

## SWS50 SPECIFICATIONS

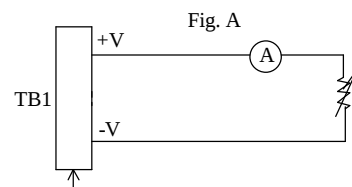
CA729-01-01A

| ITEMS |                         |                       | MODEL | SWS50-3                                                                                                | SWS50-5   | SWS50-12  | SWS50-15  | SWS50-24  |
|-------|-------------------------|-----------------------|-------|--------------------------------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|
| 1     | Nominal Output Voltage  |                       | V     | 3.3                                                                                                    | 5         | 12        | 15        | 24        |
| 2     | Maximum Output Current  |                       | A     | 10                                                                                                     | 10        | 4.3       | 3.5       | 2.1       |
| 3     | Maximum Output Power    |                       | W     | 33                                                                                                     | 50        | 51.6      | 52.5      | 50.4      |
| 4     | Efficiency (Typ)        | (115/230VAC) (* 1)    | %     | 73 / 70                                                                                                | 77 / 75   | 82 / 79   | 84 / 80   | 84 / 80   |
| 5     | Input Voltage Range     | (* 2, 3)              | —     | 85 ~ 265VAC (47-63Hz) or 120 ~ 370VDC                                                                  |           |           |           |           |
| 6     | Input Current (Typ)     | (115/230VAC) (* 1)    | A     | 0.7 / 0.5                                                                                              | 1.2 / 0.6 |           |           |           |
| 7     | Inrush Current (Typ)    | (* 4)                 | —     | 20A at 115VAC, 40A at 230VAC, Ta=25°C, Cold Start                                                      |           |           |           |           |
| 8     | Output Voltage Range    |                       | V     | 2.97~3.63                                                                                              | 4.5~5.5   | 10.8~13.2 | 13.5~16.5 | 21.6~26.4 |
| 9     | Ripple and Noise        | (115/230VAC) (* 1, 5) | mV    | 80                                                                                                     | 80        | 80        | 100       | 100       |
| 10    | Line Regulation         | (* 5, 6)              | mV    | 20                                                                                                     | 20        | 48        | 60        | 96        |
| 11    | Load Regulation         | (* 5, 7)              | mV    | 40                                                                                                     | 50        | 96        | 120       | 144       |
| 12    | Temperature Coefficient |                       | —     | Less than 0.02%/°C                                                                                     |           |           |           |           |
| 13    | Over Current Protection | (* 8)                 | A     | 10.5~                                                                                                  | 10.5~     | 4.5~      | 3.7~      | 2.2~      |
| 14    | Over Voltage Protection | (* 9)                 | V     | 3.79~4.95                                                                                              | 5.75~6.95 | 13.8~16.2 | 17.2~20.3 | 27.6~32.4 |
| 15    | Hold-Up Time (Typ)      | (115/230VAC) (* 1)    | —     | 20ms / 160ms                                                                                           |           |           |           |           |
| 16    | Leakage current         | (* 10)                | —     | 1mA Max, 0.3mA(Typ) at 115VAC / 0.6mA(Typ) at 230VAC                                                   |           |           |           |           |
| 17    | Series Operation        |                       | —     | Possible                                                                                               |           |           |           |           |
| 18    | Operating Temperature   | (* 11)                | —     | - 10 ~ + 60 °C (Refer to Output Derating Curve)                                                        |           |           |           |           |
| 19    | Operating Humidity      |                       | —     | 30 ~ 90 %RH (No dewdrop)                                                                               |           |           |           |           |
| 20    | Storage Temperature     |                       | —     | - 30 ~ +85°C                                                                                           |           |           |           |           |
| 21    | Storage Humidity        |                       | —     | 10 ~ 95%RH (No dewdrop)                                                                                |           |           |           |           |
| 22    | Cooling                 |                       | —     | Convection cooling                                                                                     |           |           |           |           |
| 23    | Withstand Voltage       |                       | —     | Input - Output : 3.0kVAC (20mA), Input - FG : 2.0kVAC (20mA)<br>Output - FG : 500VAC (100mA) for 1min. |           |           |           |           |
| 24    | Isolation Resistance    |                       | —     | More than 100MΩ at Ta=25°C and 70%RH, Output - FG : 500VDC                                             |           |           |           |           |
| 25    | Vibration               |                       | —     | At no operating, 10 - 55Hz ( sweep for 1min )<br>19.6m/s <sup>2</sup> Constant, X, Y, Z 1hour each     |           |           |           |           |
| 26    | Safety                  |                       | —     | Approved by UL60950, CSA60950, EN60950, EN50178                                                        |           |           |           |           |
| 27    | EMI                     | (* 1)                 | —     | Built to meet FCC-Class B, EN55011/EN55022-B                                                           |           |           |           |           |
| 28    | Immunity                | (* 1)                 | —     | Built to meet EN61000-4-2,-3,-4,-5,-6,-8,-11                                                           |           |           |           |           |
| 29    | Weight (Typ)            |                       | g     | 400                                                                                                    |           |           |           |           |
| 30    | Dimension               |                       | mm    | 37 x 92 x 159 (Refer to Outline Drawing)                                                               |           |           |           |           |

