

PC and Chassis Mount Triple Out to 9.5W Microminiature

TM



'Computer perfected power'

Microminiature

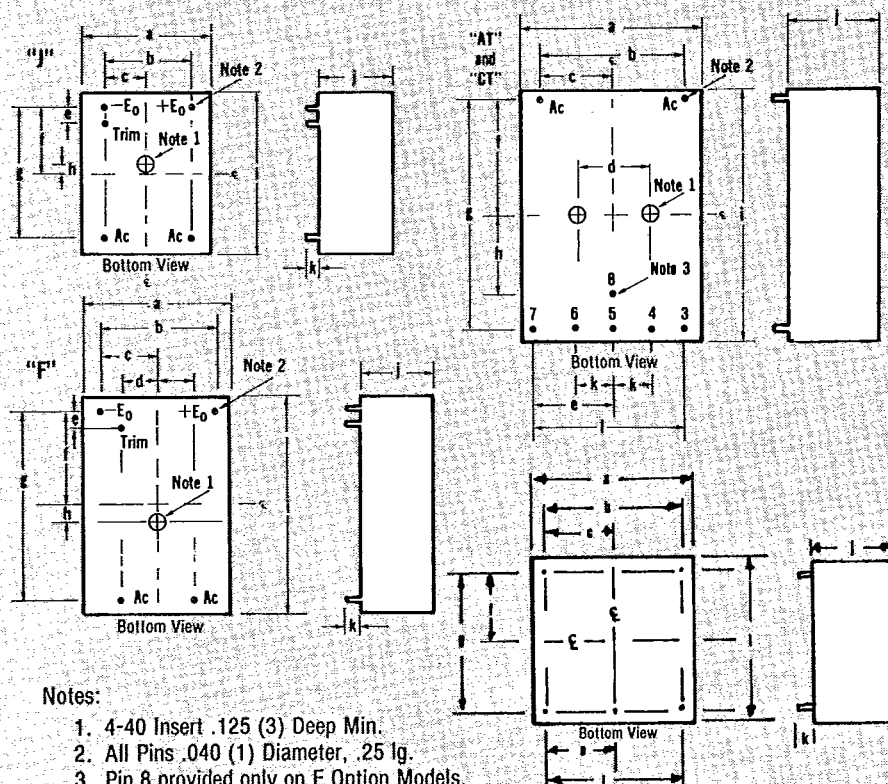
Voltage	Current	Case Config.	MIL #
3.6	250 ma	F	I3.6SF25
5	250 ma	F	I5SF25
6	200 ma	F	I6SF20
3.6	250 ma	G	I3.6SG25
5	250 ma	G	I5SG25
10	120 ma	G	I10SG12
12	100 ma	G	I12SG10
15	100 ma	G	I15SG10
10	120 ma	J	I10SJ12
12	100 ma	J	I12SJ10
15	100 ma	J	I15SJ10
18	65 ma	J	I18SJ06
20	60 ma	J	I20SJ06
24	50 ma	J	I24SJ05
28	40 ma	J	I28SJ04

Triple Output

Voltage	Current	Case Config.	MIL #
$\pm 12, +5$	$\pm 150, +300$ ma	AT	I12TA15/30
$\pm 12, +5$	$\pm 180, +300$ ma	AT	I12TA18/30
$\pm 12, +5$	$\pm 100, +500$ ma	AT	I12TA10/50
$\pm 12, +5$	$\pm 150, +500$ ma	AT	I12TA15/50
$\pm 12, +5$	$\pm 100, +750$ ma	CT	I12TC10/75
$\pm 12, +5$	$\pm 100, +1000$ ma	CT	I12TC10/1A
$\pm 12, +5$	$\pm 150, +1000$ ma	CT	I12TC15/1A
$\pm 15, +5$	$\pm 150, +300$ ma	AT	I15TA15/30
$\pm 15, +5$	$\pm 100, +500$ ma	AT	I15TA10/50
$\pm 15, +5$	$\pm 100, +750$ ma	CT	I15TC10/75
$\pm 15, +5$	$\pm 100, +1000$ ma	CT	I15TC10/1A
$\pm 15, +5$	$\pm 150, +1000$ ma	CT	I15TC15/1A

*For chassis mount option add Suffix T (refer to page 10)

DIMENSIONS



CONNECTIONS

Triple Output - Standard
Pin 3 Common Out *

Triple Output - P/W Option
(see page 10)

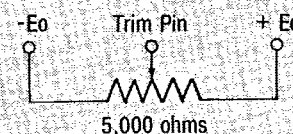
4 + 5 Vdc Out
5 - 12/- 15 Vdc Out
6 Common Out*
7 + 12/+ 15 Vdc Out
8 Faraday Shield**

* Commons internally connected

** F option only

Microminiature

(See drawings for connections)

For $\pm 5\%$ trim adjust:

OPTIONS AND ACCESSORIES

Options:

Complete listing and description on page 10.
Specify each as a suffix separated by slash marks, i.e. model #/Option 1/Option 2/etc.
Consult factory for availability on specific models.

