

**PART NUMBER:** VAS3 series**DESCRIPTION:** DC/DC converter**features**

- 3W isolated output
- efficiency to 61%
- regulated outputs
- LC input filter
- low ripple and noise
- 24-pin DIP package



| model number <sup>1</sup> | input voltage | output voltage | output current | input current |           | efficiency |
|---------------------------|---------------|----------------|----------------|---------------|-----------|------------|
|                           |               |                |                | no load       | full load |            |
| VAS3-S5-S5                | 5 Vdc         | 5 Vdc          | 600 mA         | 120 mA        | 984 mA    | 61%        |
| VAS3-S5-S12               | 5 Vdc         | 12 Vdc         | 250 mA         | 120 mA        | 984 mA    | 61%        |
| VAS3-S5-S15               | 5 Vdc         | 15 Vdc         | 200 mA         | 120 mA        | 984 mA    | 61%        |
| VAS3-S5-D12               | 5 Vdc         | ±12 Vdc        | ±125 mA        | 120 mA        | 984 mA    | 61%        |
| VAS3-S5-D15               | 5 Vdc         | ±15 Vdc        | ±100 mA        | 120 mA        | 984 mA    | 61%        |
| VAS3-S12-S5               | 12 Vdc        | 5 Vdc          | 600 mA         | 60 mA         | 410 mA    | 61%        |
| VAS3-S12-S12              | 12 Vdc        | 12 Vdc         | 250 mA         | 60 mA         | 410 mA    | 61%        |
| VAS3-S12-S15              | 12 Vdc        | 15 Vdc         | 200 mA         | 60 mA         | 410 mA    | 61%        |
| VAS3-S12-D12              | 12 Vdc        | ±12 Vdc        | ±125 mA        | 60 mA         | 410 mA    | 61%        |
| VAS3-S12-D15              | 12 Vdc        | ±15 Vdc        | ±100 mA        | 60 mA         | 410 mA    | 61%        |
| VAS3-S24-S5               | 24 Vdc        | 5 Vdc          | 600 mA         | 40 mA         | 205 mA    | 61%        |
| VAS3-S24-S12              | 24 Vdc        | 12 Vdc         | 250 mA         | 40 mA         | 205 mA    | 61%        |
| VAS3-S24-S15              | 24 Vdc        | 15 Vdc         | 200 mA         | 40 mA         | 205 mA    | 61%        |
| VAS3-S24-D12              | 24 Vdc        | ±12 Vdc        | ±125 mA        | 40 mA         | 205 mA    | 61%        |
| VAS3-S24-D15              | 24 Vdc        | ±15 Vdc        | ±100 mA        | 40 mA         | 205 mA    | 61%        |
| VAS3-S28-S5               | 28 Vdc        | 5 Vdc          | 600 mA         | 35 mA         | 176 mA    | 61%        |
| VAS3-S28-S12              | 28 Vdc        | 12 Vdc         | 250 mA         | 35 mA         | 176 mA    | 61%        |
| VAS3-S28-S15              | 28 Vdc        | 15 Vdc         | 200 mA         | 35 mA         | 176 mA    | 61%        |
| VAS3-S28-D12              | 28 Vdc        | ±12 Vdc        | ±125 mA        | 35 mA         | 176 mA    | 61%        |
| VAS3-S28-D15              | 28 Vdc        | ±15 Vdc        | ±100 mA        | 35 mA         | 176 mA    | 61%        |
| VAS3-S48-S5               | 48 Vdc        | 5 Vdc          | 600 mA         | 20 mA         | 102 mA    | 61%        |
| VAS3-S48-S12              | 48 Vdc        | 12 Vdc         | 250 mA         | 20 mA         | 102 mA    | 61%        |
| VAS3-S48-S15              | 48 Vdc        | 15 Vdc         | 200 mA         | 20 mA         | 102 mA    | 61%        |
| VAS3-S48-D12              | 48 Vdc        | ±12 Vdc        | ±125 mA        | 20 mA         | 102 mA    | 61%        |
| VAS3-S48-D15              | 48 Vdc        | ±15 Vdc        | ±100 mA        | 20 mA         | 102 mA    | 61%        |

