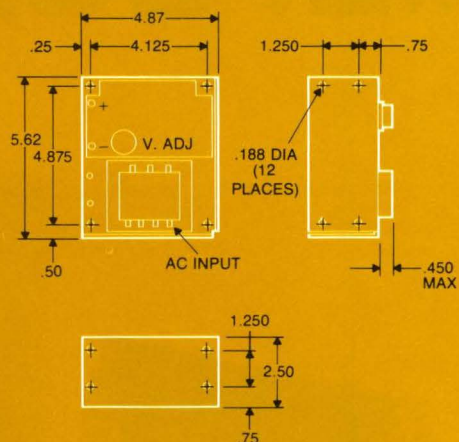
Whether you need power for new applications or existing products, choose from our wide selection of Industry Standard packages for maximum performance in OEM power.

Specifications

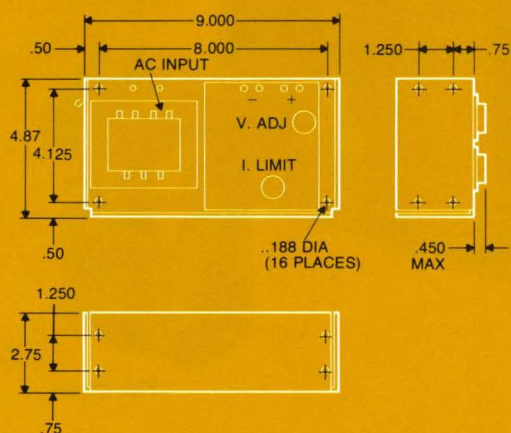
- AC Input:** 105-125 VAC, 47-440 HZ (Derate output current 10% for 50 HZ operation).
See Voltage/Current Rating Chart.
- DC Output:** Adjustment range, $\pm 5\%$ minimum.
 $\pm .01\%$ for a 10% line change.
 $\pm .02\%$ for 50% load change.
1.5 mv PK-PK, 0.4 mv RMS max.
30 μ seconds for 50% load change.
- Line Regulation:** Automatic current limit/foldback.
- Load Regulation:** Provided on output and pass element.
- Output Ripple:** Provided, open sense lead protection built-in.
- Transient Response:** $\pm .01\%/^{\circ}\text{C}$ maximum, .002% typical.
- Short Circuit & Overload Protection:** 5V units: 45%, 12 & 15V units: 55%, 20 & 24V units: 60%.
- Reverse Voltage Protection:** Per Mil-Std-810B, Method 514, procedure 1, curve AB (to 50 HZ).
Per Mil-Std-810B, Method 516, Procedure V.
- Remote Sensing:** Refer to page 14 for specifications.
- Stability:**
- Temperature Rating:**
- Temp. Coefficient:**
- Efficiency:**
- Vibration:**
- Shock:**
- Optional Overvoltage Protection:**



