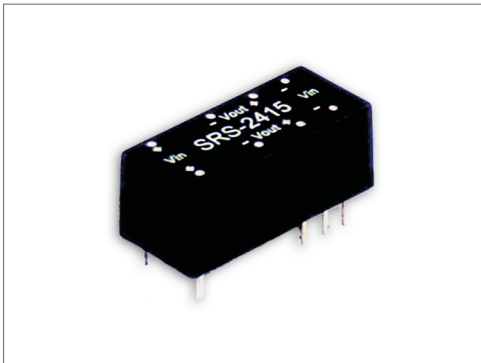


## 0.5W DC-DC regulated single output converter



- Internal SMD technology
- 1000VDC I/O isolation
- 3000VDC isolation is available
- Input filter: Capacitor type
- Non-conductive plastic case
- Dual in line package
- SIP package is available
- High reliability / Low cost
- 100% burn-in test
- 1 year warranty

### SELECTION GUIDE

| ORDER NO.           | SRS-0505  | SRS-1205 | SRS-2405 | SRS-4805 | SRS-0509 | SRS-1209 | SRS-2409 | SRS-4809 |
|---------------------|-----------|----------|----------|----------|----------|----------|----------|----------|
| DC OUTPUT VOLTAGE   | 5V        |          |          |          | 9V       |          |          |          |
| INPUT CURRENT RANGE | 0 ~ 100mA |          |          |          | 0 ~ 56mA |          |          |          |
| EFFICIENCY          | 62%       | 67%      | 65%      | 70%      | 60%      | 63%      | 65%      | 70%      |

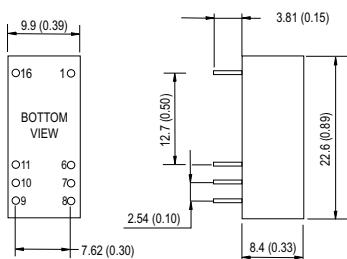
| ORDER NO.           | SRS-0512 | SRS-1212 | SRS-2412 | SRS-4812 | SRS-0515 | SRS-1215 | SRS-2415 | SRS-4815 |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| DC OUTPUT VOLTAGE   | 12V      |          |          |          | 15V      |          |          |          |
| INPUT CURRENT RANGE | 0 ~ 42mA |          |          |          | 0 ~ 34mA |          |          |          |
| EFFICIENCY          | 62%      | 65%      | 67%      | 72%      | 62%      | 65%      | 67%      | 72%      |

### SPECIFICATION

|              |                              |  |            |            |            |          |            |            |            |      |
|--------------|------------------------------|--|------------|------------|------------|----------|------------|------------|------------|------|
| OUTPUT       | RATED POWER                  | 0.5W   |            |            |            |          |            |            |            |      |
|              | VOLTAGE ACCURACY             | ±2%  |            |            |            |          |            |            |            |      |
|              | RIPPLE & NOISE (max.) Note.2 | 100mVp-p   |            |            |            |          |            |            |            |      |
|              | LINE REGULATION              | ±1%  |            |            |            |          |            |            |            |      |
|              | LOAD REGULATION Note.3       | ±1%  |            |            |            |          |            |            |            |      |
|              | SWITCHING FREQUENCY          | 50KHz min.   |            |            |            |          |            |            |            |      |
| INPUT        | VOLTAGE RANGE                | 4.5~5.5V   | 10.8~13.2V | 21.6~26.4V | 43.2~52.8V | 4.5~5.5V | 10.8~13.2V | 21.6~26.4V | 43.2~52.8V |      |
|              | NORMAL VOLTAGE               | 5V   | 12V        | 24V        | 48V        | 5V       | 12V        | 24V        | 48V        |      |
|              | INPUT CURRENT                | Full load  | 166mA      | 66mA       | 32mA       | 18mA     | 166mA      | 66mA       | 32mA       | 18mA |
|              |                              | No load  | 12mA       | 7mA        | 4mA        | 2mA      | 12mA       | 7mA        | 4mA        | 2mA  |
| FILTER       | Capacitor type               |  |            |            |            |          |            |            |            |      |
| PROTECTION   | OVER LOAD                    | Momentary  |            |            |            |          |            |            |            |      |
|              | SHORT CIRCUIT                | Momentary  |            |            |            |          |            |            |            |      |
| ENVIRONMENT  | WORKING TEMP., HUMIDITY      | -25~+60°C @, 20%~90% RH non-condensing; 80% load @ 71°C                |            |            |            |          |            |            |            |      |
|              | STORAGE TEMP., HUMIDITY      | -25~+105°C, 10~95% RH  |            |            |            |          |            |            |            |      |
|              | TEMP. COEFFICIENT            | ±0.03%/°C  |            |            |            |          |            |            |            |      |
|              | 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 for 1min.   |            |            |            |          |            |            |            |      |
|              | ISOLATION RESISTANCE         | I/P-O/P: 500VDC/ 100M Ohms min.  |            |            |            |          |            |            |            |      |
|              | ISOLATION CAPACITANCE        | 80pF max.  |            |            |            |          |            |            |            |      |
| OTHERS       | MTBF                         | 600khrs min. MIL-HDBK-217F Part-count GB                               |            |            |            |          |            |            |            |      |
|              | DIMENSION                    | 22.6*9.9*8.4mm (L*W*H) or 0.89**0.39**0.33" inch (L*W*H)               |            |            |            |          |            |            |            |      |
|              | PACKING                      | 3.1g/pcs   |            |            |            |          |            |            |            |      |

#### Mechanical Specification

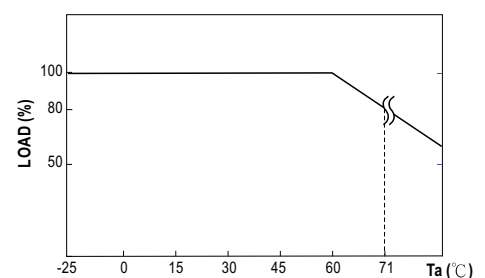
Unit: mm (inch)



#### Pin Configuration

| Pin No. | Output |
|---------|--------|
| 1 & 16  | +Vin   |
| 6 & 11  | -Vout  |
| 7 & 10  | +Vout  |
| 8 & 9   | -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. Load regulation is measured from 10% to 100% rated load.