

T-57-05

# PC and Chassis Mount Single, Dual Out to 15W

## Single Output

Voltage	Current	Case Config.	MIL #	Voltage	Current	Case Config.	MIL #	Voltage	Current	Case Config.	MIL #
5	250 ma	B	I5SB25	10	250 ma	B	I10SB25	20	100 ma	B	I20SB10
5	500 ma	B	I5SB50	10	500 ma	A	I10SA50	20	200 ma	A	I20SA20
5	1000 ma	A	I5SA1A	12	250 ma	B	I12SB25	24	100 ma	B	I24SB10
5	2000 ma	C	I5SC2A	12	500 ma	A	I12SA50	24	200 ma	A	I24SA20
6	450 ma	B	I6SB45	15	200 ma	B	I15SB20	28	100 ma	B	I28SB10
6	900 ma	A	I6SA90	15	500 ma	A	I15SA50	28	200 ma	A	I28SA20
8	350 ma	B	I8SB35	18	100 ma	B	I18SB10				
8	700 ma	A	I8SA70	18	200 ma	A	I18SA20				

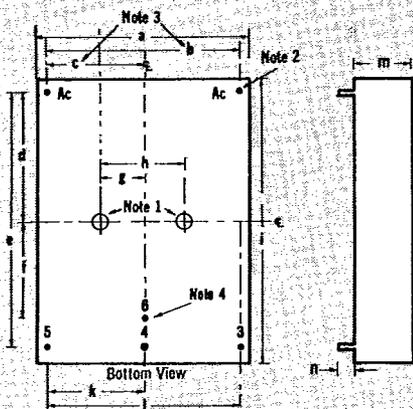
## Dual Output

Voltage	Current	Case Config.	MIL #	Voltage	Current	Case Config.	MIL #	Voltage	Current	Case Config.	MIL #
± 12	± 30 ma	B	I12DB03	± 15	± 65 ma	B	I15DB06	± 18	± 200 ma	A	I18DA20
± 12	± 50 ma	B	I12DB05	± 15	± 100 ma	B	I15DB10	± 20	± 80 ma	B	I20DB08
± 12	± 120 ma	B	I12DB12	± 15	± 200 ma	A	I15DA20*	± 20	± 200 ma	C	I20DC20
± 12	± 240 ma	A	I12DA24	± 15	± 350 ma	C	I15DC35	± 24	± 50 ma	B	I24DB05
± 12	± 300 ma	C	I12DC30	± 18	± 30 ma	B	I18DB03	± 24	± 100 ma	A	I24DA10
± 12	± 400 ma	C	I12DC40	± 18	± 50 ma	B	I18DB05	± 28	± 200 ma	C	I28DC20
± 15	± 30 ma	B	I15DB03	± 18	± 100 ma	A	I18DA10*				

\* For Chassis Mount Option add Suffix T (refer to page 10)

T Option may require next higher case size (consult factory)

### DIMENSIONS



Notes:

1. 4-40 Insert .125 (3) Deep Min.
2. All Pins .040 Diameter
3. Suffix W: Dimension b = 2.2 (56)  
c = 1.1 (28)
4. Pin 6 provided only on F option models.

See columns a, i, and m below for package outline.

### CONNECTIONS

Single Outputs - Standard	Single Outputs - W Option Only	Dual Outputs - Standard and W Option
Pin 3 - Vdc Out	Pin 3 No Connect	Pin 3 - Vdc Out
4 No Connect	4 - Vdc Out	4 Common Out
5 + Vdc Out	5 + Vdc Out	5 + Vdc Out
6 Faraday Shield*	6 Faraday Shield*	6 Faraday Shield*

\* F Option Only

### 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.

Mating Sockets:

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

\* UL Recognized. Contact factory for complete listing.

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
A In(mm)	2.5 (64)	2.0 (51)	1.0 (25.5)	1.6 (40.6)	3.2 (81)	1.1 (28)	.5 (12.5)	1.0 (25.4)	3.5 (89)		1.1 (28)	2.2 (56)	1.25 (32)	.25 (6.3)
B In(mm)	2.5 (64)	2.0 (51)	1.0 (25.5)	1.6 (40.6)	3.2 (81)	1.1 (28)	.5 (12.5)	1.0 (25.4)	3.5 (89)		1.1 (28)	2.2 (56)	.88 (22)	.25 (6.3)
C In(mm)	2.5 (64)	2.0 (51)	1.0 (25.5)	1.6 (40.6)	3.2 (81)	1.1 (28)	.5 (12.5)	1.0 (25.4)	3.5 (89)		1.1 (28)	2.2 (56)	1.59 (41)	.25 (6.3)