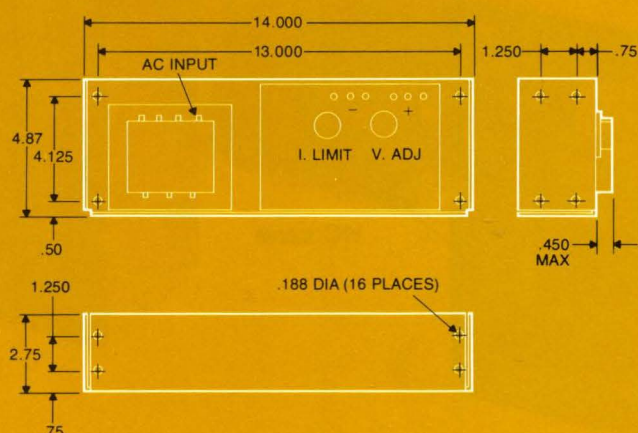
B CASE
Unit Weight 2 lbs



C CASE
Unit Weight 4 lbs



D CASE
Unit Weight 7.5 lbs

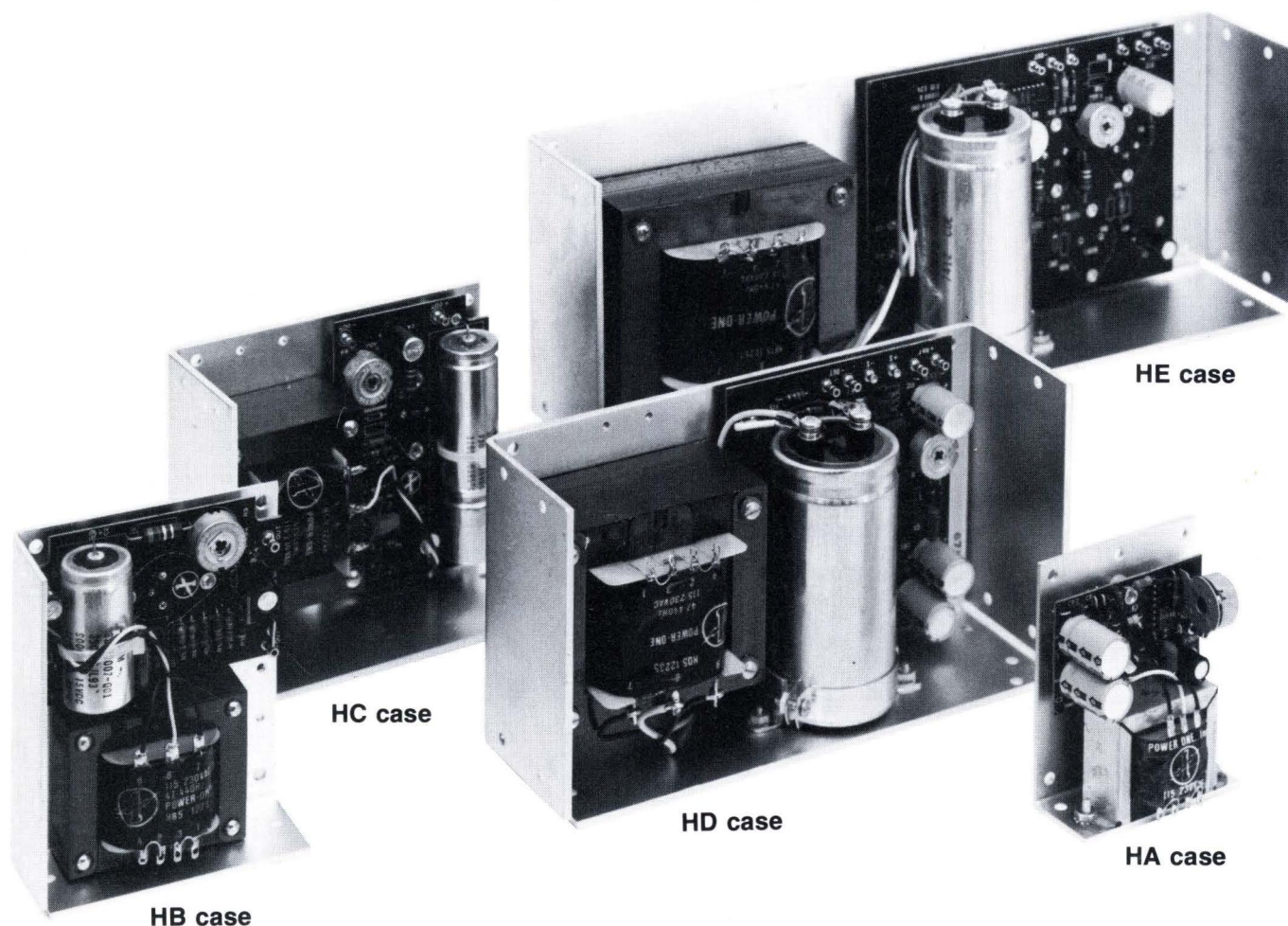


E CASE
Unit Weight 10 lbs

Voltage/Current Rating Chart

MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)	MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)
5 VOLTS					18 VOLTS				
B5-3	5	3.0	B	\$ 24.95	B24-1.2	18	1.3	B	\$ 24.95
C5-6	5	6.0	C	44.95	C24-2.4	18	2.6	C	44.95
D5-12	5	12.0	D	74.95	D24-4.8	18	5.2	D	74.95
E5-18	5	18.0	E	104.95	E24-7.2	18	7.8	E	104.95
6 VOLTS					20 VOLTS				
B5-3	6	3.0	B	\$ 24.95	B24-1.2	20	1.3	B	\$ 24.95
C5-6	6	6.0	C	44.95	C24-2.4	20	2.6	C	44.95
D5-12	6	12.0	D	74.95	D24-4.8	20	5.2	D	74.95
E5-18	6	18.0	E	104.95	E24-7.2	20	7.8	E	104.95
12 VOLTS					24 VOLTS				
B15-1.5	12	1.7	B	\$ 24.95	B24-1.2	24	1.2	B	\$ 24.95
C15-3	12	3.4	C	44.95	C24-2.4	24	2.4	C	44.95
D15-6	12	6.8	D	74.95	D24-4.8	24	4.8	D	74.95
E15-9	12	10.2	E	104.95	E24-7.2	24	7.2	E	104.95
15 VOLTS									
B15-1.5	15	1.5	B	\$ 24.95					
C15-3	15	3.0	C	44.95					
D15-6	15	6.0	D	74.95					
E15-9	15	9.0	E	104.95					

POWER-ONE, INC.



Single Output Hi-Vol

FEATURES

- 115/230 VAC INPUT
- OVP ON 5V MODELS
- $\pm .05\%$ REGULATION
- INDUSTRY STANDARD SIZE
- FOLDBACK CURRENT LIMIT
- FULL RATED TO 50°C
- I.C. REGULATED DESIGN
- TWO HOUR BURN-IN
- TWO YEAR WARRANTY

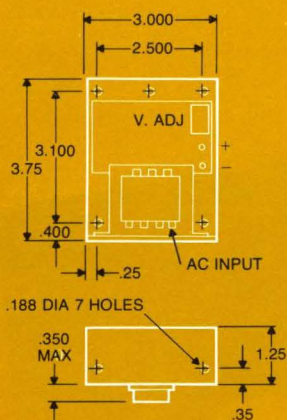
SINGLE OUTPUT - Hi-Vol

Recognized as the Industry's best buy in OEM power, the Hi-Vol series offers standard features found available only as additional cost options on competitive models. Among these are 115/230 VAC input capabilities on all models and built-in OVP on 5V models.

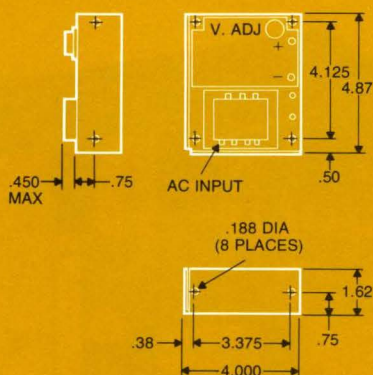
The Hi-Vol Series is the result of an extensive program to offer as standard features those options most commonly requested by our customers.

Specifications

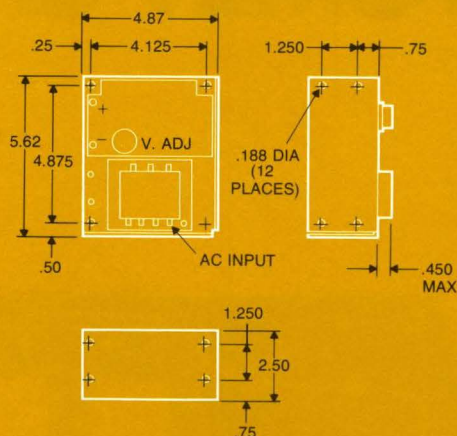
AC Input:	115/230VAC $\pm 10\%$, 47-440 HZ (Derate output current 10% for 50 HZ operation).
DC Output:	See Voltage/Current Rating Chart. Adjustment range, $\pm 5\%$ minimum. $\pm .05\%$ for a 10% line change.
Line Regulation:	$\pm .05\%$ for a 50% load change.
Load Regulation:	2 to 15V unit : 1.5 mv PK-PK, 0.4 mv RMS maximum, 20 to 200V unit : 0.02% PK-PK, .01% RMS maximum.
Output Ripple:	30 μ seconds for 50% load change.
Transient Response:	Automatic current limit/foldback.
Short Circuit & Overload Protection:	Built-in on 5V models (except HA5-1.2). Set at 6.2V $\pm .4$ V.
OVP:	Provided on all D & E models, open sense lead protection built-in.
Remote Sensing:	$\pm .3\%$ for 24 hours after warm up.
Stability:	0°C to 50°C full rated, derated linearly to 40% at 70°C .
Temperature Rating:	$\pm .03\%/^{\circ}\text{C}$ maximum.
Temp. Coefficient:	5V units: 45%, 12 & 15V units: 55%, 20 & 24V units: 60%.
Efficiency:	Per Mil-Std-810B, Method 514, Procedure 1, curve AB (to 50 HZ).
Vibration:	Per Mil-Std-810B, Method 516, Procedure V.
Shock:	



