SWT65 INSTRUCTION MANUAL

DWG.NO.CA703-04-01

SPECIFICATION

	MODEL		SWT65						REV
			522, 5FF			525			
	ITEMS		CH1	CH2	CH3	CH1	CH2	CH3	
1	NOMINAL OUTPUT VOLTAGE	V	+5	+12, +15	-12, -15	+5	+12	-5	
2	MAX. OUTPUT CURRENT (*1)	A	6	2.5	0.5	6	2.5	0.5	
3	MIN. OUTPUT CURRENT	A	0.3	0	0	0.3	0	0	
4	PEAK OUTPUT CURRENT	A	-	-	-	-	-	-	
5	MAX. OUTPUT POWER (*1)	W	66			62.5			
6	EFFICIENCY (TYP) (*2)	%	72						
7	INPUT VOLTAGE RANGE (*3)	-	AC 85 -132V . 170 -265V(auto selectable)						
8	INPUT CURRENT (TYP) (*2)	A	1.71(Vin=100VAC) / 0.86(Vin=200VAC)						
9	INRUSH CURRENT (TYP)	A	30A/100VAC 30A / 200VAC (cold start)						
10	OUTPUT VOLTAGE		CH1 +5V fixed. CH2,3 fixed Shipment condition: CH1: ±1% CH2: ±3% CH3: ±5%						
11	MAX. RIPPLE & NOISE (*4)	mV	±5V: 120mV; ±12V: 150mV						
12	MAX. LINE REGULATION (*4,5)	%	CH1:1%,CH2:2%,CH3:1% at minimum load, 50% &100%						
13	MAX. LOAD REGULATION (*4,6)	%	CH1 (+5V): 2%; CH2: 4% CH3: 2%						
14	MAX. TEMPERATURE DRIFT (*4,7)	%/°C	0.04%/°C						
15	OVER CURRENT PROTECTION (*8)	-	Automatic recovery. O.C.P point>105%						
16	OVER VOLTAGE PROTECTION (*9)	V	> 6 (CH1 only)						
17	HOLD - UP TIME (TYP) (*2)	mS	17ms (Input 100 VAC)						
18	OPERATING TEMPERATURE (*10)	°C	Convection cooling 0-50°C:100% load; 60°C:70% load						
19	OPERATING HUMIDITY	RH	30%-90%RH						
20	STORAGE TEMPERATURE	°C	-20°C - 85°C						
21	STORAGE HUMIDITY	RH	10%-95%RH						
22	COOLING	-	Convection cooling (100% load) .						
23	EMI	-	Conform to FCC-B, VCCI-2, EN55022B						
24	WITHSTAND VOLTAGE	V	I/P-O/P: 3KVAC, I/P-FG: 2.5KVAC, O/P-FG: 500VAC 1Min						
25	ISOLATION RESISTANCE	-	Output to chassis 500VDC. > 100Mohm						
26	VIBRATION	G	10 - 55Hz Amplitude (sweep 1min) Less than 2G X,Y,Z 1h each						
27	SHOCK	G	Less than 20G						
28	OUTPUT GROUNDING	-	All common ground(2terminals)						
29	SAFETY	-	Conform to UL1950, CSA22.2-234, EN60950, DENTORI						
30	WEIGHT	g	350						
31	SIZE (W*D*H)	inch	3.50 x 6.00 x 1.77 (3.15 x 4.80 mounting hole Φ3.5mm)						
		m/m	88.9 x 152.4 x 45.0						

NOTES:

*1:With Convection cooling.

*2: At 100VAC, 200VAC and Max output power (Convection cooling), Ta=25°C.

*3: For cases where conformance to various safety specs (UL,CSA, EN) are required to be described as 100-120VAC, 200-240VAC, 50/60 Hz on name plate.

*4: Please refer to Fig A for measurement determination of line & load regulation and output ripple voltage.

*5: From 85-132VAC / 170-265VAC, constant load.

*6: From Min. load - Full load (Maximum power), constant input voltage. (100VAC or 200VAC)

*7: From 0°C - +50°C, constant input voltage and load.

*8: Current limiting with automatic recovery. Avoid to operate over load or dead short for more than 30 seconds.

*9:Over voltage clamping by zener diode

*10:At standard mounting method. Fig B.

