

# SORENSEN

## NMS Series: Single Output NMD Series: Dual Output

T-57-05

### ELECTRICAL

**Input Voltage:** 105 to 125 Vac, 50 Hz to 440 Hz std.

**Output Voltage Set Accuracy:** ±.5%

**Load Regulation:** 0.1% of V out (no load to full load)<sup>1</sup>

**Line Regulation:** 0.05% of V out (low line to high line)

**Ripple:** 1 mV p-p max.<sup>2</sup>

**Transient Response:** 1 mV p-p for less than 1 μsec.

**Temperature Coefficient:** .02%/°C

**Isolation Resistance Input to**

**Output:** Greater than 500 megohms.

**Hi Pot Input To Output:** 1750 Vrms (2500 Vdc)

**Current Foldback/Short Circuit Prot.:** (Standard all models).

### ENVIRONMENTAL

**Ambient Operating Temperature**

**Range:** -25°C to +70°C

**Storage Temperature:** -40°C to +85°C

### MECHANICAL

**Case:** Bakelite/Diallylphthalate, Black

**Encapsulation:** Epoxy

**Mounting:** Two 4-40 Inserts (PC Mount.)

Four 4-40 Inserts (Chassis mount.)

### Connections:

1. P.C. Pins, .250 Long Min.
2. Terminal Blocks, only on chassis mount units

### NMS Single Outputs— PC Mount

SORENSEN P/N	Voltage	Current	Case Config.
NMS 5-.250	5	250 ma	B
NMS 5-.500	5	500 ma	B
NMS 5-1.00	5	1000 ma	A
NMS 5-2.00	5	2000 ma	C
NMS 15-.200	15	200 ma	B
NMS 15-.500	15	500 ma	A

### NMD Dual Output— PC Mount

SORENSEN P/N	Voltage	Current	Case Config.
NMD 15-.030	± 15	± 30 ma	B
NMD 15-.065	± 15	± 65 ma	B
NMD 15-.100	± 15	± 100 ma	B
NMD 15-.200*	± 15	± 200 ma	A
NMD 15-.350	± 15	± 350 ma	C

### CONNECTIONS

Single Outputs— Pin 3 No Connect 4— Vdc Out 5 + Vdc Out 6 Faraday Shield*	Dual Outputs— Pin 3—Vdc Out 4 Common Out 5 + Vdc Out 6 Faraday Shield*
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\*M6 Option Only

### OPTIONS

M2 200-252 Vac Input  
M3 105-125/210-250 Vac Input  
M5 Terminals  
M6 Faraday Shield  
M7 Overvoltage Protection

\*UL Recognized. Consult factory for complete listing.

### NOTES:

1. 0.2% for some high I, 5V models.
2. Dc to 1 MHz bandwidth. 2 mV p-p for outputs above 20 Vdc.

# KMS Series: Microminiature NMT Series: Triple Output DMS Series: Single Output DMD Series: Dual Output

T-57-05

## KMS Microminiature— PC Mount\*\*\*

SORENSEN P/N	Voltage	Current	Case Config.
KMS 5-.250	5	250 ma	F
KMS 12-.100	12	100 ma	J
KMS 15-.100	15	100 ma	J
KMS 24-.050	24	50 ma	J
KMS 28-.040	28	40 ma	J

\*\*\*Accepts M2, M6 & M7 options.

## NMT Triple Output— PC Mount†

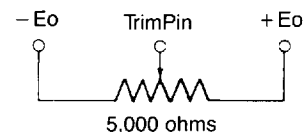
SORENSEN P/N	Voltage	Current	Case Config.
NMT 250/100	± 15, +5	± 100, + 250 ma	AT
NMT 500/100	± 15, +5	± 100, + 500 ma	AT
NMT 750/100	± 15, +5	± 100, + 750 ma	CT

†Accepts all options.