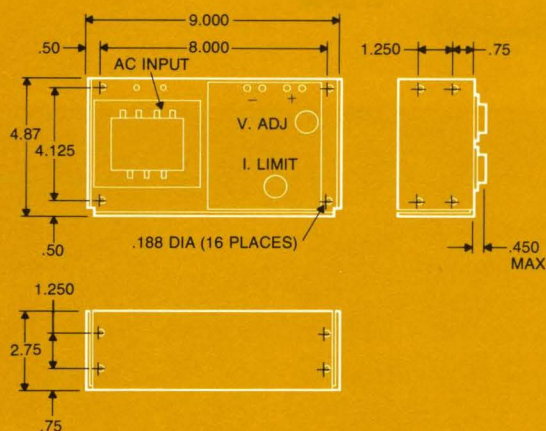
HA CASE
Unit Weight 1 lb



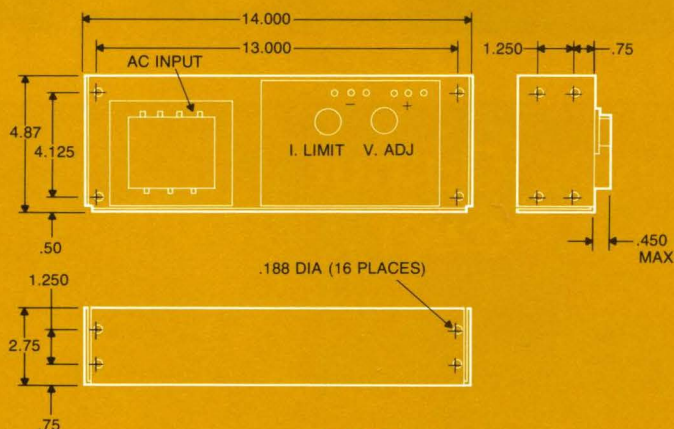
HB CASE
Unit Weight 2 lbs



HC CASE
Unit Weight 4 lbs



HD CASE
Unit Weight 7.5 lbs

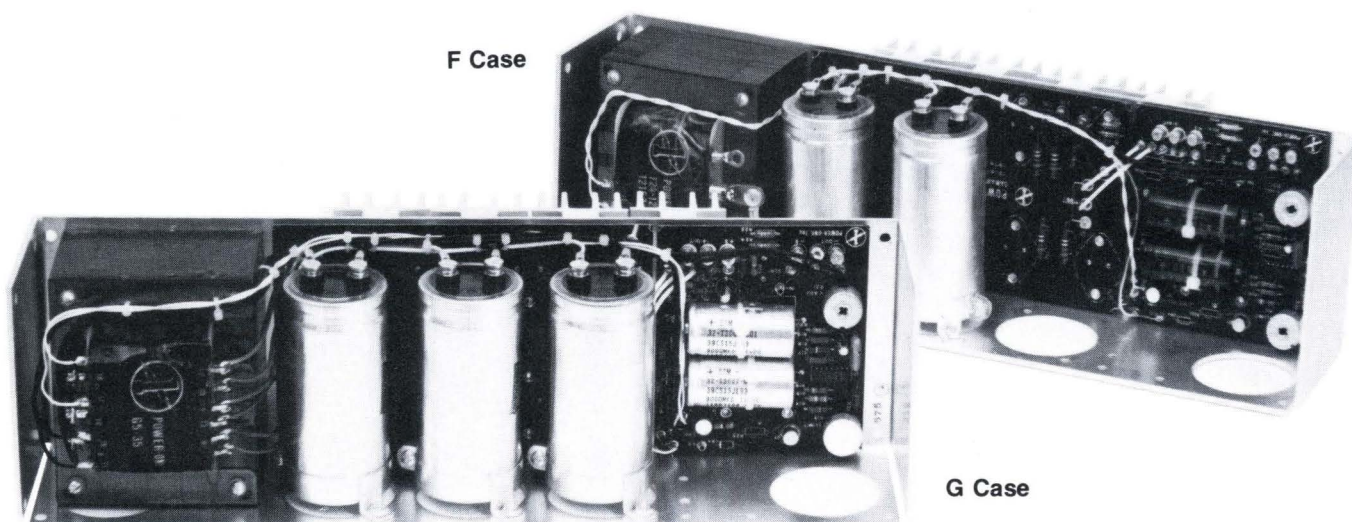


HE CASE
Unit Weight 10 lbs

Voltage/Current Rating Chart

MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)	MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)
2 VOLTS					24 VOLTS				
HB2-3	2	3.0	HB	\$ 29.95	HB24-1.2	24	1.2	HB	\$ 24.95
HC2-6	2	6.0	HC	49.95	HC24-2.4	24	2.4	HC	44.95
HD2-12	2	12.0	HD	79.95	HD24-4.8	24	4.8	HD	74.95
HE2-18	2	18.0	HE	109.95	HE24-7.2	24	7.2	HE	104.95
5 VOLTS					28 VOLTS				
HA5-1.2	5	1.2	HA	\$ 19.95	HB28-1.2	28	1.0	HB	\$ 24.95
HB5-3/OVP	5	3.0	HB	24.95	HC28-2	28	2.0	HC	44.95
HC5-6/OVP	5	6.0	HC	49.95	HD28-4	28	4.0	HD	74.95
HD5-12/OVP	5	12.0	HD	79.95	HE28-6	28	6.0	HE	104.95
HE5-18/OVP	5	18.0	HE	114.95	48 VOLTS				
12 VOLTS					HB48-0.5	48	0.5	HB	\$ 29.95
HA15-0.5	12	0.5	HA	\$ 19.95	HC48-1	48	1.0	HC	49.95
HB12-1.7	12	1.7	HB	24.95	HD48-2	48	2.0	HD	79.95
HC12-3.4	12	3.4	HC	44.95	HE48-3	48	3.0	HE	109.95
HD12-6.8	12	6.8	HD	74.95	180, 200 VOLTS				
HE12-10.2	12	10.2	HE	104.95	HB200-0.12	175-210	0.12	HB	\$ 29.95
15 VOLTS					250 VOLTS				
HA15-0.5	15	0.5	HA	\$ 19.95	HB250-0.1	240-260	0.1	HB	\$ 29.95
HB15-1.5	15	1.5	HB	24.95					
HC15-3	15	3.0	HC	44.95					
HD15-6	15	6.0	HD	74.95					
HE15-9	15	9.0	HE	104.95					

POWER-ONE, INC.



Single Output High Power

FEATURES

- 115/230 VAC INPUT
- 53%-66% EFFICIENCY
- TRUE MASTER/SLAVE OPERATION
- $\pm .01\%$ REGULATION
- REMOTE PROGRAMMING CAPABILITY
- FOLDBACK CURRENT LIMIT
- REMOTE SENSING
- OVP ON 5V MODELS
- TTL CONTROLLED INHIBIT
- TWO HOUR BURN-IN
- TWO YEAR WARRANTY

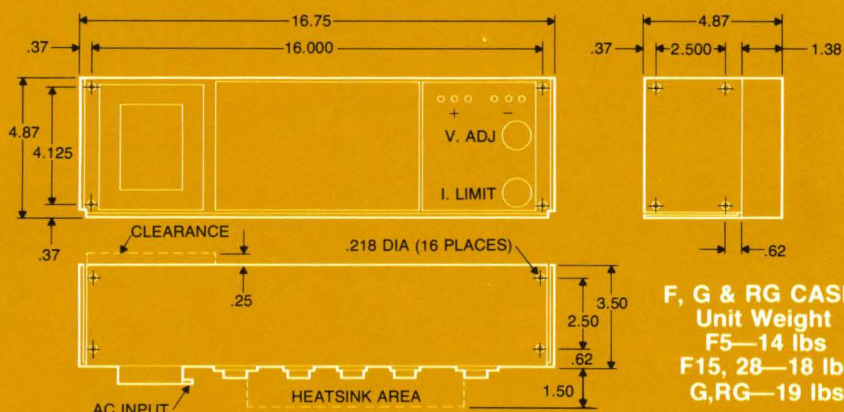
SINGLE OUTPUT - High Power

Power-One's E & F Series are offered for higher power applications requiring the maximum in design flexibility and reliability. We have incorporated a number of additional standard features from our Hi-Vol Series, including 115/230 VAC input capabilities, built-in OVP on 5V models, and true master/slave operation.

Another unique feature is the use of extruded finned heatsink assemblies for the efficient removal of dissipated power, providing cooler operation and higher reliability than competitive models.

Specifications

AC Input:	115/230VAC $\pm 10\%$, 47-440HZ (Derate output current 10% for 50HZ operation).
DC Output:	See Voltage/Current Rating Chart. Adjustment range, $\pm 5\%$ minimum.
Line Regulation:	$\pm .01\%$ for a 10% line change.
Load Regulation:	$\pm .02\%$ for a 50% load change.
Output Ripple:	1.5mv PK-PK, 0.4mv RMS maximum.
Transient Response:	30 μ seconds for 50% load change.
Short Circuit & Overload Protection:	Automatic current limit/foldback. Built-in on 5V models. Set at 6.2V $\pm .2V$. Other models use optional overvoltage protection. Refer to page 14 for specifications.



