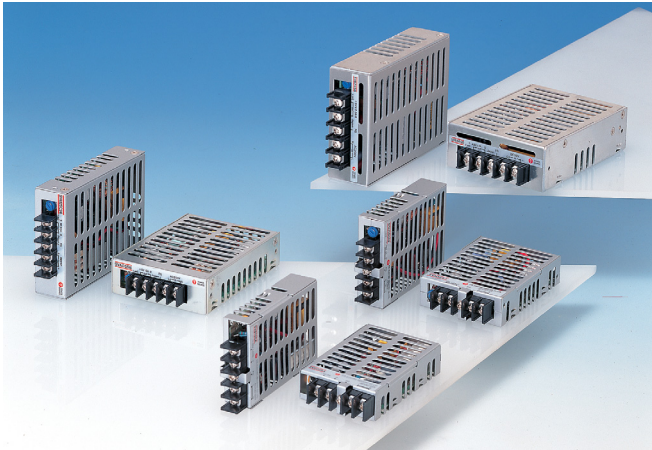


# 25 WATT AC-DC CONVERTER

**SVA-SB SERIES**



The SV-series has been developed to follow ETA's philosophy of "Miniaturization and high efficiency" of power supplies. There are two inputs available: SVA..-SA is designed for 100VAC; SVA-..SB is usable with 200VAC. The small size and high efficiency are suitable for many applications, especially small equipment.

## Application

Industrial

## Input

**Input Voltage:** AC85-132V

**Efficiency:** 77%

## Features

1. **Very small (one of the smallest in Japan)**
2. **No derating when mounted on a horizontal surface**
3. **Low impedance capacitors**
4. **Over voltage protection**
5. **EMI: Complies with FCC/A**

## Options

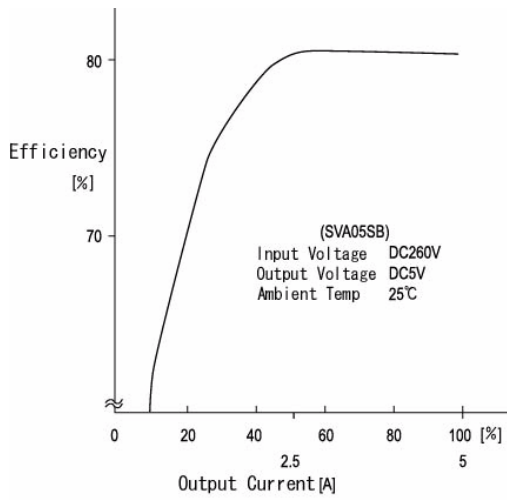
Specifications <AC/DC>	Model				
	SVA05SB	SVA12SB	SVA15SB	SVA24SB	SVA48SB
<b>SVA**SA 25WATTS/SINGLE</b>					
<b>Input Characteristic</b>					
Input Voltage	AC200V				
Input Range	AC 170-264V(DC 220-350V)				
Input Frequency	50/60Hz				
Input Frequency Range	47-440Hz				
Phase	Single				
Inrush Current *1	20A (maximum) at AC200V				
Efficiency [%] (typical) *2	80	82	84	85	86
<b>Output Characteristic</b>					
Output Voltage [V]	5	12	15	24	48
Output Current [A]	5.0	2.1	1.7	1.1	0.50
Voltage Adjust Range	+/- 10% of Rated Output Voltage (at no load within the input range)				
Ripple and Noise [mVp-p](maximum) *3	150	220	250	340	580
<b>Regulation</b>					
a. Statistic Line Regulation [mV](maximum)	40	96	120	192	384
b. Statistic Load Regulation [mV](maximum)	45	108	135	216	432
c. Temperature Coefficient *4	0.03% / °C				
d. Drift [mV](maximum) *5	40	75	90	135	255
e. Dynamic Load Regulation [mV](typical) *6	150	360	450	720	1440
f. Recovery Time *6	0.3mS (typical)				
Rise up time	500mS (maximum) at 25°C and rated input/output				
Hold up time	20mS (minimum) at 25°C and rated input/output				
<b>Functions</b>					
Overcurrent Protection	≥ 110% of Rated Output Current[A]	Current Limiting with automatic recovery			
		5.50	2.31	1.87	1.21
Overvoltage Protection	≥ 110% of Rated Output Voltage[V]	output shutdown (to reset, leave 1 minute after shut-off)			
		5.50	13.2	16.5	26.4
Remote Sense	not available				
Remote On/Off	not available				
<b>Environmental</b>					
Operating Temperature	0 to +50°C				
Operating Humidity	85% RH (non-condensing)				
Storage Temperature	-20 to +85°C				
Storage Humidity	85% RH (non-condensing)				
Withstanding Voltage	Primary-Secondary AC 2,500V for 1 minute Primary-Frame Ground AC 2,500V for 1 minute Secondary-Frame Ground AC 500V for 1 minute				
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ (minimum) by DC 500V insulation tester				
Vibration	5-10Hz: 10mm double amplitude, 10-55Hz: 19.6m/s <sup>2</sup> , 20 minutes' period for 60 minutes each along X, Y, Z axes (non-operating)				
Shock	294m/s <sup>2</sup>				
Cooling	Convection				
? Leakage Current	1mA (maximum) at 25°C, rated input/output and rated input frequency				
? Safety					
? Weight (typical)	220g				
? MTBF [H]	640,000				
? Switching Frequency [kHz] (typical)	90				

**Conditions:**

- \*1 at cold start
- \*2 at DC 260V input and rated output
- \*3 measured by a bayonet probe at output connector at 0 to 100MHz bandwidth
- \*4 at 0 to +50°C
- \*5 for 7hour period after 1hour warm-up at 25°C and rated input/output
- \*6 when output current changed from 25% to 75% of rated output current rapidly at AC200V input



### Efficiency Curve



### OCP Curve

