

## ■ Features :

- 2:1 wide input range
- 4:1 wide input range(option)
- 1000VDC I/O isolation
- 3000VDC I/O isolation(option)
- Built-in EMI filter
- Protections: Short circuit / Overload
- Cooling by free air convection
- Five-sided shield metal case
- 100% burn-in test
- Low cost / High reliability
- Approvals: FCC / CE
- 2 years warranty

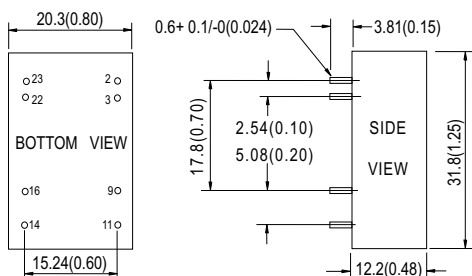


## SPECIFICATION

| ORDER NO.                                                                              |                                             | SCW05A-05                                                                              | SCW05B-05                      | SCW05C-05 | SCW05A-09   | SCW05B-09 | SCW05C-09 | SCW05A-12  | SCW05B-12 | SCW05C-12 | SCW05A-15  | SCW05B-15 | SCW05C-15 |
|----------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------|-----------|-------------|-----------|-----------|------------|-----------|-----------|------------|-----------|-----------|
| OUTPUT                                                                                 | DC VOLTAGE                                  | 5V                                                                                     |                                |           | 9V          |           |           | 12V        |           |           | 15V        |           |           |
|                                                                                        | CURRENT RANGE                               | 200 ~ 1000mA                                                                           |                                |           | 111 ~ 556mA |           |           | 94 ~ 470mA |           |           | 80 ~ 400mA |           |           |
|                                                                                        | RATED POWER                                 | 5W                                                                                     |                                |           | 5W          |           |           | 5.6W       |           |           | 6W         |           |           |
|                                                                                        | RIPPLE & NOISE (max.) <small>Note.2</small> | 50mVp-p                                                                                |                                |           | 60mVp-p     |           |           | 60mVp-p    |           |           | 60mVp-p    |           |           |
|                                                                                        | LINE REGULATION <small>Note.3</small>       | ±0.5%                                                                                  |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | LOAD REGULATION <small>Note.4</small>       | ±0.5%                                                                                  |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | VOLTAGE ACCURACY                            | ±2.0%                                                                                  |                                |           |             |           |           |            |           |           |            |           |           |
| SWITCHING FREQUENCY                                                                    |                                             | 50KHz min.                                                                             |                                |           |             |           |           |            |           |           |            |           |           |
| INPUT                                                                                  | VOLTAGE RANGE                               | A: 9 ~ 18VDC   B: 18 ~ 36VDC   C: 36 ~ 72VDC                                           |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | EFFICIENCY (Typ.)                           | 75%                                                                                    | 77%                            | 77%       | 80%         | 81%       | 83%       | 80%        | 82%       | 83%       | 81%        | 83%       | 81%       |
|                                                                                        | DC CURRENT                                  | Full load                                                                              | A: 617mA   B: 301mA   C: 147mA |           |             |           |           |            |           |           |            |           |           |
|                                                                                        |                                             | No load                                                                                | A: 41mA   B: 22mA   C: 12mA    |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | FILTER                                      | Pi network                                                                             |                                |           |             |           |           |            |           |           |            |           |           |
| PROTECTION                                                                             |                                             | Fuse recommended                                                                       |                                |           |             |           |           |            |           |           |            |           |           |
| PROTECTION<br><small>(Note. 5)</small>                                                 | OVERLOAD                                    | 150 ~ 250% rated output power                                                          |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        |                                             | Protection type : Hiccup mode, recovers automatically after fault condition is removed |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | SHORT CIRCUIT                               | All output equipped with short circuit                                                 |                                |           |             |           |           |            |           |           |            |           |           |
| Protection type : Hiccup mode, recovers automatically after fault condition is removed |                                             |                                                                                        |                                |           |             |           |           |            |           |           |            |           |           |
| ENVIRONMENT                                                                            | WORKING TEMP.                               | -40 ~ +71℃ (Refer to output load derating curve)                                       |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | WORKING HUMIDITY                            | 20% ~ 90% RH non-condensing                                                            |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | STORAGE TEMP., HUMIDITY                     | -40 ~ +105℃, 10 ~ 95% RH                                                               |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | TEMP. COEFFICIENT                           | ±0.03% / ℃ (0 ~ 50℃)                                                                   |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | VIBRATION                                   | 10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes               |                                |           |             |           |           |            |           |           |            |           |           |
| SAFETY & EMC                                                                           | WITHSTAND VOLTAGE                           | I/P-O/P:1KVDC                                                                          |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | ISOLATION RESISTANCE                        | I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH                                             |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | ISOLATION CAPACITANCE                       | 80pF max.                                                                              |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | EMI CONDUCTION & RADIATION                  | Compliance to EN55022 Class B, FCC part 15 Class B                                     |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | EMS IMMUNITY                                | Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A                  |                                |           |             |           |           |            |           |           |            |           |           |
| OTHERS                                                                                 | MTBF                                        | 900khrs min. MIL-HDBK-217F(25℃)                                                        |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | DIMENSION                                   | 31.8*20.3*12.2mm or 1.25"*0.80"*0.48" inch (L*W*H)                                     |                                |           |             |           |           |            |           |           |            |           |           |
|                                                                                        | WEIGHT                                      | 15g                                                                                    |                                |           |             |           |           |            |           |           |            |           |           |

## ■ Mechanical Specification

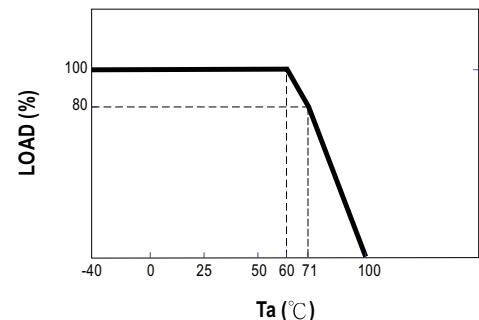
Unit:mm(inch)



## ■ Pin Configuration

| Pin No. | Output |
|---------|--------|
| 2 & 3   | -Vin   |
| 9       | N.C.   |
| 11      | N.C.   |
| 14      | +Vout  |
| 16      | -Vout  |
| 22 & 23 | +Vin   |

## ■ Derating Curve



## NOTE

- 1.All parameters are specified at normal input, rated load, 25°C 70% RH ambient.
- 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- 3.Line regulation is measured from low line to high line at rated load.
- 4.Load regulation is measured from 20% to 100% rated load.
- 5.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.