**F, G & RG CASE
Unit Weight**
F5—14 lbs
F15, 28—18 lbs
G, RG—19 lbs

Voltage/Current Rating Chart

MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)
5 VOLTS				
F5-25/OVP	5	25.0	F	\$149.00
G5-35/OVP	5	35.0	G	185.00
12 VOLTS				
F15-15	12	16.0	F	\$149.00
15 VOLTS				
F15-15	15	15.0	F	\$149.00
24 VOLTS				
F24-12	24	12.0	F	\$149.00
28 VOLTS				
F24-12	28	10.0	F	\$149.00

Remote Sensing:	Provided, open sense lead protection built-in.
Stability:	$\pm .05\%$ for 24 hours after warm up.
Temperature Rating:	0°C to 50°C full rated, derated linearly to 40% at 70°C.
Temp. Coefficient:	$\pm .01\%$ maximum, .002%/°C typical.
Efficiency:	5V units: 52-54%, 12 & 15V units: 62-64%, 24 & 28V units: 64-66%
Vibration:	Per Mil-Std-810B, Method 514, Procedure 1, curve AB (to 50HZ).
Shock:	Per Mil-Std-810B, Method 516, Procedure V.
Master/Slave:	Any unit may operate as master or slave. One master unit will drive up to 5 slave units.

NEW



Single Output High Efficiency

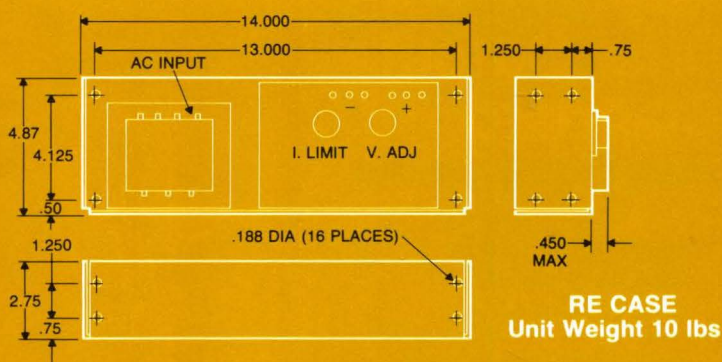
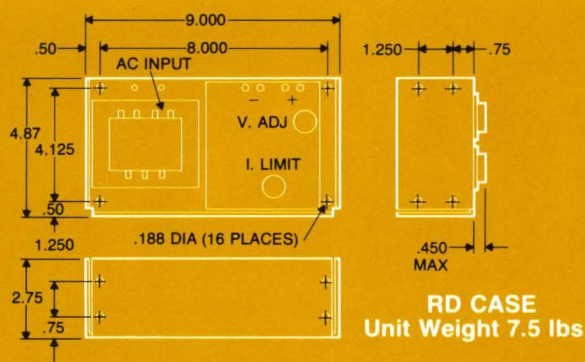
FEATURES

- EFFICIENCY UP TO 66%
- ULTRA-RELIABLE LINEAR DESIGN
- RFI/EMI FREE OPERATION
- 30 μ SECOND TRANSIENT RESPONSE
- EXTENDED LOW LINE "BROWN-OUT" CAPABILITY
- HIGH PACKAGING DENSITY
- FULL RATED TO +50°C
- OVP ON ALL MODELS

THE R SERIES

Power-One's new R Series represents a major breakthrough in linear technology offering operating efficiency and packaging density previously considered unattainable with a linear design.

These new models offer many of the outstanding features found in switching designs, without the classic problems associated with their use. Problems such as poor reliability, switching spikes and noise, slow transient response, and high cost have been avoided completely.



Specifications

AC Input: 105-125 VAC, 60 HZ, standard. Multiple input taps are provided to obtain a wider AC input range for extended low-line "brown-out" operation. These taps may also be used to optimize efficiency when operating at reduced output current levels.

DC Output: 5.0 VDC, adjustable $\pm 5\%$ minimum. See DC Output Current/Efficiency Chart for output current ratings.

Efficiency: See DC Output Current/Efficiency Chart.

Line Regulation: $\pm .01\%$ for a 10% input change.

Load Regulation: $\pm .02\%$ for 50% load change.

Output Ripple: 1.5mv PK-PK, 0.4mv RMS maximum
Transient Response: 30 μ seconds for 50% load change.

Short Circuit & Overload Protection: Automatic current limit/foldback.

OVP: Built-in. Set at 6.2V $\pm .4$ V.

Reverse Voltage Protection: Provided on output & pass element.

Remote Sensing: Provided, open sense lead protection built-in.

Stability: $\pm .05\%$ for 24 hours after warm up.

Temperature Rating: 0°C to 50°C full rated, derated linearly to 40% at 70°C.

Temperature Coefficient: $\pm .01\%/^{\circ}\text{C}$ maximum, .002% typical.
Vibration: Per Mil-Std-810B, Method 514, Procedure 1, curve AB (to 50Hz).

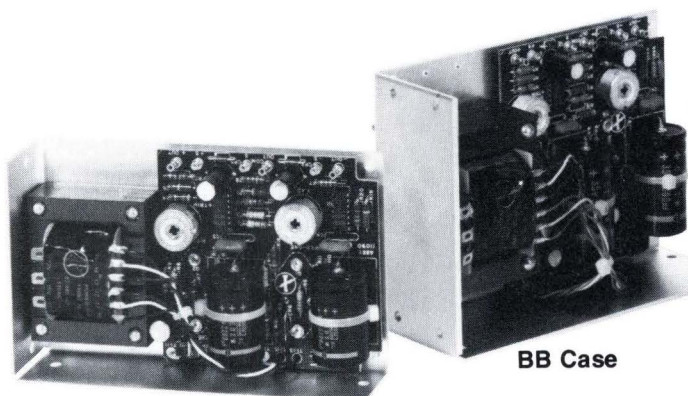
Shock: Per Mil-Std-810B, Method 516, Procedure V.

Master/Slave: RG5-40/OVP, only. May be operated as master or slave. One master unit will drive up to 5 slave units.

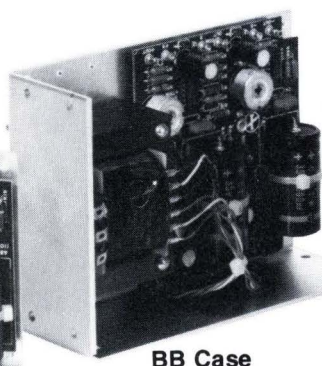
DC Output Current/ Efficiency Chart

MODEL	AC INPUT TAP	DC OUTPUT CURRENT, EFFICIENCY @ NOMINAL LINE			CASE SIZE	PRICE (1-9)
		AC INPUT: 105-125 VAC, STANDARD	AC INPUT: 98-125 VAC, EXTENDED	AC INPUT: 91-125 VAC, EXTENDED		
RD5-15/OVP	A	9A, 66%			D	\$ 99.95
	B	12A, 63%	9A, 64%			
	C	15A, 60%	12A, 58%	9A, 61%		
RE5-23/OVP	A	14A, 63%			E	\$ 130.00
	B	18A, 60%	14A, 61%			
	C	23A, 57%	18A, 55%	14A, 58%		
RG5-40/OVP	A	25A, 63%			G	\$ 220.00
	B	32A, 60%	25A, 61%			
	C	40A, 57%	32A, 55%	25A, 58%		

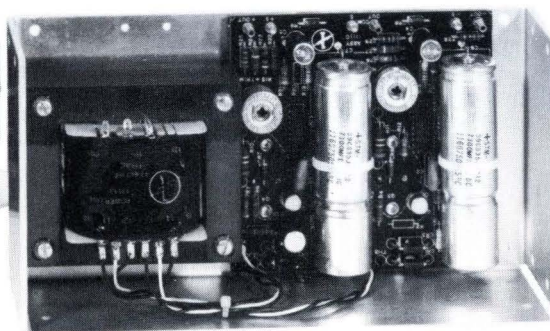
POWER-ONE, INC.



