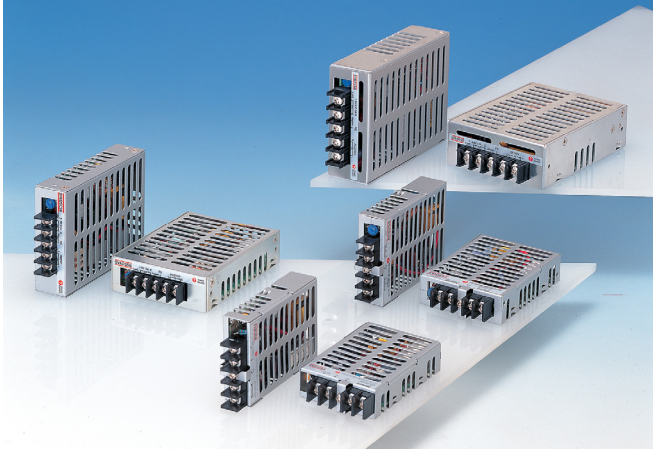


15 WATT AC-DC CONVERTER

SVM-SB SINGLE CHANNEL



The SV-series has been developed to follow ETA's philosophy of "Miniaturization and high efficiency" of power supplies. There are two inputs available: SVM-..SA is designed for 100VAC; SVM-..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%

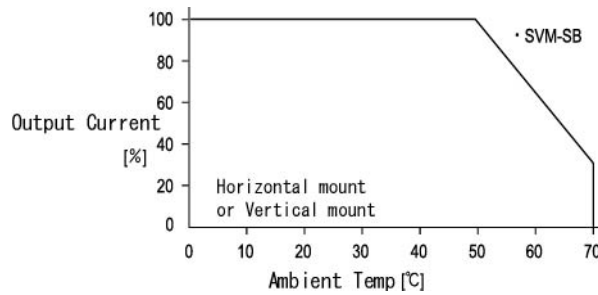
Features

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

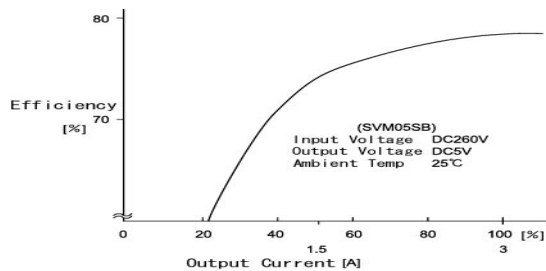
Options

Specifications<AC/DC>	Model				
SVM**SB 15WATTS/SINGLE	SVM05SB	SVM12SB	SVM15SB	SVM24SB	SVM48SB
Input Characteristic					
Input Voltage	AC200V				
Input Range	AC170-264V(DC220-350V)				
Input Frequency	50/60Hz				
Input Frequency Range	47-440Hz				
Phase	Single				
Inrush Current *1	12A(maximum)at AC200V				
Efficiency [%] (typical) *2	78	79	80	82	83

DERATING CURVE



EFFICIENCY CURVE



SVM05SB_K

Specifications<AC/DC>	Model				
	SVM05SB	SVM12SB	SVM15SB	SVM24SB	SVM48SB
SVM**SB 15W ATTS/SINGLE					
Output Voltage [V]	5	12	15	24	48
Output Current [A]	3.0	1.3	1.0	0.7	0.35
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
Regulation					
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°Cand rated input/output				
Hold up time	15mS(minimum) at 25°Cand rated input/output				
Functions					
Overcurrent Protection $\geq 10\%$ of	Current Limiting with automatic recovery				
Rated Output Current[A]	3.30	1.43	1.10	0.77	0.38
Overvoltage Protection $\geq 10\%$ of	output shutdown(to reset,leave 1minute after shut-off)				
Rated Output Voltage[V]	5.50	13.2	16.50	26.4	52.8
Remote Sense	not available				
Remote On/Off	not available				
Environmental					
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 AC2,500V for 1minute				
	Primary-Frame Ground AC2,500V for 1minute				
	Secondary-Frame Ground AC500V for 1minute				
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester				
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)				
Shock	294m/s ²				
Cooling	Convection				
Leakage Current	1mA(maximum) at 25°Crated input/output and rated input frequency				
Safety					
Weight (typical)	120g				
MTBF [H]	600,000				
Switching Frequency[kHz](typical)	140				

Conditions:

*1 at cold start

*2 at DC260V input and rated output

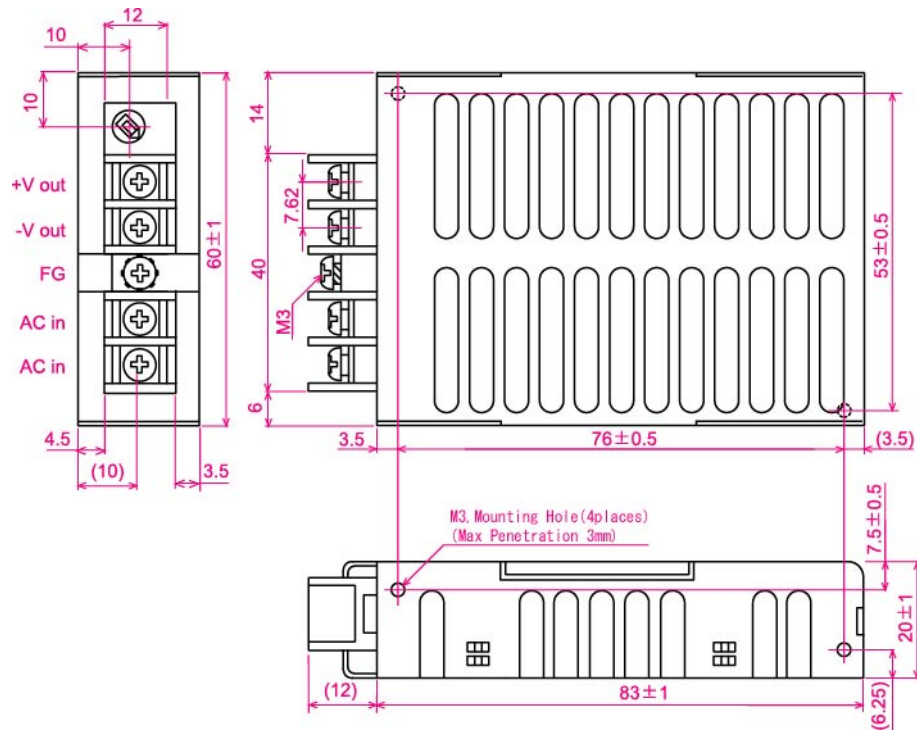
*3 measured by a bayonet probe at output connector at 0 to 100MHz bandwidth

*4 at 0 to +50°C

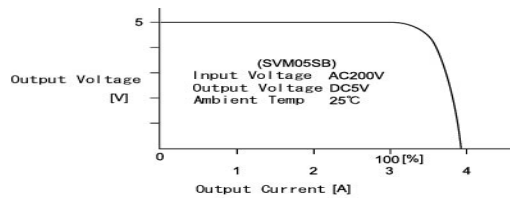
*5 for 7hour period after 1hour warm-up at 25°Cand rated input/output

*6 when output current changed from 25% to 75% of rated output current rapidly at AC200V input

DIMENSION DIAGRAM



OCP CURVE



SVM05SB