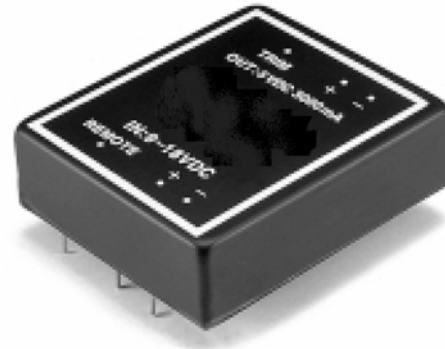


PART NUMBER: VED15 series

DESCRIPTION: wide input DC/DC converter

**features**

- 15W isolated output
- efficiency to 84%
- 200KHz switching frequency
- 2:1 input range
- six sided shield
- remote ON/OFF control



| model number    | input voltage | output voltage | output current | input current |           | efficiency |
|-----------------|---------------|----------------|----------------|---------------|-----------|------------|
|                 |               |                |                | no load       | full load |            |
| VED15-D12-S5    | 9-18VDC       | 5VDC           | 3000mA         | 20mA          | 1700mA    | 77%        |
| VED15-D12-S12   | 9-18VDC       | 12VDC          | 1250mA         | 20mA          | 1600mA    | 78%        |
| VED15-D12-S15   | 9-18VDC       | 15VDC          | 1000mA         | 20mA          | 1600mA    | 78%        |
| VED15-D12-D12   | 9-18VDC       | ±12VDC         | ±625mA         | 35mA          | 1520mA    | 82%        |
| VED15-D12-D15   | 9-18VDC       | ±15VDC         | ±500mA         | 35mA          | 1520mA    | 82%        |
| VED15-D12-T512  | 9-18VDC       | 5/±12VDC       | 1500/±310mA    | 30mA          | 1600mA    | 78%        |
| VED15-D12-T515  | 9-18VDC       | 5/±15VDC       | 1500/±250mA    | 30mA          | 1600mA    | 78%        |
| VED15-D12-T5125 | 9-18VDC       | +5/+12/-5VDC   | 1500/310/500mA | 30mA          | 1470mA    | 78%        |
| VED15-D24-S5    | 18-36VDC      | 5VDC           | 3000mA         | 25mA          | 810mA     | 77%        |
| VED15-D24-S12   | 18-36VDC      | 12VDC          | 1250mA         | 25mA          | 780mA     | 80%        |
| VED15-D24-S15   | 18-36VDC      | 15VDC          | 1000mA         | 25mA          | 780mA     | 80%        |
| VED15-D24-D12   | 18-36VDC      | ±12VDC         | ±625mA         | 25mA          | 750mA     | 84%        |
| VED15-D24-D15   | 18-36VDC      | ±15VDC         | ±500mA         | 25mA          | 750mA     | 84%        |
| VED15-D24-T512  | 18-36VDC      | 5/±12VDC       | 1500/±310mA    | 25mA          | 780mA     | 80%        |
| VED15-D24-T515  | 18-36VDC      | 5/±15VDC       | 1500/±250mA    | 25mA          | 780mA     | 80%        |
| VED15-D24-T5125 | 18-36VDC      | +5/+12/-5VDC   | 1500/310/500mA | 25mA          | 715mA     | 80%        |
| VED15-D48-S5    | 36-72VDC      | 5VDC           | 3000mA         | 10mA          | 410mA     | 77%        |
| VED15-D48-S12   | 36-72VDC      | 12VDC          | 1250mA         | 10mA          | 390mA     | 80%        |
| VED15-D48-S15   | 36-72VDC      | 15VDC          | 1000mA         | 10mA          | 390mA     | 80%        |
| VED15-D48-D12   | 36-72VDC      | ±12VDC         | ±625mA         | 15mA          | 380mA     | 82%        |
| VED15-D48-D15   | 36-72VDC      | ±15VDC         | ±500mA         | 15mA          | 380mA     | 82%        |
| VED15-D48-T512  | 36-72VDC      | 5/±12VDC       | 1500/±310mA    | 15mA          | 380mA     | 82%        |
| VED15-D48-T515  | 36-72VDC      | 5/±15VDC       | 1500/±250mA    | 15mA          | 380mA     | 82%        |
| VED15-D48-T5125 | 36-72VDC      | +5/+12/-5VDC   | 1500/310/500mA | 15mA          | 350mA     | 82%        |

PART NUMBER: VED15 series

DESCRIPTION: wide input DC/DC converter

### INPUT

|                     |                                       |
|---------------------|---------------------------------------|
| input voltage range | 12V 9-18V<br>24V 18-36V<br>48V 36-72V |
| input filter        | PI Type                               |