AA Case



BB Case



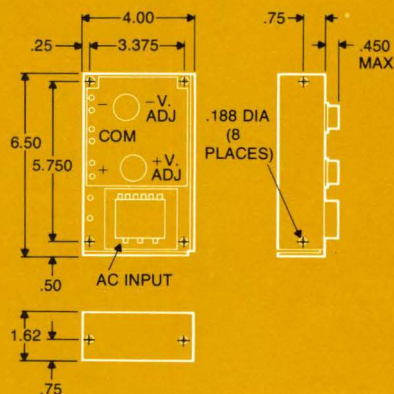
CC Case

Dual Output Standard

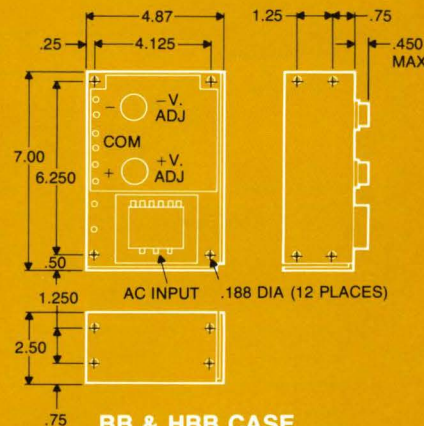
$\pm 0.1\%$ Tracking Accuracy

FEATURES

- TRACKING OUTPUTS
- REMOTE SENSING
- $\pm .02\%$ REGULATION
- FOLDBACK CURRENT LIMIT
- REMOTE PROGRAMMING CAPABILITY
- I.C. REGULATED DESIGN
- TWO HOUR BURN-IN
- TWO YEAR WARRANTY



AA & HAA CASE
Unit Weight 2 lbs



BB & HBB CASE
Unit Weight 4 lbs

DUAL OUTPUT - Standard

Designed for use in applications requiring precise power for operational amplifiers, D to A converters, and linear devices. These models offer $\pm 0.1\%$ output tracking accuracy for maximum longterm stability.

Remote sensing is provided on each output to maintain the highest degree of balance accuracy under varying load current conditions.

Specifications

AC Input:	105-125VAC, 47-440HZ (Derate output current 10% for 50HZ operation).
DC Output:	See Voltage/Current Rating Chart. Adjustment range, $\pm 5\%$ minimum.
Line Regulation:	$\pm .01\%$ for a 10% line change.
Load Regulation:	$\pm .02\%$ for a 50% load change.
Output Ripple:	1.5mv PK-PK, 0.4mv RMS maximum.
Transient Response:	30 μ seconds for 50% load change.
Short Circuit & Overload Protection:	Automatic current limit/foldback.
Reverse Voltage Protection:	Provided on output and pass element.
Remote Sensing:	Provided, open sense lead protection built-in.
Tracking Accuracy:	$\pm 0.1\%$ when balance is set to $\pm .01\%$.
Stability:	$\pm .05\%$ for 24 hours after warm up.

Voltage/Current Rating Chart

MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)
± 12 VOLTS				
AA15-0.8	12/12	1.0/1.0	AA	\$ 42.95
BB15-1.5	12/12	1.7/1.7	BB	53.95
CC15-3	12/12	3.4/3.4	CC	84.95
± 15 VOLTS				
AA15-0.8	15/15	0.8/0.8	AA	\$ 42.95
BB15-1.5	15/15	1.5/1.5	BB	53.95
CC15-3	15/15	3.0/3.0	CC	84.95

Temperature Rating: 0°C to 50°C full rated, derated linearly to 40% at 70°C.

Temperature Coefficient: $\pm .01\%/^{\circ}\text{C}$ maximum, .002% typical.

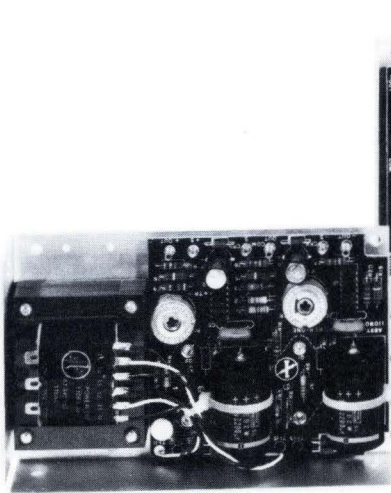
Efficiency: 5V units: 45%, 12 & 15V units: 55%, 20 & 24V units: 60%.

Vibration: Per Mil-Std-810B, Method 514, Procedure 1, Curve AB (to 50HZ).

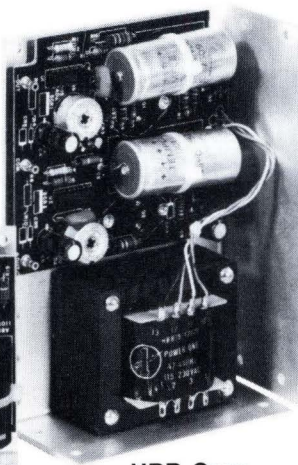
Shock: Per Mil-Std-810B, Method 516, Procedure V.

Optional Overvoltage Protection: Refer to page 14 for specifications.

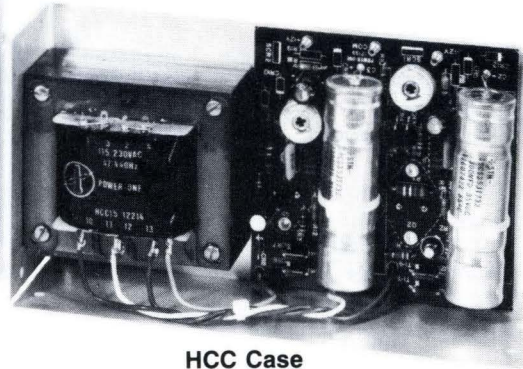
POWER-ONE, INC.



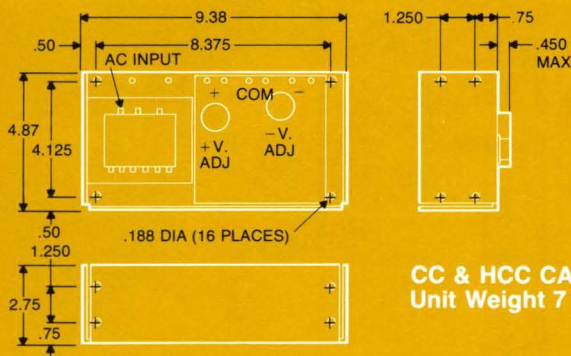
HAA Case



HBB Case



HCC Case



CC & HCC CASE
Unit Weight 7 lbs

Dual Output Hi-Vol

FEATURES

- 115/230 VAC INPUT
- OVP ON 5V OUTPUTS
- $\pm .05\%$ REGULATION
- FOLDBACK CURRENT LIMIT
- I.C. REGULATED DESIGN
- TWO HOUR BURN-IN
- TWO YEAR WARRANTY

Specifications

AC Input: 115/230VAC $\pm 10\%$, 47-440HZ (Derate output current 10% for 50HZ Operation).

DC Output: See Voltage/Current Rating Chart. Adjustment range, $\pm 5\%$ except continuously variable 9V to 15V outputs.

Line Regulation: $\pm .05\%$ for a 10% line change.

Load Regulation: $\pm .05\%$ for a 50% load change.

Output Ripple: 1.5mv PK-PK, 0.4mv RMS maximum.

Transient Response: 30 μ seconds for 50% load change.

Short Circuit & Overload Protection: Automatic current limit foldback. Built-in on 5V outputs. Set at 6.2V $\pm .4V$. Other outputs use optional overvoltage protection. Refer to page 14 for specifications.

OVP:

Stability: $\pm .3\%$ for 24 hours after warm up.