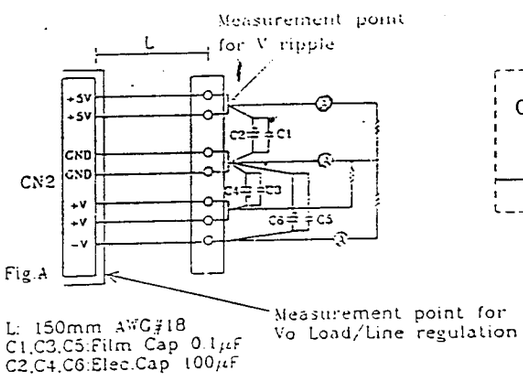

Fig.A

L: 150mm AWG#18
C1,C3,C5:Film Cap 0.1μF
C2,C4,C6:Elec.Cap 100μF

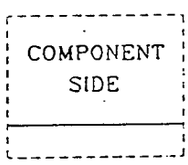

Fig.B

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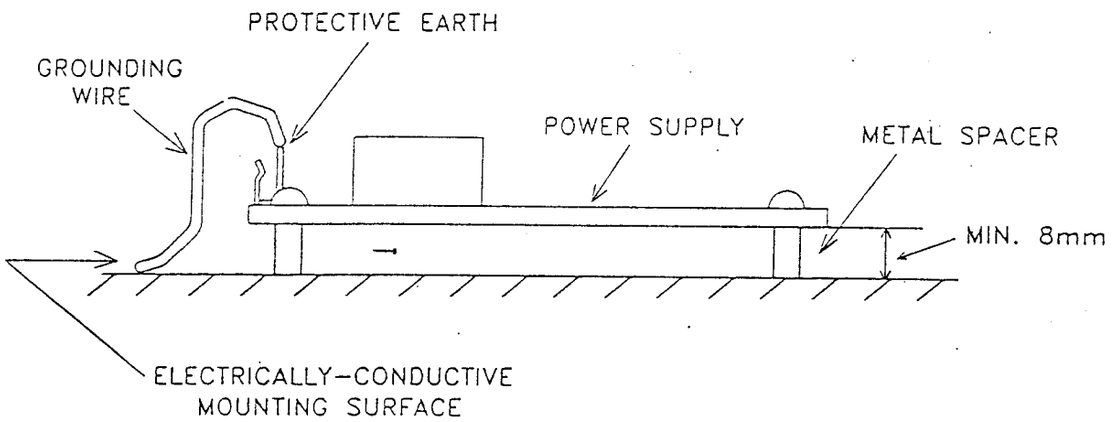
INSTALLATION:



2. TO MEET SAFETY REQUIREMENTS, THE POWER SUPPLY TERMINALS MUST NOT BE USED DIRECTLY AS THE EXTERNAL TERMINATIONS OF ANY EQUIPMENT.
   Recommended screw torque is 5kg.cm.

3. PROTECTIVE EARTHING:
   3.1 FOR SAFETY, ENSURE SECURE CONNECTION OF THE ⏚ TERMINAL TO THE GROUND TERMINAL OF THE EQUIPMENT AS THE PROTECTIVE EARTH CONNECTION. SCREWS AND WASHERS USED MUST BE OF SUITABLE MATERIAL AS IN ANNEX J IN EN60950 STANDARD.

4. MOUNTING

   4.1 FOR OPTIMUM NOISE PERFORMANCE, MOUNT THE POWER SUPPLY UNIT (PSU) ON AN ELECTRICALLY-CONDUCTIVE SURFACE

   4.2 IF SPACER HEIGHT IS LESS THAN 8mm, BASIC INSULATION MUST BE PROVIDED BETWEEN THE PSU AND THE GROUNDED MOUNTING SURFACE.

   4.3 EXCEPT FOR THE SOLDER OF THE PSU, A MINIMUM SPACING OF 4mm MUST BE MAINTAINED BETWEEN THE PSU AND EQUIPMENT CHASSIS.

   4.4 THE PSU MUST BE INSTALLED WHERE EQUIPMENT VENTILATION ENSURE FREE CONVECTION COOLING.

   4.5 AWG #24~#18 WIRES SHOULD BE USED FOR INPUT AND OUTPUT CONVECTION. TO IMPROVE NOISE PERFORMANCE, INPUT AND OUTPUT WIRES SHOULD BE WELL SEPARATED, BUT EACH PAIR SHOULD BE TWISTED TOGETHER.