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

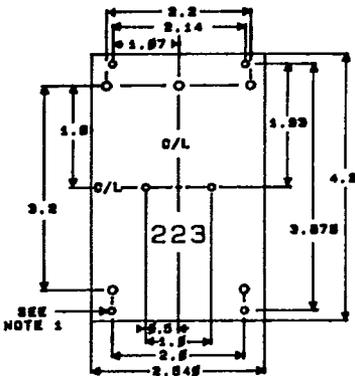
power supply package. At MIL, a 100% statistical performance-feedback is conducted at our computerized test station on every power supply, at each critical stage of its manufacture. The combination of optimum design and 100% computer test is so effective that MIL yields now exceed 99.7% at 100% final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

### 24-Hour Burn-In

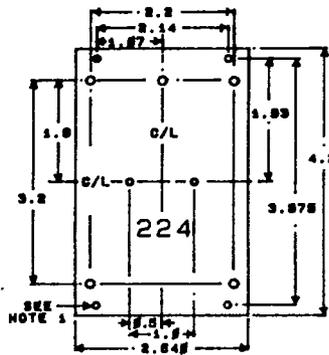
Component failure rate relates to the inherent reliability of the components themselves. The highest failure rates usually occur in the first few hours of component operation, and drop dramatically afterwards.

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.

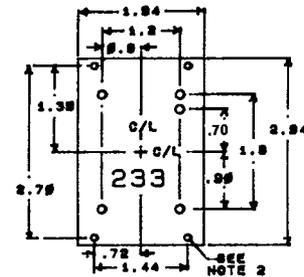
## MATING SOCKET



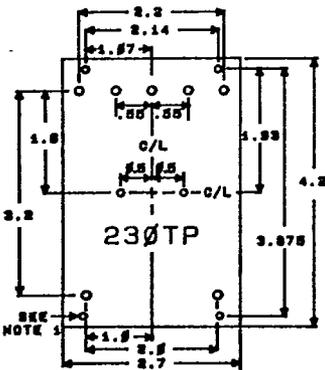
SINGLE & DUAL OUTPUTS  
2" INPUT PIN SPACING  
A, B, & C CASES



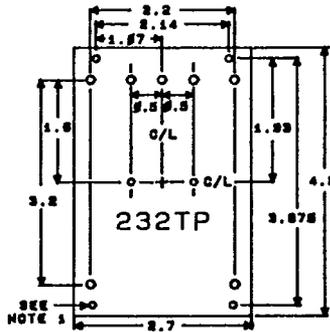
SINGLE & DUAL OUTPUTS  
2.2" INPUT PIN SPACING  
A, B, & C CASES



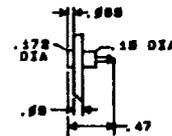
SINGLE OUTPUT  
J CASE



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



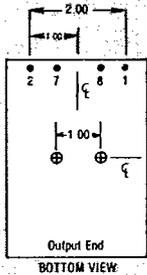
'Computer perfected power'

## 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

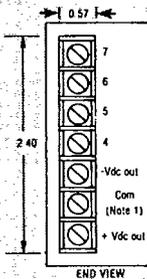
- 110 Vac:  
 1. Jumper 1 and 7  
 2. Jumper 2 and 8  
 3. Apply AC to 1 and 8
- 220 Vac:  
 1. Jumper 2 and 7  
 2. Apply AC to 1 and 8



### 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



## 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.

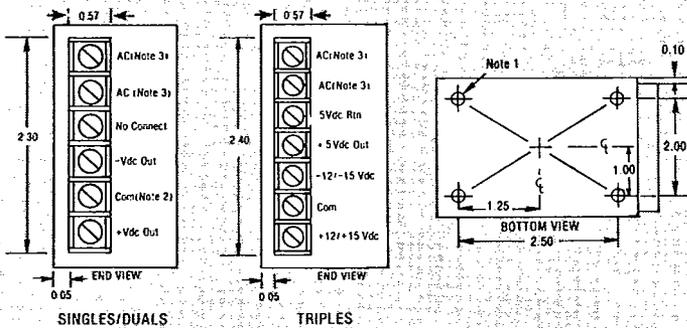
## N - 90 to 110 Vac Input

Provides an input range of 90 to 110 Vac.

## 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.

## 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

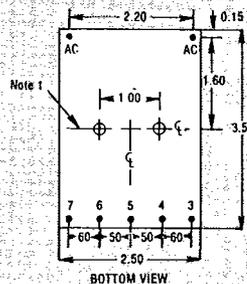
Specially shielded transformer minimizes leakage current to less than 20 microamperes at 60 hz. Pin 6 (singles, duals) and pin 8 (triples) appear on PC mount units to allow direct shield connection. Consult product pages for pin location.

## 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)



## SB - Split Bobbin

Provides higher isolation and low leakage current.

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