\* Read instruction manual carefully , before using the power supply unit.

= NOTES=

- \* 1 : At maximum output power, nominal input voltage, Ta = 25°C.
- \* 2 : For cases where conformance to various safety specs ( UL, CSA, EN ) are required, to be described as 100 - 240VAC, 50 / 60Hz on name plate.
- \* 3 : Please refer to Output Derating Curve for input voltage less than 100VAC (next page).
- \* 4 : Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
- \* 5 : Please refer to Fig A for measurement of line & load regulation, ripple and noise.  
Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uF and 47uF capacitor.
- \* 6 : 85 - 265VAC, constant load.
- \* 7 : No load - Full load(Maximum power), constant input voltage.
- \* 8 : Current limiting with automatic recovery.  
Avoid to operate at overload or dead short for more than 30seconds.
- \* 9 : OVP circuit will shutdown output, manual reset (Re power on).
- \* 10 : Measured by each measuring method of UL, CSA, EN.
- \* 11 : Refer to Output Derating Curve (next page) for details of output derating versus ambient temperature and mounting method .

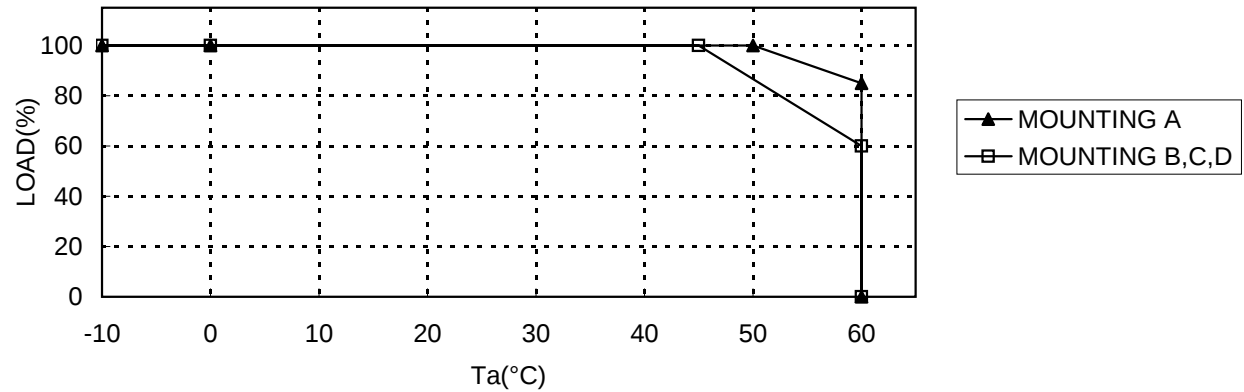


Measurement point for Vo Line/Load Regulation, and ripple and noise.

SWS50 OUTPUT DERATING

CA729-01-02A

SWS50-3,5,12,15,24 OUTPUT DERATING VS Ta CURVE (CONVECTION COOLING)



SWS50-3,5,12,15,24 OUTPUT DERATING VS INPUT VOLTAGE