**NOTES:**

1. suffix "-SMT" for SMT case style

**PART NUMBER:** VAS3 series**DESCRIPTION:** DC/DC converter**INPUT**

|                     |         |
|---------------------|---------|
| input voltage range | ±10%    |
| input filter        | LC type |

**OUTPUT**

|                              |                            |
|------------------------------|----------------------------|
| voltage accuracy             | ±3.0% max.                 |
| temperature coefficient      | ±0.02% / °C max.           |
| ripple and noise, 20MHz BW   | 50mV p-p max.              |
| short circuit protection     | indefinite & current limit |
| line Regulation <sup>1</sup> | single/dual                |
|                              | ±0.3%                      |
| load Regulation <sup>2</sup> | single                     |
|                              | ±0.5%                      |
|                              | dual                       |
|                              | ±1.0%                      |

**GENERAL SPECIFICATIONS**

|                             |   |
|-----------------------------|---|
| efficiency                  | see table                                 |
| isolation capacitance       | 150 pF typ.                               |
| isolation resistance        | 10 <sup>9</sup> Ohms                      |
| switching frequency         | 80K Hz min.                               |
| operating temperature range | -25°C to +71°C                            |
| storage temperature range   | -40°C to +100°C                           |
| case temperature            | 100°C max.                                |
| cooling                     | free air convection                       |
| dimensions                  | 1.25x0.8x0.4 inches<br>(31.8x20.3x10.2mm) |

**ISOLATION VOLTAGE**

|             |                 |
|-------------|-----------------|
| 500 Vdc min | standard models |
|-------------|-----------------|

**CASE MATERIAL**

|                 |  |
|-----------------|--|
| standard models | black coated copper with non-conductive base |
|-----------------|--|

**NOTES:**

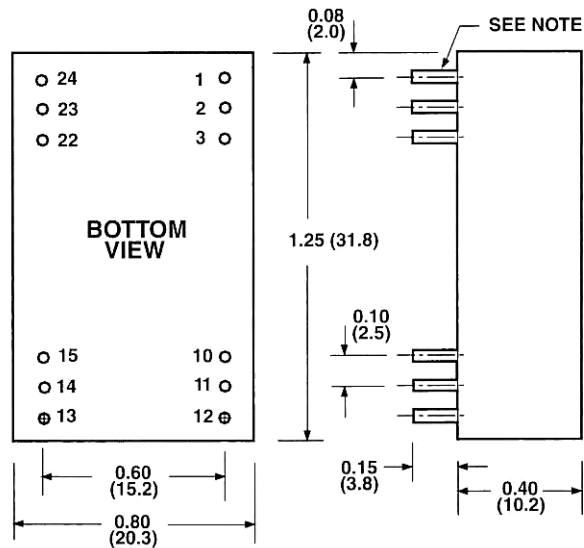
1. measured from high line to low line
2. measured from full load to 10% load

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**DESCRIPTION:** DC/DC converter

## DIMENSIONS (mm)

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA  
All Dimensions In Inches(mm)  
Tolerance .xx= ±.02, .xxx= ±.010



| PIN CONNECTION |               |             |
|----------------|---------------|-------------|
| 500 VDC        |               |             |
| Pin            | Single Output | Dual Output |

|    |           |           |           |
|----|-----------|-----------|-----------|
| 1  | 24        | +V Input  | +V Input  |
| 2  | 23        | NC        | -V Output |
| 3  | 22        | NC        | Common    |
| 10 | -V Output | Common    |           |
| 11 | +V Output | +V Output |           |
| 12 | -V Input  | -V Input  |           |
| 13 | -V Input  | -V Input  |           |
| 14 | +V Output | +V Output |           |
| 15 | -V Output | Common    |           |

\*NC-NO CONNECTION WITH PIN

## DERATING CURVE

