

SSV SERIES

5~6W DC/DC CONVERTERS Single Output



H8.5×W21×L33 (mm)

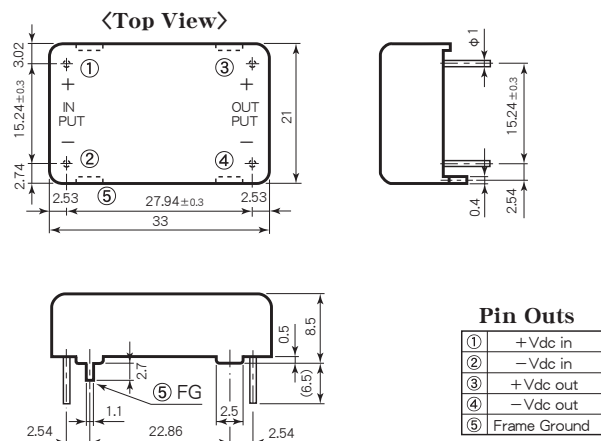
Features

- | | |
|--|--------------------------------|
| ● High Efficiency 81~88% | ● 高効率 81~88% |
| ● 8.5mm in Height | ● 高さ8.5mm |
| ● Compact, Light Weight | ● 小形、軽量 |
| ● Built-in Input Filter | ● 入力フィルタ内蔵 |
| ● Wide Input Voltage Range | ● 広範囲な入力電圧 |
| ● Input-Output Isolation | ● 入出力間絶縁 |
| ● Low No Load Current | ● 無負荷電流が少ない |
| ● 5 Sided Metal Shielding | ● 5面メタルシールド |
| ● High Reliability | ● 高信頼性 |
| ● Operating Ambient Temperature
-40°C~+85°C | ● 動作周囲温度
-40°C~+85°C |
| ● Max. Case Temperature
+100°C | ● 最大ケース温度
+100°C |
| ● Conformity to RoHS Directive | ● RoHS指令対応 |
| ● Not built-in aluminum and
tantalum electrolytic capacitor | ● アルミ電解コンデンサ及び
タンタルコンデンサ不使用 |

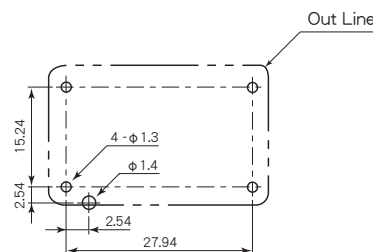
General Characteristics

- | | | |
|---------------------------------|--|---|
| ● Input Voltage, Range | (at Ta : 25°C, Full Load, Nominal Vin) | DC5, 12, 24, 48V (See Table 1) |
| ● Output Voltage, Current | | See Table 1 |
| ● Output Voltage Accuracy | | ±2% (12, 15, 24V Vout)
±3% (3.3, 5, 6V Vout) |
| ● Efficiency | | See Table 1 |
| ● Line Regulation | | 0.3% max. (at Vin Range) |
| ● Load Regulation | | ±0.5% max. (0~100% Load) |
| ● Reflected Input Ripple, Noise | | (3% Vin)/Vp-p max. |
| ● Output Ripple | | 20mVp-p max. |
| ● Output Noise | | 80mVp-p max. (0~20MHz)
150mVp-p max. (0~100MHz) |
| ● Short Circuit Protection | | Built-in, Auto-restart (See Fig. 2) |
| ● Temperature Coefficient | | 0.02%/°C max. |
| ● Operating Ambient Temp. | | -40°C~+85°C (See Fig. 1)
-30°C~+85°C (5V Vin only) |
| ● Max. Case Temperature | | +100°C |
| ● Storage Temperature | | -40°C~+100°C |
| ● Isolation Voltage | | AC500V one minute
(Input-Output-Case) |
| ● Isolation Impedance | | 100MΩ min. (at DC1000V)
(Input-Output-Case) |
| ● Weight | | 15g max. |
| ● Humidity | | 20~95% RH |
| ● Shock | | 490m/s ² (11msec 3directions) |
| ● Vibration | | 10~55Hz 98m/s ²
(30minutes 3directions) |
| ● Surface Structure | | 5 Sided Steel Case |
| ● Soldering Conditions | | Soldering DIP
Soldering iron |
| ● MTBF | | 1,000,000H
(Ta : 25°C, 80% Load, Nominal Vin) |
| ● Warranty | | 5 years |

