

# SWT100 SPECIFICATION

CA704-01-01G

| ITEMS | MODEL                         | SWT100-522 |  |     | SWT100-525 |     |     | SWT100-5FF |     |     |     |
|-------|-------------------------------|------------|--|-----|------------|-----|-----|------------|-----|-----|-----|
|       |                               | CH1        | CH2  | CH3 | CH1        | CH2 | CH3 | CH1        | CH2 | CH3 |     |
| 1     | NOMINAL OUTPUT VOLTAGE        | V          | +5   | +12 | -12        | +5  | +12 | -5         | +5  | +15 | -15 |
| 2     | MIN. OUTPUT CURRENT           | A          | 0.5  | 0   | 0          | 0.5 | 0   | 0          | 0.5 | 0   | 0   |
| 3     | MAX. OUTPUT CURRENT           | A          | 8  | 4   | 0.8        | 8   | 4   | 0.8        | 8   | 3.2 | 0.8 |
| 4     | PEAK OUTPUT CURRENT           | A          | -  | -   | -          | -   | -   | -          | -   | -   | -   |
| 5     | MAX. OUTPUT POWER             | W          | 97.6   |     |            | 92  |     |            | 100 |     |     |
| 6     | EFFICIENCY (TYP) (* 1)        | -          | 74%  |     |            |     |     |            |     |     |     |
| 7     | INPUT VOLTAGE RANGE (* 2)     | -          | AC85~265V (Continuously), 47~63 Hz /110~340VDC                                     |     |            |     |     |            |     |     |     |
| 8     | INPUT CURRENT (TYP) (* 1)     | -          | 2.9A(Vin=100VAC) / 1.9A (Vin=200VAC)   |     |            |     |     |            |     |     |     |
| 9     | INRUSH CURRENT (TYP) (*10)    | -          | 15A / 100VAC 30A / 200VAC (Ta=25°C)  |     |            |     |     |            |     |     |     |
| 10    | OUTPUT VOLTAGE                | -          | CH1 +5V fixed, CH2,3 fixed<br>Shipment condition: CH1: ±1%, CH2: ±3%, CH3: ±5%     |     |            |     |     |            |     |     |     |
| 11    | MAX. RIPPLE & NOISE (* 3)     | -          | ±5V: 120mV; ±12V: 150mV; ±15V: 150 mV  |     |            |     |     |            |     |     |     |
| 12    | MAX. LINE REGULATION (*3,4)   | -          | CH1:1%, CH2: 2%, CH3: 1%   |     |            |     |     |            |     |     |     |
| 13    | MAX. LOAD REGULATION (*3,5)   | -          | CH1:2%, CH2: 4%, CH3: 2%   |     |            |     |     |            |     |     |     |
| 14    | MAX. TEMPERATURE DRIFT (*3,6) | -          | 0.04%/°C   |     |            |     |     |            |     |     |     |
| 15    | OVER CURRENT PROTECTION (* 7) | -          | Automatic recovery, O.C.P point: 105% ~  |     |            |     |     |            |     |     |     |
| 16    | OVER VOLTAGE PROTECTION (* 8) | -          | 6V ~ ( CH1 only)   |     |            |     |     |            |     |     |     |
| 17    | HOLD - UP TIME (TYP) (* 1)    | -          | 17ms (Input 100VAC)  |     |            |     |     |            |     |     |     |
| 18    | OPERATING TEMPERATURE (* 9)   | -          | Convection cooling 0 ~ 50°C:100% load; 60°C:70% load                               |     |            |     |     |            |     |     |     |
| 19    | OPERATING HUMIDITY            | -          | 30% ~ 90%RH  |     |            |     |     |            |     |     |     |
| 20    | STORAGE TEMPERATURE           | -          | -20°C ~ +85°C  |     |            |     |     |            |     |     |     |
| 21    | STORAGE HUMIDITY              | -          | 10% ~ 95%RH  |     |            |     |     |            |     |     |     |
| 22    | COOLING                       | -          | Convection cooling   |     |            |     |     |            |     |     |     |
| 23    | EMI                           | -          | Conform to FCC-B, VCCI-2, EN55022B   |     |            |     |     |            |     |     |     |
| 24    | WITHSTAND VOLTAGE             | -          | I/P-O/P:3kVAC(20mA),I/P-FG:2.5kVAC(20mA),O/P-FG:500VAC(100mA) for 1min             |     |            |     |     |            |     |     |     |
| 25    | ISOLATION RESISTANCE          | -          | More than 100MΩ at Ta=25°C and 70%RH, Output - FG 500VDC                           |     |            |     |     |            |     |     |     |
| 26    | VIBRATION                     | -          | 10 ~ 55Hz Amplitude ( sweep 1min ) Less than 19.6m/s <sup>2</sup> X ,Y ,Z 1Hr each |     |            |     |     |            |     |     |     |
| 27    | SHOCK                         | -          | Less than 196.1m/s <sup>2</sup>  |     |            |     |     |            |     |     |     |
| 28    | OUTPUT GROUNDING              | -          | All channels common ground (3 terminals)   |     |            |     |     |            |     |     |     |
| 29    | SAFETY                        | -          | Conform to UL60950-1, CSA60950-1, EN60950-1, DENAN                                 |     |            |     |     |            |     |     |     |
| 30    | WEIGHT                        | -          | 600g   |     |            |     |     |            |     |     |     |
| 31    | SIZE (W*D*H)                  | m/m        | 108.0 x 196.9 x 45.0   |     |            |     |     |            |     |     |     |
|       |                               | inch       | 4.25 x 7.75 x 1.77 (3.75 x 7.25 mounting hole Φ 3.5mm)                             |     |            |     |     |            |     |     |     |

