

# VSR SERIES 1W REGULATED



## FEATURES

- SINGLE IN LINE PACKAGE
- UP TO 1W REGULATED OUTPUT POWER
- 100% BURN IN
- NO EXTERNAL COMPONENTS REQUIRED
- 1500VDC ISOLATION
- LOW COST
- UL 94V-0 PACKAGE MATERIAL
- INTERNAL SMD TECHNOLOGY
- 3 YEARS WARRANTY



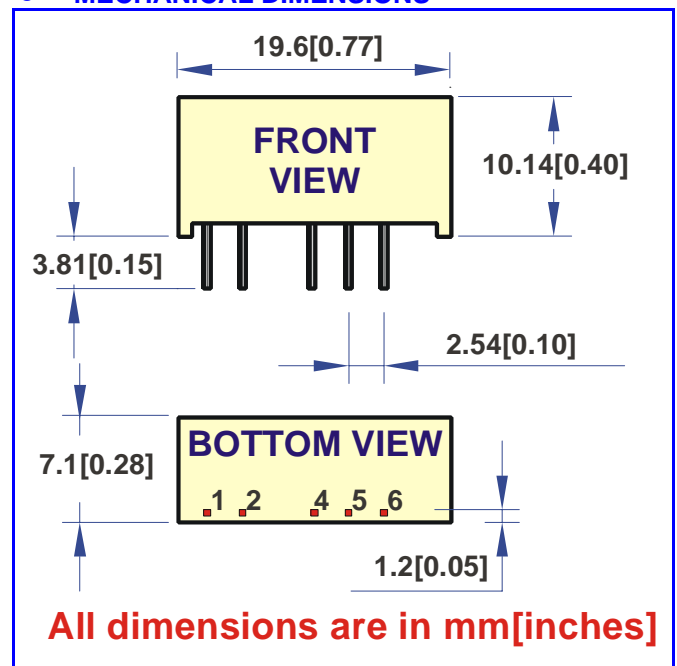
| OUTPUT SPECIFICATIONS      |                  | INPUT SPECIFICATIONS                |                     | GENERAL SPECIFICATIONS |                          |
|----------------------------|------------------|-------------------------------------|---------------------|------------------------|--------------------------|
| Voltage Set-point Accuracy | +/-3% max        | Input Voltage Range                 | +/-10% max          | Efficiency             | 56% min                  |
| Temperature Coefficient    | +/-0.05%/°C      | Input Filter                        | Capacitor Type      | Isolation Voltage      | 1500 VDC min             |
| Ripple & Noise(20MHz BW)   | 100mVp-p max     | Protection                          | Fuse Recommended    | Isolation Resistance   | 10 <sup>9</sup> ohms min |
| Line Regulation            | +/-1% max        | <b>ENVIRONMENTAL SPECIFICATIONS</b> |                     |                        |                          |
| Load Regulation            | +/-1% max        | Operating Temperature               | -25°C to +71°C      | Isolation Capacitance  | 80pF max                 |
| Minimum Load               | 10% of Full Load | Storage Temperature                 | -55°C to +125°C     | Switching Frequency    | 100KHz min               |
| Short Circuit Protection   | Current Limit    | Cooling                             | Free-Air Convection | MTBF                   | >1,800,000 Hours         |
| Transient Response         | 100uS max        | Humidity                            | 95% max             | Case Material          | Non-Conductive Plastic   |
|                            |                  |                                     |                     | Weight                 | 2.3g Typ                 |

### 1W OUTPUT

| MODEL NUMBER | INPUT (VDC) | OUTPUT      |              | EFF (%) | OUTPUT POWER (Watt) |
|--------------|-------------|-------------|--------------|---------|---------------------|
|              |             | VOLT. (VDC) | CURRENT (mA) |         |                     |
| VSR010-0505S | 4.5-5.5     | 5           | 200          | 60      | 1                   |
| VSR010-0509S | 4.5-5.5     | 9           | 100          | 57      | 0.9                 |
| VSR010-0512S | 4.5-5.5     | 12          | 84           | 60      | 1                   |
| VSR010-0515S | 4.5-5.5     | 15          | 67           | 60      | 1                   |
| VSR010-1205S | 10.8-13.2   | 5           | 200          | 66      | 1                   |
| VSR010-1209S | 10.8-13.2   | 9           | 100          | 59      | 0.9                 |
| VSR010-1212S | 10.8-13.2   | 12          | 84           | 60      | 1                   |
| VSR010-1215S | 10.8-13.2   | 15          | 67           | 62      | 1                   |
| VSR010-2405S | 21.6-26.4   | 5           | 200          | 62      | 1                   |
| VSR010-2409S | 21.6-26.4   | 9           | 100          | 58      | 0.9                 |
| VSR010-2412S | 21.6-26.4   | 12          | 84           | 60      | 1                   |
| VSR010-2415S | 21.6-26.4   | 15          | 67           | 60      | 1                   |
| VSR010-2424S | 21.6-26.4   | 24          | 42           | 61      | 1                   |
| VSR010-4805S | 43.2-52.8   | 5           | 200          | 62      | 1                   |
| VSR010-4809S | 43.2-52.8   | 9           | 100          | 56      | 0.9                 |

|              |           |    |    |    |   |
|--------------|-----------|----|----|----|---|
| VSR010-4812S | 43.2-52.8 | 12 | 84 | 58 | 1 |
| VSR010-4815S | 43.2-52.8 | 15 | 67 | 58 | 1 |

### MECHANICAL DIMENSIONS



| PIN    | 1    | 2    | 4     | 5  | 6     |
|--------|------|------|-------|----|-------|
| SINGLE | +Vin | -Vin | -Vout | NP | +Vout |