## CONNECTIONS

Triple Output—Standard:  
Pin 3—12/-15 Vdc Out  
4 + 5 Vdc Return  
5 Common Out  
6 + 5 Vdc Out  
7 + 12/+ 15 Vdc Out  
8 Faraday Shield\*\*

\*\*M6 Option Only Microminiature  
(See drawings for connections)  
For + 5% trim adjust:



## OPTIONS

- M2 200-252 Vac Input
- M3 105-125/210-250 Vac Input
- M5 Terminals
- M6 Faraday Shield
- M7 Overvoltage Protection

## DMS Single Output— Chassis Mount

SORENSEN P/N	Voltage	Current	Case Config.
DMS 5-.500	5	500 ma	E
DMS 5-1.00	5	1000 ma	E
DMS 5-2.00	5	2000 ma	D
DMS 5-3.00	5	3000 ma	D

All input/output connections are via terminal strip.

## DMD Dual Output— Chassis Mount

SORENSEN P/N	Voltage	Current	Case Config.
DMD 15-.100	± 15	± 100 ma	E
DMD 15-.200	± 15	± 200 ma	E
DMD 15-.350	± 15	± 350 ma	D
DMD 15-.500	± 15	± 500 ma	D

All input/output connections are via terminal strip.

## OPTIONS:

- M2 200-252 Vac Input
- M3 105-125/210-250 Vac Input
- M6 Faraday Shield
- M7 Overvoltage Protection

## CONNECTIONS

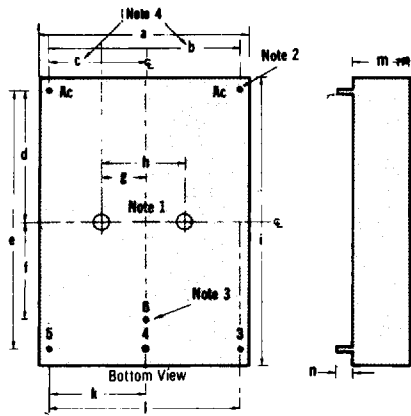
Pin	Single/ Dual	Option M3 Single/ Dual	Option M6 Single Only	Options M3 & M6 Single Only?	Option M7
1	+ VDC	+ VDC	+ VDC	+ VDC	
2	COM VDC	COM VDC	COM VDC	COM VDC	
3	-VDC	-VDC	SHIELD	SHIELD	
4	N.C.	AC IN	N.C.	AC IN	
5	AC IN	AC IN	AC IN	AC IN	
6	AC IN	AC IN	AC IN	AC IN	
7	N.C.	AC IN	N.C.	AC IN	

1. For 110 VAC—Jump 7 & 6, Jump 4 & 5; 7 & 4 are AC IN. For 220 VAC—Jump 6 & 5, 7 & 4 (AC IN). 2. For 110 VAC—Jump 7 & 6, Jump 4 & 5; 7 & 4 are AC IN. For 220 VAC—Jump 6 & 5, 7 & 4 are AC IN.

**SORENSEN**

**Miniature Encapsulated  
Linear Power Supplies  
Dimensional Drawings**

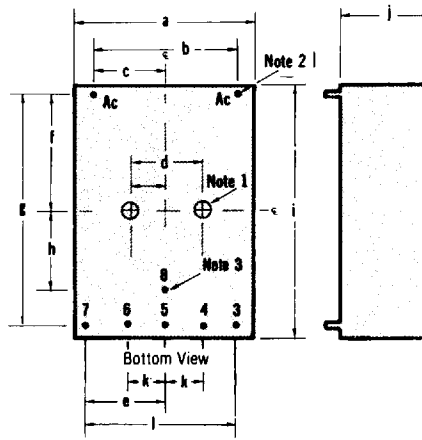
**CASE A, B & C**



**Notes:**

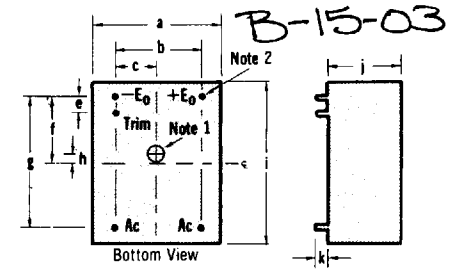
1. 4-40 insert .125 (3) Deep Min.
  2. All Pins .040 Diameter
  3. Pin 6 provided only on M6 option models.
  4. Optional pin spacing available at no charge.
- See columns a, i, and m below for package outlines.