**NOTES:**

- \*1. At 100VAC, 200VAC and MAX. OUTPUT POWER (Convection cooling), Ta=25°C.
- \*2. 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.
- \*3. Please refer to Fig A for measurement determination of line & load regulation and output ripple voltage.  
(Measure with JEITA RC-9131 probe)
- \*4. From 85~132VAC / 170~265VAC, constant load.
- \*5. From Min. load - Full load ( Maximum power ), constant input voltage.
- \*6. From 0°C ~ +50°C, constant input voltage and load.
- \*7. Current limiting with automatic recovery. Avoid to operate over load or dead short for more than 30 seconds.
- \*8. Over voltage clamping by zener diode.
- \*9. At standard mounting method, Fig B.
- \*10. When resuming operation in less than 5sec. after power failure, soft start circuit will not limit the in-rush current at turn-on.

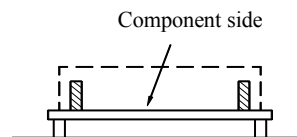
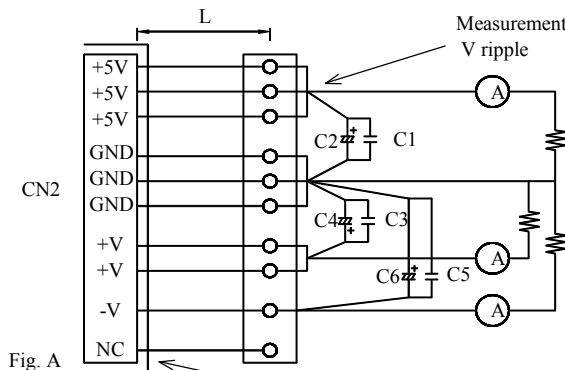


Fig. A

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

Measurement point for Vo  
 Load / Line regulation

Fig. B

**SWT100**

OUTPUT DERATING

CA704-01-02A

| Ta (°C) | LOADING CONDITION (%) |            |            |            |            |
|---------|-----------------------|------------|------------|------------|------------|
|         | Mounting A            | Mounting B | Mounting C | Mounting D | Mounting E |
| 0       | 100                   | 100        | 100        | 100        | 100        |
| 20      | 100                   | 100        | 100        | 100        | 100        |
| 40      | 100                   | 100        | 100        | 100        | 75         |
| 50      | 100                   | 75         | 75         | 75         | 75         |
| 60      | 70                    | 50         | 50         | 50         | 50         |