Mating Sockets:

Available for all PC mount models.
See page 9 or consult factory.

	a	b	c	d	e	f	g	h	i	j	k	l
F In(mm)	2.00 (51)	1.60 (40.6)	.80 (20.3)	.50 (12.7)	.40 (10)	1.30 (33)	2.60 (66)	.25 (6.3)	3.00 (76.2)	1.00 (25.4)	.25 (6.3)	
n(mm)	2.0 (50.8)	1.66 (42.2)	.83 (21.1)		.85 (21.6)	.85 (21.6)	1.7 (43.2)		2.0 (50.8)	1.0 (25.4)	.25 (6.35)	1.7 (43.2)
J In(mm)	1.75 (44.4)	1.20 (30.5)	.60 (15.2)		.20 (5)	.92 (23.5)	1.8 (45.7)	.125 (3)	2.25 (57)	1.00 (25.4)	.25 (6.3)	
AT In(mm)	2.5 (64)	2.0 (51)	1.0 (25.5)	1.0 (25.5)	1.1 (28)	1.6 (40.6)	3.2 (81)	1.1 (28)	3.5 (89)	1.25 (32)	.55 (14)	2.2 (56)
CT In(mm)	2.5 (64)	2.0 (51)	1.0 (25.5)	1.0 (25.5)	1.1 (28)	1.6 (40.6)	3.2 (81)	1.1 (28)	3.5 (89)	1.59 (41)	.55 (14)	2.2 (56)

Contact factory for other output voltages/currents not listed.

T-90-40

T-90-20

Reliable by Design

Reliability is a function of design. At MIL Electronics, we design power supplies that circumvent the three major causes of power supply failure: component stress level, workmanship, and component failure rate.

Computer Modeling Circumvents Overstress

Overstress frequently occurs when a power supply designer fails to particularly consider temperature rise inside a densely designed housing. Sustained overload and high line voltage are major contributors to temperature overstress.

MIL's proprietary computer model assures that device temperature and voltages are always well below the maximum safe operating level under continuous extreme conditions.

Quality Control Commitment

Workmanship problems usually result when something touches something it shouldn't within the tight confines of a

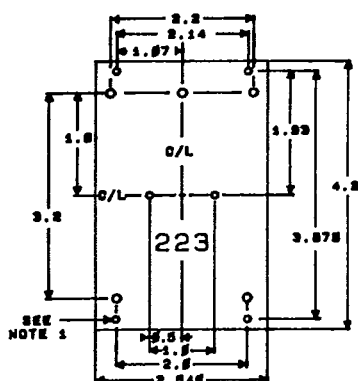
power supply package. At MIL, a 100% statistical performance-feedback is conducted at our computerized test station on every power supply, at each critical stage of its manufacture. The combination of optimum design and 100% computer test is so effective that MIL yields now exceed 99.7% at 100% final test.

24-Hour Burn-In

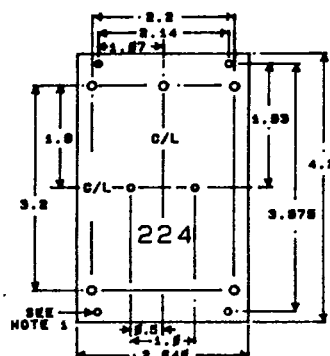
Component failure rate relates to the inherent reliability of the components themselves. The highest failure rates usually occur in the first few hours of component operation, and drop dramatically afterwards.

Consequently, MIL burns in each power supply for 24 hours before running final test. By cutting in-process failure rate and customer returns, and increasing yield, MIL is able to hold the line on cost, which helps to hold the line on price.

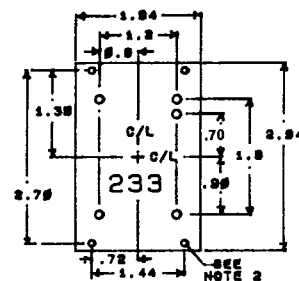
MATING SOCKET



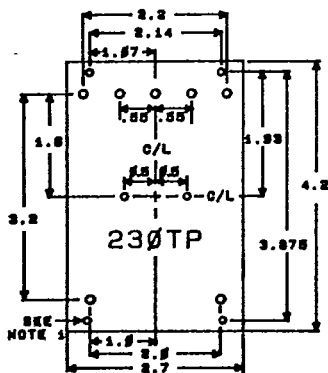
SINGLE & DUAL OUTPUTS
2" INPUT PIN SPACING
A, B, & C CASES



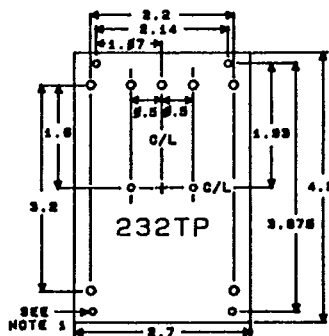
SINGLE & DUAL OUTPUTS
2.2" INPUT PIN SPACING
A, B, & C CASES



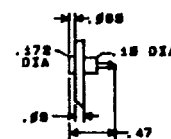
SINGLE OUTPUT
J CASE



TRIPLE OUTPUT STD
2" INPUT PIN SPACING
A, B, & C CASES



TRIPLE OUTPUT
PW OPT. (REF PG10)
2.2" INPUT PIN SPACING
A, B, & C CASES



PARTIAL SIDE VIEW

NOTES:

1. SIX MOUNTING HOLES $\phi .14$ DIA
2. FOUR MOUNTING HOLES $\phi .14$ DIA

T-90-20

Options

TM

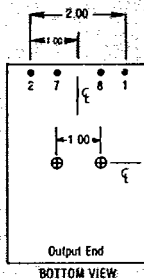
'Computer perfected power'

K2 - 105 to 125/210 to 250 Vac Input

User-selectable input ranges of 105 to 125 or 210 to 250 Vac (2.5W x 3.5L pkgs. only)

K2 - PC Mount

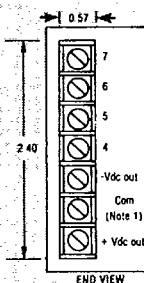
- 110 Vac:
1. Jumper 1 and 7
2. Jumper 2 and 8
3. Apply AC to 1 and 8
220 Vac:
1. Jumper 2 and 7
2. Apply AC to 1 and 8



K2 - Chassis Mount

(Singles, Duals, "T" Option)

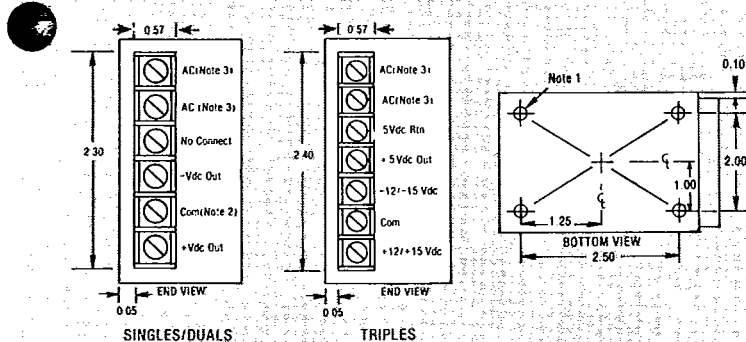
- 110 Vac:
1. Jumper 7 and 6
2. Jumper 5 and 4
3. Apply AC to 7 and 4
220 Vac:
1. Jumper 6 and 5
2. Apply AC to 7 and 4
Note 1: No connection internally- Single outputs



T - Terminals

Chassis mount with power entry/exit via end-mounted screw terminal block (2.5 W x 3.5 L pkgs. only)

T - Connections/Dimensions



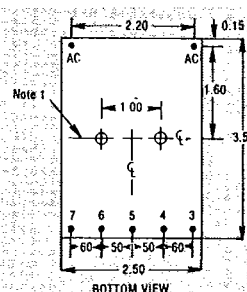
- Note 1: 4-40 Mounting Insert (4 places)
2: No connection internally - single outputs
3: For 220 Vac, add K option. For 110/220 Vac, add K2 option and see K2 - Chassis Mount for connections.

P/W - Alternative Triple Output Model

Another industry standard triple output pin configuration and spacing. Provides isolation between 5Vdc Rtn and dual 12/15 Vdc Common of 300 Vdc (see cross reference chart on page 8).

P/W - Connections/Dimensions

- Pin 3 -12/-15 Vdc out
4 5 Vdc return
5 12/15 Vdc common
6 +5 Vdc out
7 +12/+15 Vdc out
Note 1: 4-40 Mounting Insert (2 places)



K1 - 220 to 260 Vac Input

Provides an input range of 220 to 260 Vac.

K - 200 to 252 Vac Input

Provides an input range of 200 to 252 Vac.

N - 90 to 110 Vac Input

Provides an input range of 90 to 110 Vac.

W - Widely-Spaced AC Input (2.2")

Alternative industry standard pin-out and spacing (see cross reference chart on page 8).

OV - Overvoltage Protection

Crowbar overvoltage protection set at 6.2 Vdc + 0.4 Vdc for 5 Volt outputs. Consult factory for other voltage thresholds.

F - Faraday Shield

Specially shielded transformer minimizes leakage current to less than 20 micro-amperes at 60 hz. Pin 6 (singles, duals) and pin 8 (triples) appear on PC mount units to allow direct shield connection. Consult product pages for pin location.

SB - Split Bobbin

Provides higher isolation and low leakage current.

NOTE: Terminal block drawings for reference only and not drawn to scale.