DUAL OUTPUT - Hi-Vol

Offered for use in systems employing TTL, NMOS, PMOS, CMOS, and linear devices where output tracking is not required.

Incorporated in these dual output models are all of the additional standard features of our Hi-Vol Series including 115/230 VAC input capabilities and built-in OVP on all 5V outputs.

Temperature Rating: 0°C to 50°C full rated, derated linearly to 40% at 70°C.

Temp. Coefficient: $\pm .03\%/^{\circ}\text{C}$ maximum.

Efficiency: 5V units: 45%, 12 & 15V units: 55%, 20 & 24V units: 60%.

Vibration: Per Mil-Std-810B, Method 514, Procedure 1, curve AB (to 50HZ).

Shock: Per Mil-Std-810B, Method 516, Procedure V.

Voltage/Current Rating Chart

MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)
± 5 VOLTS				
HBB5-3/OVP	5/5	3.0/3.0	HBB	\$ 61.95
HCC5-6/OVP	5/5	6.0/6.0	HCC	92.95
± 12 to 15 VOLTS				
HAA15-0.8	12-15/12-15	1.0/8/1.0/8	HAA	\$ 39.95
HBB15-1.5	12-15/12-15	1.7/1.5/1.7/1.5	HBB	49.95
HCC15-3.0	12-15/12-15	3.4/3.0/3.4/3.0	HCC	79.95
5 VOLTS and 9-15 VOLTS (ISOLATED OUTPUTS)				
HAA512	5/9-15	2.0/0.5	HAA	\$ 44.95
HBB512	5/9-15	3.0/1.25	HBB	54.95
HCC512	5/9-15	6.0/2.5	HCC	86.95



±0.1% Tracking Accuracy

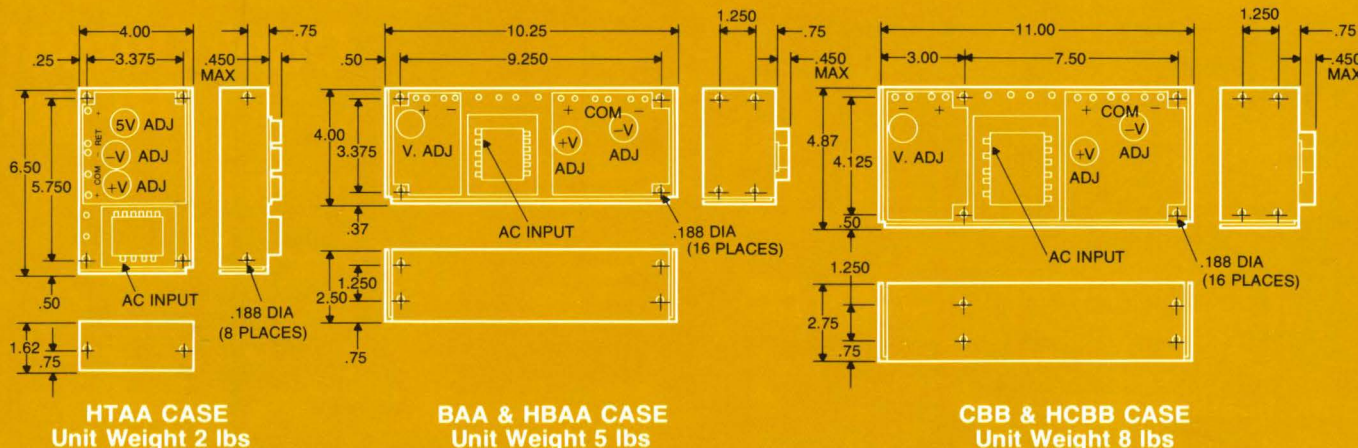
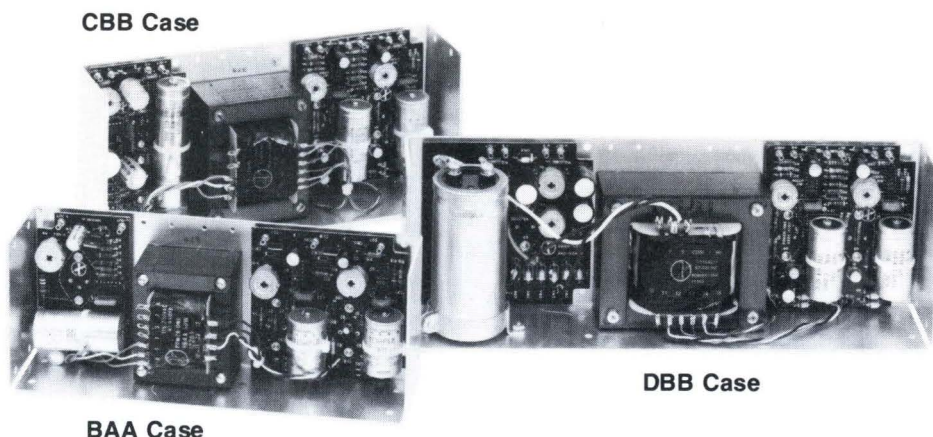
FEATURES

- TRACKING REGULATORS (DUAL OUTPUT SECTION)
- REMOTE SENSING
- REMOTE PROGRAMMING CAPABILITY
- $\pm .02\%$ REGULATION
- FOLDBACK CURRENT LIMIT
- I.C. REGULATED DESIGN
- TWO HOUR BURN-IN
- TWO YEAR WARRANTY

TRIPLE OUTPUT - Standard

Designed to provide precise power for systems using combinations of TTL, ECL, I²L, MOS, linear and other devices. These versatile models provide $\pm 0.1\%$ tracking on all dual

outputs for maximum longterm stability & balance accuracy. Remote sensing is included on all outputs to maintain accurate point of load regulation under dynamic load current conditions.



Specifications

AC Input:	105-125VAC, 47-440HZ (Derate output current 10% for 50HZ operation).
DC Output:	See Voltage/Current Rating Chart. Adjustment range, $\pm 5\%$ minimum.
Line Regulation:	$\pm .01\%$ for a 10% line change.
Load Regulation:	$\pm .02\%$ for a 50% load change.
Output Ripple:	1.5mv PK-PK, 0.4mv RMS maximum.
Transient Response:	30 μ seconds for 50% load change.
Short Circuit & Overload Protection:	Automatic current limit/foldback.
Reverse Voltage Protection:	Provided on output and pass element.

Optional Overvoltage

Protection:	Refer to page 14 for specifications.
Remote Sensing:	Provided, open sense lead protection built-in.
Tracking Accuracy:	$\pm 0.1\%$ when balance is set to $\pm .01\%$.
Stability:	$\pm .05\%$ for 24 hours after warm-up.
Temperature Rating:	0°C to 50°C full rated, derated linearly to 40% at 70°C.

Temperature Coefficient: $\pm .01\%/^{\circ}\text{C}$ maximum, .002% typical.
Efficiency: 5V units: 45%, 12 & 15V units: 55%.

Vibration:

Shock:

Refer to page 14 for specifications.
 Provided, open sense lead
 protection built-in.
 $\pm 0.1\%$ when balance is set to $\pm .01\%$
 $\pm .05\%$ for 24 hours after warm-up.
 0°C to 50°C full rated, derated
 linearly to 40% at 70°C.
 $\pm .01\%/^{\circ}\text{C}$ maximum, .002% typical.
 5V units: 45%, 12 & 15V units: 55%,
 20 & 24V units: 60%.
 Per Mil-Std-810B, Method 514,
 Procedure 1, curve AB (to 50HZ).
 Per Mil-Std-810B, Method 516,
 Procedure V.