Pin Outs & Dimensions (±0.5mm)



Hole Configurations on PCB (Top View)



Selection Guide

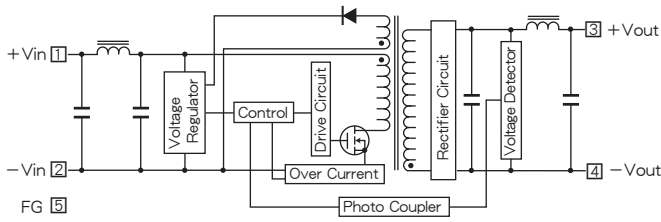
Table 1

Model Number	Input Volt. (Range) (V. DC)	Output Voltage (V. DC)	Output Current (mA)	Efficiency (Typical) (%)
SSV 5 - 3.3 S 1500	5 (4.5~9)	3.3	1500	81
SSV 5 - 5 S 1000		5	1000	83
SSV 5 - 6 S 800		6	800	83
SSV 5 - 12 S 400		12	400	83
SSV 5 - 15 S 320		15	320	83
SSV 5 - 24 S 200		24	200	83
SSV 12 - 3.3 S 1500	12 (8~18)	3.3	1500	83
SSV 12 - 5 S 1000		5	1000	85
SSV 12 - 6 S 900		6	900	85
SSV 12 - 12 S 500		12	500	87
SSV 12 - 15 S 400		15	400	87
SSV 12 - 24 S 250		24	250	87
SSV 24 - 3.3 S 1500	24 (16~36)	3.3	1500	83
SSV 24 - 5 S 1000		5	1000	85
SSV 24 - 6 S 900		6	900	85
SSV 24 - 12 S 500		12	500	87
SSV 24 - 15 S 400		15	400	87
SSV 24 - 24 S 250		24	250	87
SSV 48 - 3.3 S 1500	48 (32~72)	3.3	1500	84
SSV 48 - 5 S 1000		5	1000	86
SSV 48 - 6 S 900		6	900	86
SSV 48 - 12 S 500		12	500	88
SSV 48 - 15 S 400		15	400	88
SSV 48 - 24 S 250		24	250	88

※ 上記仕様以外にも対応可能ですので お問い合わせ下さい。
Please consult with us about other specification.

