

# SSV SERIES

## 5~6W DC/DC CONVERTERS Single Output



H8.5×W21×L33 (mm)

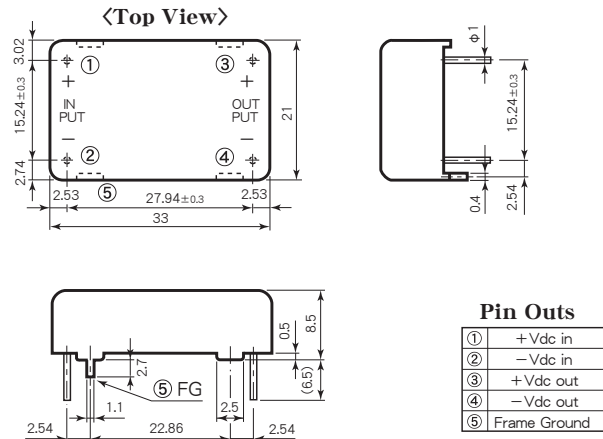
### Features

- High Efficiency 81~88%
- 8.5mm in Height
- Compact, Light Weight
- Built-in Input Filter
- Wide Input Voltage Range
- Input-Output Isolation
- Low No Load Current
- 5 Sided Metal Shielding
- High Reliability
- Operating Ambient Temperature -40°C~+85°C
- Max. Case Temperature +100°C
- Conformity to RoHS2 Directive
- Not built-in aluminum and tantalum electrolytic capacitor
- 高効率 81~88%
- 高さ8.5mm
- 小形、軽量
- 入力フィルタ内蔵
- 広範囲な入力電圧
- 入出力間絶縁
- 無負荷電流が少ない
- 5面メタルシールド
- 高信頼性
- 動作周囲温度 -40°C~+85°C
- 最大ケース温度 +100°C
- RoHS2指令対応
- アルミ電解コンデンサ及びタンタルコンデンサ不使用

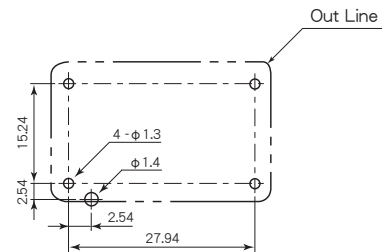
### General Characteristics

- Input Voltage, Range (at Ta : 25°C, Full Load, Nominal Vin) DC5, 12, 24, 48, 100V (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<sup>2</sup> (11msec 3directions)
- Vibration 10~55Hz 98m/s<sup>2</sup> (30minutes 3directions)
- Surface Structure 5 Sided Steel Case
- Soldering Conditions Soldering DIP 260°C, for 15 seconds max. Soldering iron 360°C, for 5 seconds max.
- 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

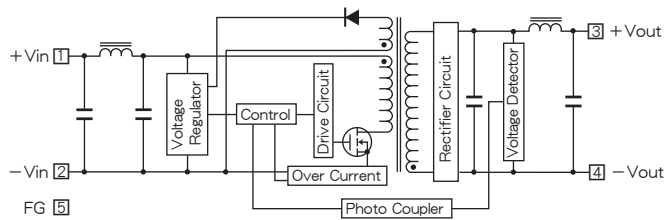
Table 1

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	
SSV 100 - 12 S 500	100 (64~120)	12	500	88
SSV 100 - 15 S 400		15	400	88
SSV 100 - 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.