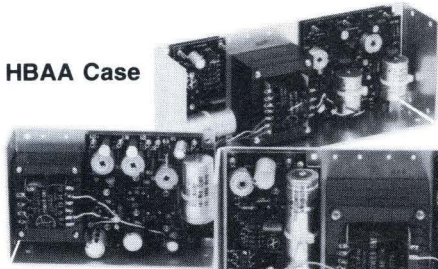
Voltage/Current Rating Chart

MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)
5 VOLTS and ± 12 VOLTS				
BAA-40W	5/12/12	3.0/1.0/1.0	BAA	\$ 69.95
CBB-75W	5/12/12	6.0/1.7/1.7	CBB	91.95
DBB-105W	5/12/12	12.0/1.7/1.7	DBB	126.95
5 VOLTS and ± 15 VOLTS				
BAA-40W	5/15/15	3.0/0.8/0.8	BAA	\$ 69.95
CBB-75W	5/15/15	6.0/1.5/1.5	CBB	91.95
DBB-105W	5/15/15	12.0/1.5/1.5	DBB	126.95

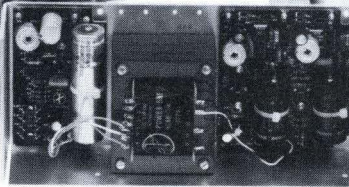
NEW MODEL CP-131

New High-Reliability triple output model for new and existing applications using this Industry Standard package size.

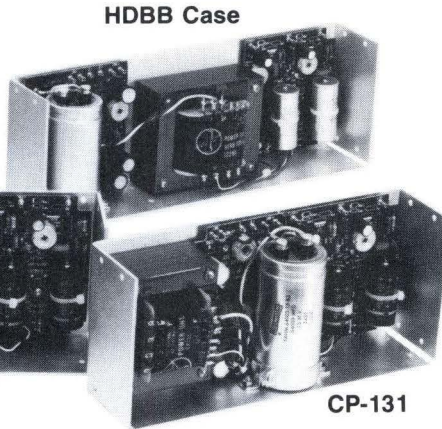
HBAA Case



HTAA Case



HCBB Case



CP-131

HDBB Case

Triple Output Hi-Vol

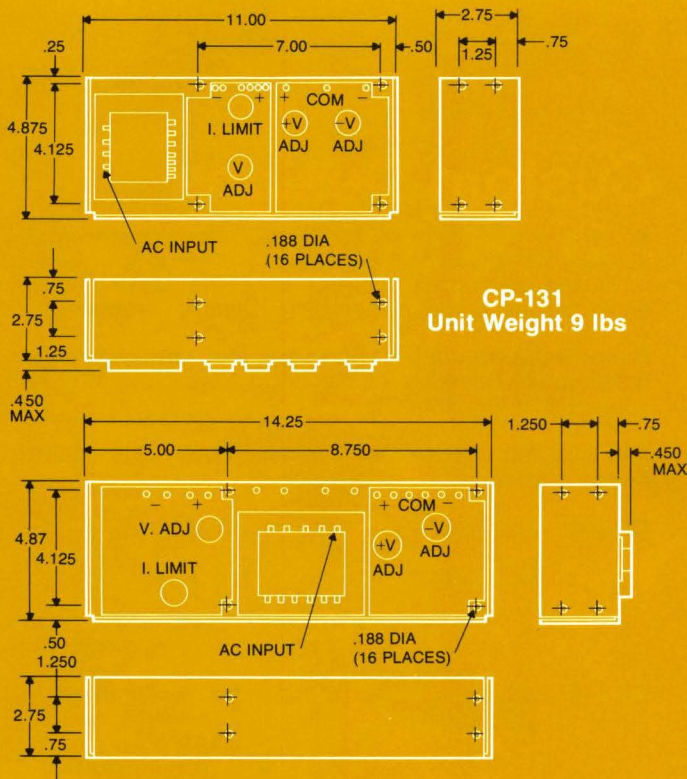
FEATURES

- 115/230 VAC INPUT
- OVP ON 5V OUTPUTS
- $\pm .05\%$ REGULATION
- FOLDBACK CURRENT LIMIT
- I.C. REGULATED DESIGN
- TWO HOUR BURN-IN
- TWO YEAR WARRANTY

TRIPLE OUTPUT - Hi-Vol

Suggested for use in applications using logic, memory, interface, and linear devices where output tracking is not required.

These versatile triple output models include all of the standard features of our Hi-Vol Series. Among these are built-in OVP on all 5V outputs, and 115/230 VAC input capabilities.



CP-131
Unit Weight 9 lbs

DBB & HDBB CASE
Unit Weight 11 lbs

Specifications

AC Input:

115/230VAC $\pm 10\%$, 47-440HZ
(Derate output current 10% for 50HZ operation).

DC Output:

See Voltage/Current Rating Chart.
Adjustment range, $\pm 5\%$ except continuously variable 9V to 15V outputs.

Line Regulation:

$\pm .05\%$ for a 10% line change.

Load Regulation:

$\pm .05\%$ for a 50% load change.

Output Ripple:

1.5mv PK-PK, 0.5mv RMS maximum.

Transient Response:

30 μ seconds for 50% load change.

Short Circuit & Overload Protection:

Automatic current limit/foldback. Provided on 5V outputs. Set at 6.2V $\pm .4V$. Other outputs use optional overvoltage protection. Refer to page 14 for specifications.

OVP:

Remote Sensing:

Provided on 5v, 12A output, open sense lead protection built-in.

Stability:

$\pm .3\%$ for 24 hours after warm-up.

Temperature Rating:

0°C to 50°C full rated, derated linearly to 40% at 70°C.

Temperature Coefficient:

$\pm .03\%/^{\circ}\text{C}$ maximum.

Efficiency:

5V units: 45%, 12 & 15V units: 55%, 20 & 24V units: 60%.

Vibration:

Per Mil-Std-810B, Method 514, Procedure 1, curve AB (to 50HZ).

Shock:

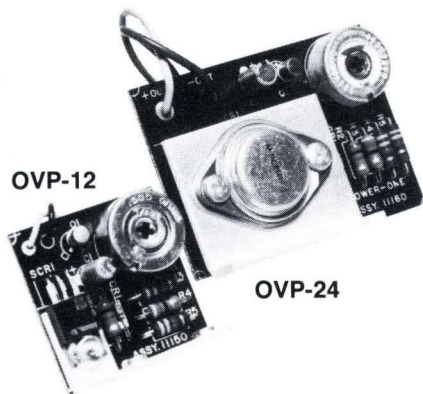
Per Mil-Std-810B, Method 516, Procedure V.