SSV SERIES DATA SHEET

Block Diagram



Characteristic Curves

Fig. 1 Derating Curve

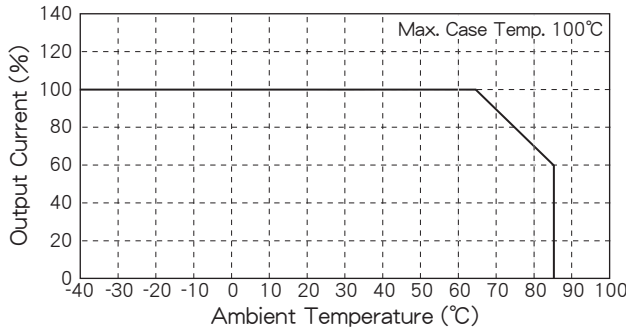


Fig. 2 Short Circuit Operating Area

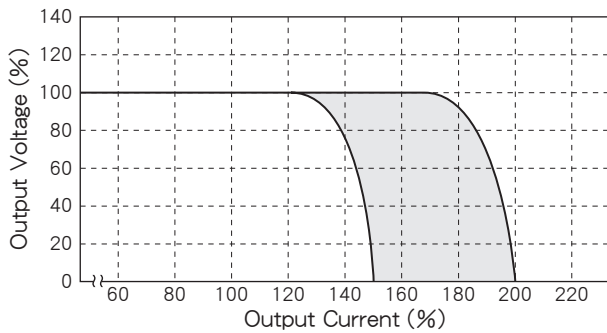


Fig. 3 Temperature Characteristic on Case Surface

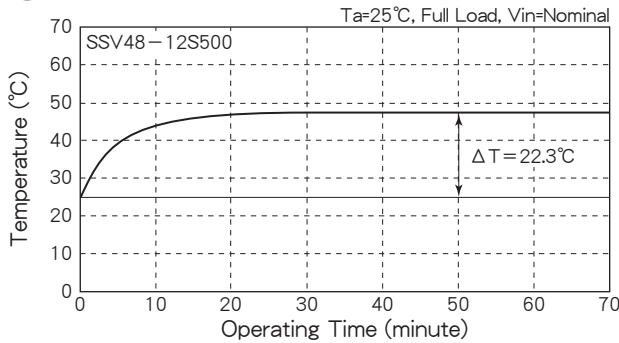


Fig. 4 Efficiency vs. Output Current

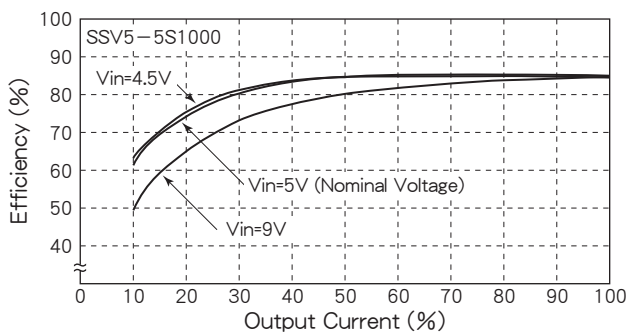


Fig. 5 Efficiency vs. Output Current

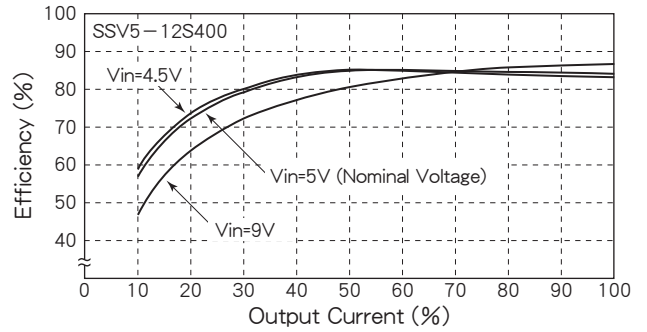


Fig. 6 Efficiency vs. Output Current

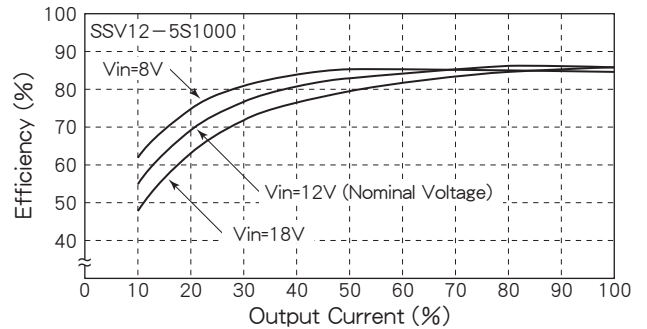


Fig. 7 Efficiency vs. Output Current

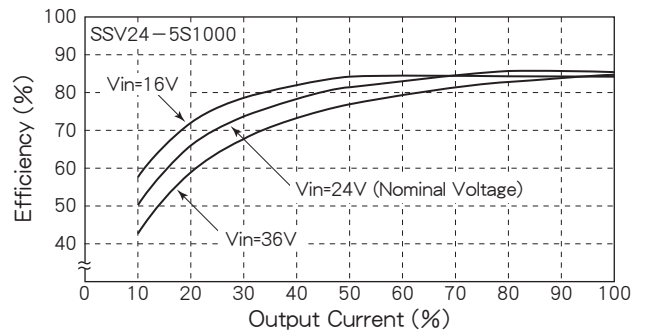


Fig. 8 Efficiency vs. Output Current

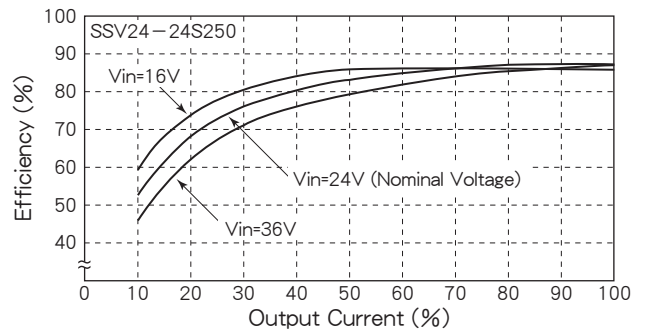


Fig. 9 Efficiency vs. Output Current