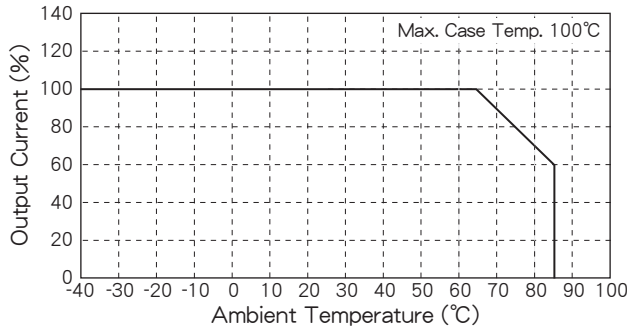
# SSV SERIES DATA SHEET

## Block Diagram

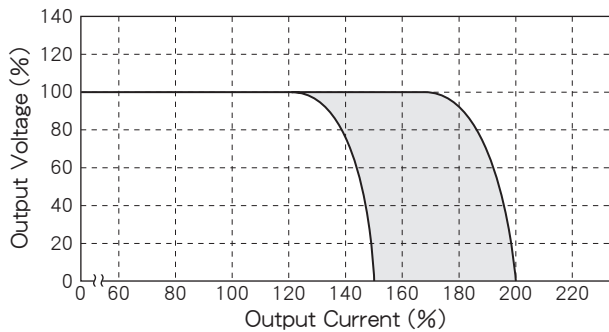


## Characteristic Curves

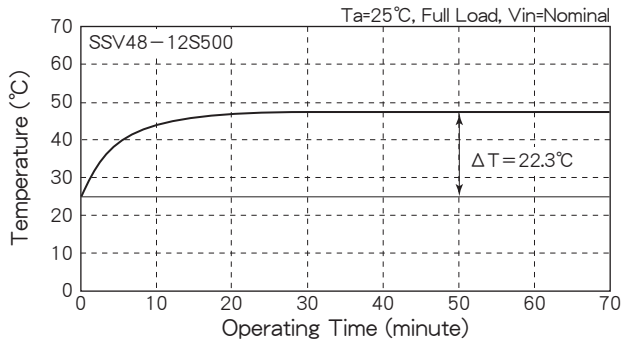
**Fig. 1 Derating Curve**



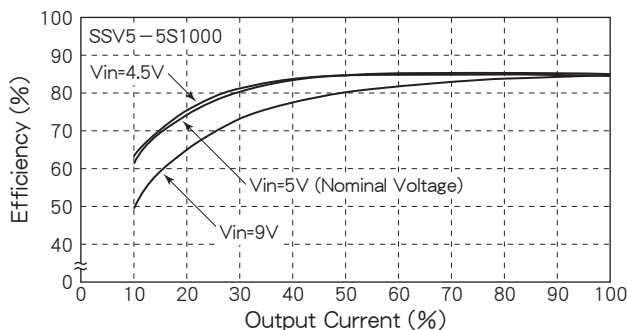
**Fig. 2 Short Circuit Operating Area**



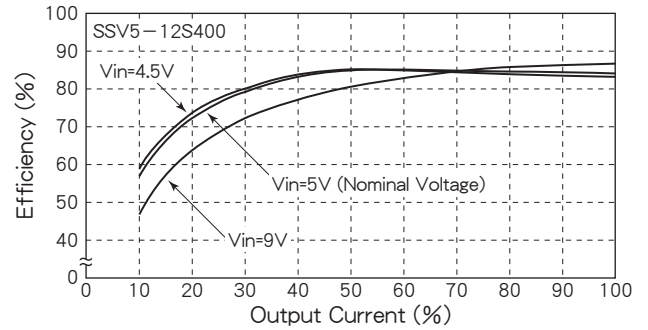
**Fig. 3 Temperature Characteristic on Case Surface**



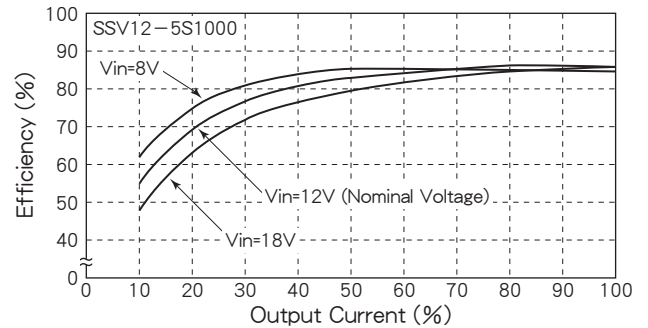
**Fig. 4 Efficiency vs. Output Current**



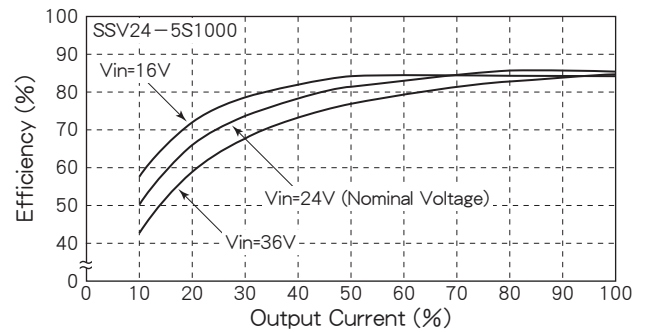
**Fig. 5 Efficiency vs. Output Current**



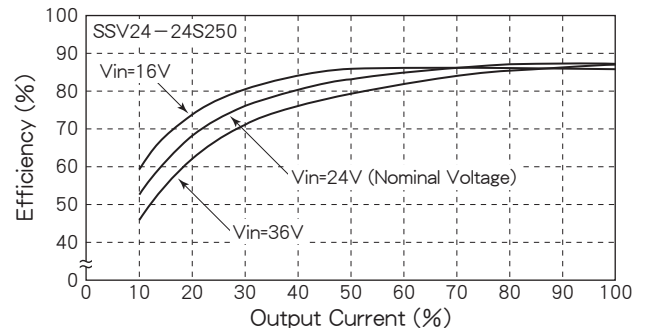
**Fig. 6 Efficiency vs. Output Current**



**Fig. 7 Efficiency vs. Output Current**



**Fig. 8 Efficiency vs. Output Current**



**Fig. 9 Efficiency vs. Output Current**