Voltage/Current Rating Chart

MODEL	VOLTAGE (Volts)	CURRENT (Amps)	CASE SIZE	PRICE (1-9)
5 VOLTS and ± 12 VOLTS				
HBAA-40W	5/12/12	3.0/1.0/1.0	HBAA	\$ 69.95
HCBB-75W	5/12/12	6.0/1.7/1.7	HCBB	91.95
CP-131	5/12/12	8.0/1.7/1.7	CP-131	110.00
HDBB-105W	5/12/12	12.0/1.7/1.7	HDBB	126.95
5 VOLTS and ± 15 VOLTS				
HBAA-40W	5/15/15	3.0/0.8/0.8	HBAA	\$ 69.95
HCBB-75W	5/15/15	6.0/1.5/1.5	HCBB	91.95
CP-131	5/15/15	8.0/1.5/1.5	CP-131	110.00
HDBB-105W	5/15/15	12.0/1.5/1.5	HDBB	126.95
5 VOLTS and $\pm 9-15$ VOLTS				
HTAA-16W	5/9-15/9-15	2/2/2	HTAA	\$ 49.95

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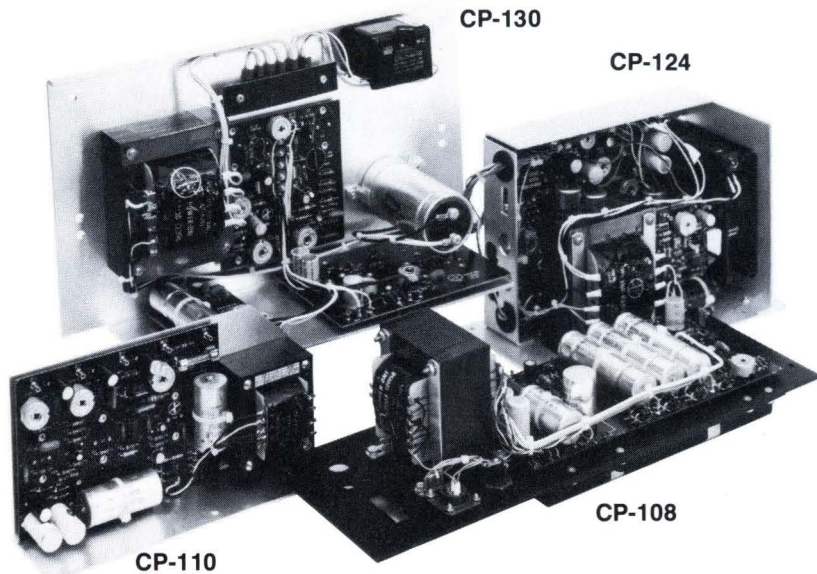
OVP-12



OVP-24

CP-130

CP-124



CP-110

CP-108

Overvoltage Protection

These optional Overvoltage Protection modules are available for use with any power supply NOT supplied with built-in OVP. Each is adjustable from 6.4V to 36V and should be used when maximum load protection is of prime importance.

Mounting holes are provided on all chassis for these modules, which mount within the specified outline dimensions of each power supply.

		Price (1-9)
OVP-12	For use on all models except E & F case sizes. When used on $\pm 9V$ thru $\pm 15V$ models, one OVP-12 protects both outputs.	\$ 7.95
OVP-24	For use on E & F case models.	\$14.95

Modified Standard Products

Upon request, any of Power-One's standard power supplies may be modified to meet special requirements. As an example, these modifications may involve DC output voltages or current, AC input characteristics, chassis components, mounting facilities, markings, transformer shielding, etc.

Contact Power-One or your local factory representative for more information.

Custom Designs

Power-One is an experienced manufacturer of custom power supplies for high quantity applications requiring special electrical and mechanical configurations. We excel at open-frame multiple output designs, regulated or unregulated.

Power-One's Applications Engineers are always available to assist you in selecting the most cost effective approach to your custom requirements.

The following examples demonstrate Power-One's custom design capabilities:

CP-108	AC Input:	100/118/200/236 VAC $\pm 10\%$, 47-63Hz.
	DC Outputs:	+5V @ 11A w/OVP $\pm 15V$ @ 0.3A -12V @ 0.1A +12V @ 1A unregulated
CP-110	AC Input:	115/230 VAC $\pm 10\%$, 47-63Hz.
	DC Outputs:	-10V @ 2A w/OVP $\pm 12V$ @ 0.1A +80V @ 0.25A unregulated
CP-124	AC Input:	115 VAC +10%, -20%, 47-63Hz.
	DC Outputs:	+5V @ 8A w/OVP +12V @ 2.1A -12V @ 0.5A +30V @ 2A +250V @ 32ma
CP-130	AC Input:	115/230 VAC $\pm 10\%$, 47-63Hz.
	DC Outputs:	+5V @ 18A w/OVP -9V @ 1A -12V @ 3A w/OVP +8.5V @ 0.2A

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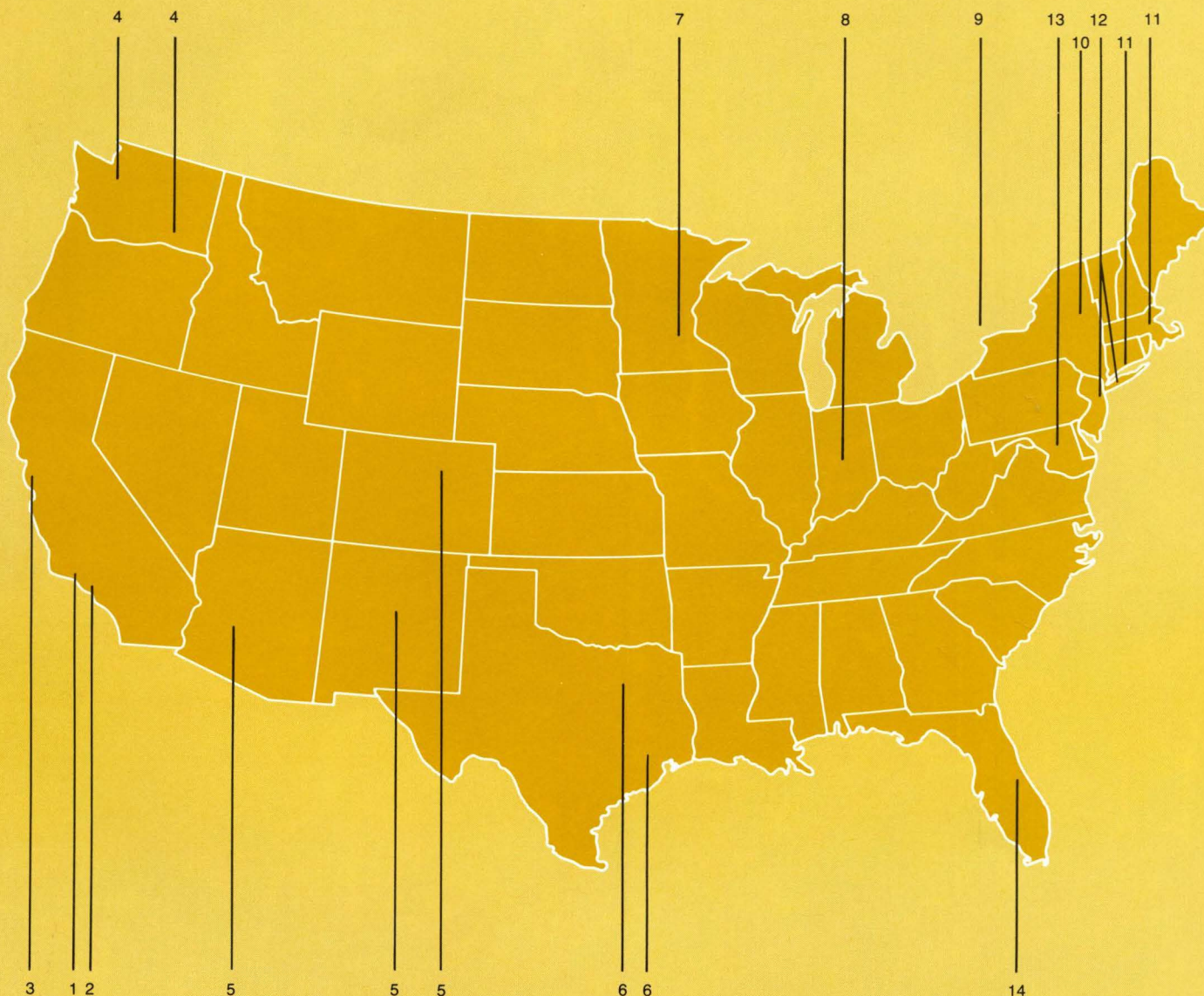
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