

# SWT30 INSTRUCTION MANUAL

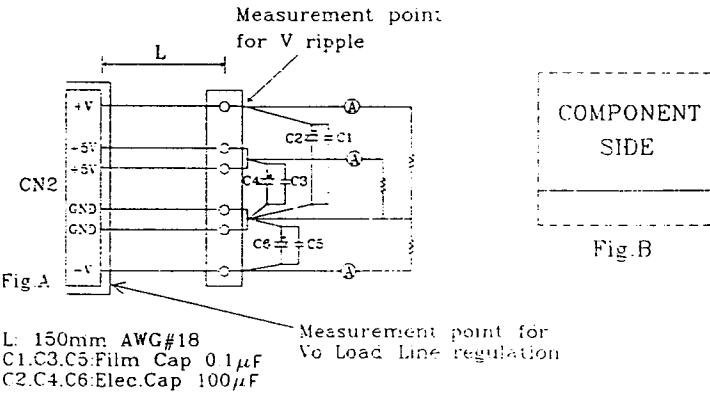
DWG.NO.CA701-04-01

## SPECIFICATIONS

ITEMS	MODEL	SWT30 30						REV	
		522 5FF			S25				
		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	2	1.5	0.3	2	1.5	0.3	
3	MIN. OUTPUT CURRENT	A	0.2	0.4	0	0.2	0.4	0	
4	PEAK OUTPUT CURRENT (*11)	A	3	3	-	3	3	-	
5	MAX. OUTPUT POWER (PEAK) (*1)	W		31.6(49.6)			29.5(47.5)		
6	EFFICIENCY (TYP) (*2)	%		70					
7	INPUT VOLTAGE RANGE (*3)	-		AC85 -265V (Continuously)					
8	INPUT CURRENT (TYP) (*2)	A		1.11(Vin=100VAC) / 0.55(Vin=200VAC)					
9	INRUSH CURRENT (TYP)	A		15A / 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%				A	
13	MAX. LOAD REGULATION (*4.6)	%		CH1 (+5V): 2%; CH2: 4% CH3: 2%				A	
14	MAX. TEMPERATURE DRIFT (*4.7)	%/°C		0.04%/°C*				A	
15	OVER CURRENT PROTECTION (*8)	-		Automatic recovery, O.C.P point >170%					
16	OVER VOLTAGE PROTECTION (*9)	V		> 6 (CH1 only)				A	
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, EN55022				A	
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				A	
27	SHOCK	G		less than 20G					
28	OUTPUT GROUNDING	-		All common ground(2 terminals)					
29	SAFETY	-		Conform to UL1950, CSA22.2-234, EN60950, DENTORI				A	
30	WEIGHT	g		280				A	
31	SIZE (W*D*H)	inch		3.00 x 5.00 x 1.20 (2.55 x 4.55 mounting hole 3.5mm)					
		m/m		76.20 x 127.00 x 30.48				A	

### 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.
- \*11:Peak current operation is less than 10 sec. with duty factor less than 30%. In addition, it does not has to satisfied the total regulation specification.



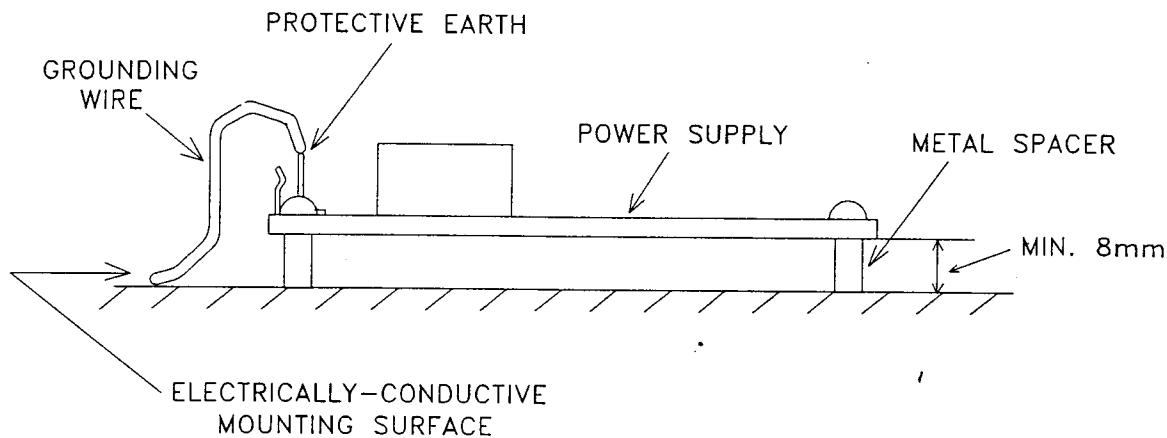
SHANGHAI NEMIC-LAMBDA

RECEIVED

# SWT30 INSTRUCTION MANUAL

DWG.NO.CA701-04-03

## 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.  
THIS PRODUCT MUST BE INSTALLED IN A RESTRICTED ACCESS LOCATION, ACCESSIBLE TO AUTHORISED COMPETENT PERSONNEL ONLY.  
WHERE CSA APPROVED, CSA APPROVAL IS TO LEVEL 3.
3. PROTECTIVE EARTHING:
  - 3.1 FOR SAFETY, ENSURE SECURE CONNECTION OF THE  $\ominus$  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.

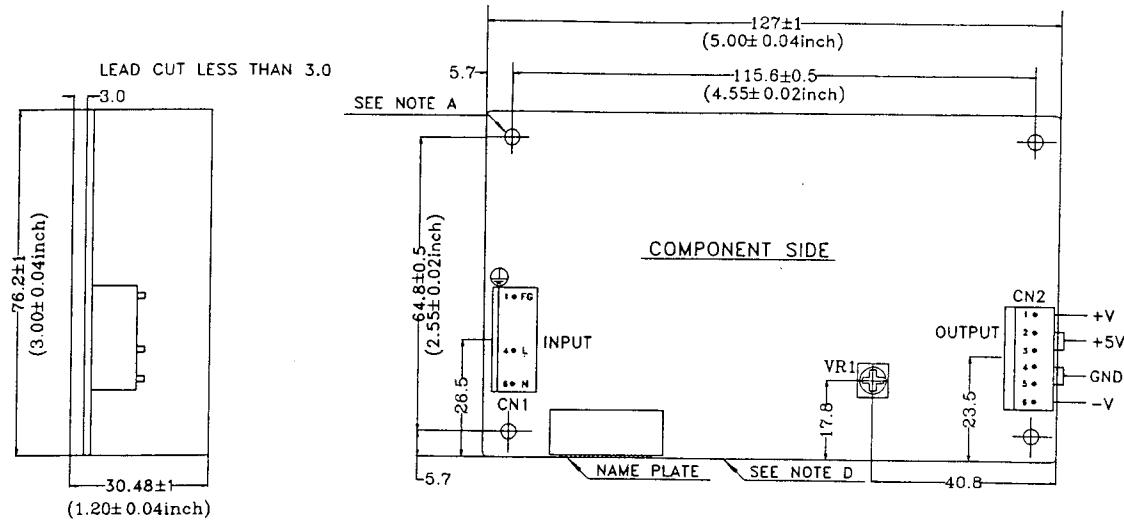
*[Signature]* SHANGHAI NEMIC-TAMRDA

RECEIVED

# SWT30 INSTRUCTION MANUAL

DWG.NO.CA701-04-02

## 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)	5273-06A	MOLEX	1

### ACCESSORIES:

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

PINS 08-70-0013

### 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.

SHANGHAI NEMIC-LAMBDA

RECEIVED