   4.6 RECOMMENDED SCREWS TORQUE IS 5Kg.cm.

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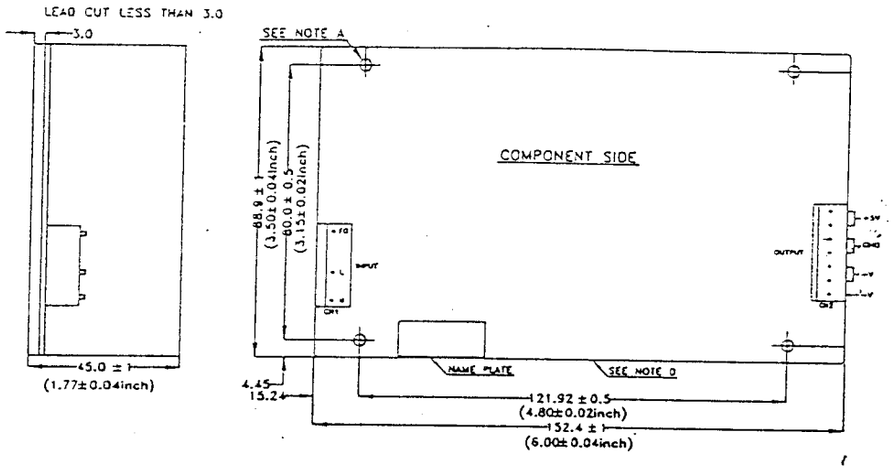
1.OUTLINE AND CONNECTION



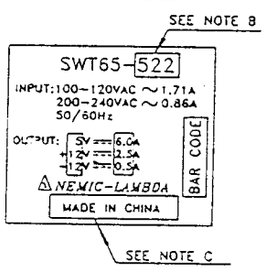
CONNECTORS USED:

PART DESCRIPTION	CATALOG NO.	MANUFACTURER	QTY
PIN HEADER(INPUT SIDE CN1)	5414-30B	MOLEX	1
PIN HEADER(OUTPUT SIDE CN2)	5273-07A	MOLEX	1

ACCESSORIES:

PART DESCRIPTION	CATALOG NO.	MANUFACTURER	QTY
SOCKET HOUSING (CN1)	NEMIC 5239-06	MOLEX 09-52-4064	1
SOCKET HOUSING (CN2)	NEMIC 5239-07	MOLEX 09-52-4074	1

NAME PLATE



NOTES:

A :THE 4 ø3.5mm HOLES ARE CUSTOMER CHASSIS MOUNTING HOLES. ALL MUST BE SCREWED IN ORDER TO CONFORM TO THE EMI NOISE AND VIBRATION SPEC.. WASHERS ETC. USED MUST NOT EXCEED ø6mm.

B :MODEL NAME, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT AND PEAK OUTPUT CURRENT ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.

C :COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.

D :MINIMUM 4mm SPACING BETWEEN PCB EDGE, TOP OF POWER SUPPLY AND CUSTOMER CHASSIS.

E :INPUT TERMINALS
- N – NEUTRAL
- L – LIVE(CONNECTED TO INTERNAL FUSE)
- ⏚ – GROUND (FOR PROTECTIVE EARTH CONNECTION)

F :OUTPUT TERMINALS
- +5V :CH1 OUTPUT TERMINAL
- +V :CH2 OUTPUT TERMINAL
- –V :CH3 OUTPUT TERMINAL
- GND :CH1,CH2,CH3 GROUND TERMINAL

G :VR1 IS THE VOLUME FOR ADJUSTING OUTPUT VOLTAGE OF CH1. CH1 IS ADJUST TO 5V (FIXED) DURING MASS PRODUCTION. DO NOT ADJUST UNNECESSARILY.

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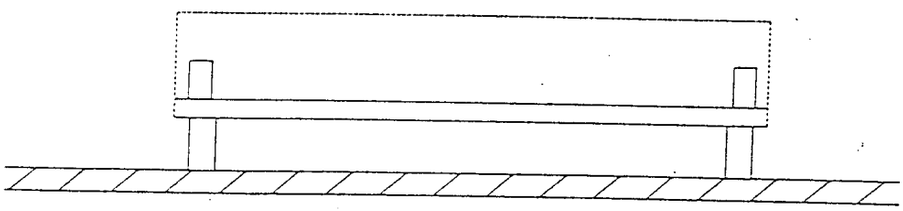
MOUNTING POSITION AND OUTPUT DERATING



AMBIENT TEMP. RANGE: 0°C ~ 50°C AT 100% LOAD, 60°C AT 70% LOAD.

OUTPUT DERATING ACCORDING TO SPEC.

FUSE:

RATING :250V 2.5A
TYPE :FAST-BLOW

CAUTION: CHANGE OF FUSE IS TO BE DONE BY AUTHORISED PERSONNEL ONLY.
VORSICHT: UBERLASSEN SIE WARTUNGSASRBEITEN STETS DEM VON ZUGELASSENEN FACHMANN.

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