### OUTPUT

|  |                            |                  |
|--|----------------------------|------------------|
| voltage accuracy                         | single output              | ±1.0% max.       |
|  | dual +output               | ±1.0% max.       |
|  | -output                    | ±3.0% max.       |
|  | triple, 5V                 | ±2.0% max.       |
|  | 12V/15V                    | ±3.0% max.       |
| voltage balance (dual)                   |                            | ±1.0%max         |
| transient response: 25% step load change |                            | <500µ sec.       |
|  | dual, FL-1/2±1% error band | <500µ sec.       |
| external trim adj. range                 |                            | ±10%             |
| ripple & noise                           | 20MHz BW                   | 10mV RMS., max   |
|  |                            | 75mV pk-pk., max |
| temperature coefficient                  |                            | ±0.02%/°C        |
| short circuit protection                 |                            | continuous       |
| line regulation <sup>1</sup>             | single/dual                | ±0.2% max.       |
|  | triple                     | ±1.0% max.       |
| load regulation <sup>2</sup>             | single/dual                | ±1.0% max.       |
|  | triple                     | ±5.0% max.       |

### GENERAL SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| efficiency                  | see table                                    |
| isolation voltage           | 500VDC min.                                  |
| isolation resistance        | 10 <sup>9</sup> Ohm min.                     |
| switching frequency         | 200KHz, Type                                 |
| operating temperature range | -25°C to +71°C                               |
| case temperature            | 100°C max.                                   |
| storage temperature         | -55°C to +105°C                              |
| cooling                     | free air convection                          |
| EMI/RFI                     | six sided continuous shield                  |
| dimensions                  | 2.56x3.0x0.83 inches<br>(65x76.2x21.1mm)     |
| case material               | black coated copper with non-conductive base |

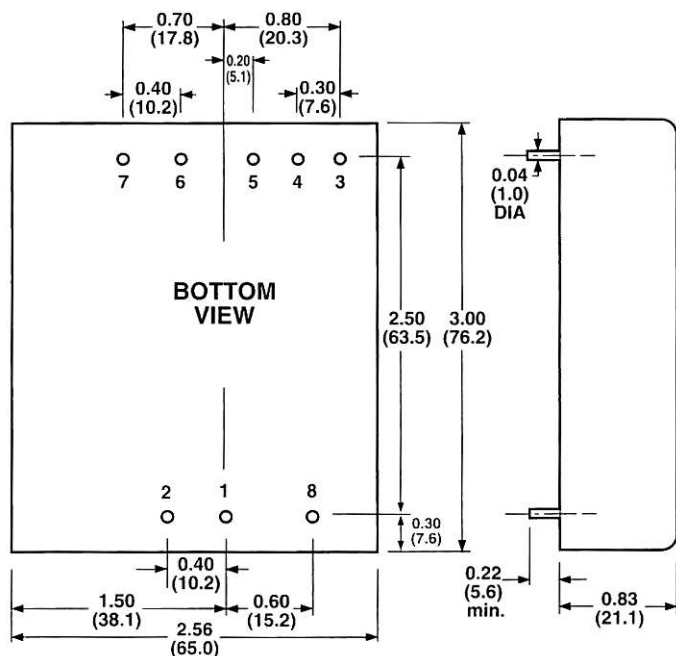
#### NOTES:

1. measured from high line to low line
2. measured from full load to 1/4 load

PART NUMBER: VED15 series

DESCRIPTION: wide input DC/DC converter

## DIMENSIONS (mm)

 All Dimensions In Inches(mm)  
 Tolerance .xx= ±.04, .xxx= ±.010


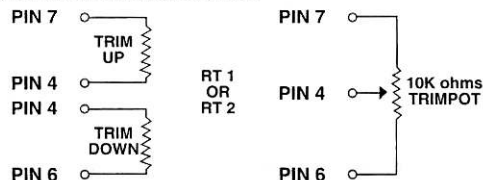
### PIN CONNECTION

| Pin | Single Output         | Dual Output | Triple Output |
|-----|-----------------------|-------------|---------------|
| 1.  | +Input                | +Input      | +Input        |
| 2.  | -Input                | -Input      | -Input        |
| 3.  | No Pin                | +Output     | +Output       |
| 4.  | Output Trim           | Common      | Common        |
| 5.  | No Pin                | -Output     | -Output       |
| 6.  | +Output               | No Pin      | +5V Output    |
| 7.  | -Output               | No Pin      | No Pin        |
| 8.  | Remote On/Off Control |             |               |

### Remote On/Off Control

|                       |                            |
|-----------------------|----------------------------|
| Logic Compatibility   | CMOS or Open Collector TTL |
| EC-On                 | >+5.5VDC or Open Circuit   |
| EC-Off                | <1.8 VDC                   |
| Shutdown Idle Current | 10 mA                      |
| Control Common        | Referenced to Input Minus  |

### External Output Trimming

 Output may optionally be externally trimmed ( $\pm 10\%$ ) with a fixed resistor or an external trimpot as shown.


## DERATING CURVE