**CASE AT & CT**

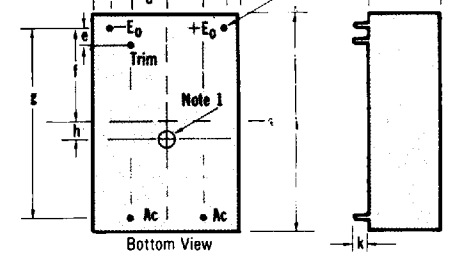


**CASE CONFIGURATIONS**

**CASE J**



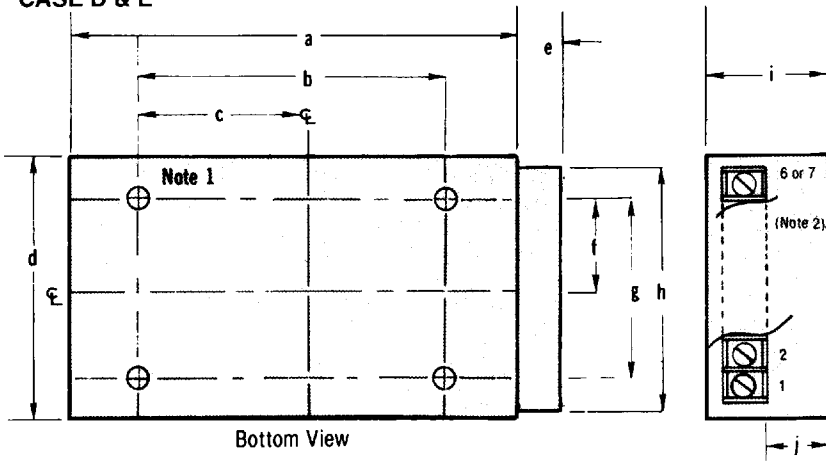
**CASE F**



**Notes:**

1. 4-40 Insert .125 (3) Deep Min.
  2. All Pins .040 (1) Diameter, .25 lg.
  3. Pin 8 provided only on M6 Option Models.
  4. Optional pin spacing available at no charge.
- See columns a, i and j below for package outlines.

**CASE D & E**



**Notes:**

1. 4-40 Inserts .125 (3) Deep Min. (4 places).
  2. Singles/Duals-6 terminals.
- See columns a, d, and i for package outlines.

Case	a	b	c	d	e	f	g	h	i	j	k	l	m	n
<b>A in(mm)</b>	2.5(64)	2.2(56)	1.1(28)	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>B in(mm)</b>	2.5(64)	2.2(56)	1.1(28)	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)
<b>C in(mm)</b>	2.5(64)	2.2(56)	1.1(28)	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(51)	.25(6.3)
<b>J in(mm)</b>	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)		
<b>F in(mm)</b>	2.00(51)	1.60(40.6)	.80(20.3)	.50(12.7)	.20(5)	1.30(33)	2.60(66)	.25 (6.3)	3.00(76.2)	1.00(25.4)	.25(6.3)			
<b>AT in(mm)</b>	2.5 (64)	2.2 (56)	1.1 (28)	1.0 (25.5)	1.1 (28)	1.6 (40.6)	3.2 (81)	1.1 (28)	3.5 (89)	1.25(32)	.50(13)	2.2(56)		
<b>CT in(mm)</b>	2.5 (64)	2.2 (56)	1.1 (28)	1.0 (25.5)	1.1 (28)	1.6 (40.6)	3.2 (81)	1.1 (28)	3.5 (89)	1.59(51)	.50(13)	2.2(56)		
<b>E in(mm)</b>	4.00(101.6)	2.5(63.5)	1.25(31.7)	2.7(68.6)	.42(10.6)	1.0(25.4)	2.0(50.8)	2.4(61)	1.45(36.8)	.83(21.1)				
<b>D in(mm)</b>	4.00(101.6)	2.5(63.5)	1.25(31.7)	2.7(68.6)	.42(10.6)	1.0(25.4)	2.0(50.8)	2.4(61)	2.0 (50.8)	1.38(35)				