

**PART NUMBER:** VAD7R5 series**DESCRIPTION:** DC/DC converter**features**

- 7.5W isolated output
- efficiency to 83%
- regulated outputs
- continuous short circuit protection
- 24-Pin DIP package
- 2:1 input range
- Pi input filter



model number	input voltage	output voltage	output current	input current		efficiency
				no load	full load	
VAD7R5-D12-S3R3	9-18VDC	3.3VDC	1500mA	25mA	557mA	74%
VAD7R5-D12-S5	9-18VDC	5VDC	1500mA	25mA	801mA	78%
VAD7R5-D12-S12	9-18VDC	12VDC	625mA	25mA	762mA	82%
VAD7R5-D12-S15	9-18VDC	15VDC	500mA	25mA	762mA	82%
VAD7R5-D12-D5	9-18VDC	±5VDC	±750mA	30mA	791mA	79%
VAD7R5-D12-D12	9-18VDC	±12VDC	±310mA	30mA	753mA	83%
VAD7R5-D12-D15	9-18VDC	±15VDC	±250mA	30mA	753mA	83%
VAD7R5-D24-S3R3	18-36VDC	3.3VDC	1500mA	20mA	271mA	76%
VAD7R5-D24-S5	18-36VDC	5VDC	1500mA	20mA	396mA	79%
VAD7R5-D24-S12	18-36VDC	12VDC	625mA	20mA	381mA	82%
VAD7R5-D24-S15	18-36VDC	15VDC	500mA	20mA	381mA	82%
VAD7R5-D24-D5	18-36VDC	±5VDC	±750mA	25mA	386mA	81%
VAD7R5-D24-D12	18-36VDC	±12VDC	±310mA	25mA	377mA	83%
VAD7R5-D24-D15	18-36VDC	±15VDC	±250mA	25mA	377mA	83%
VAD7R5-D48-S3R3	36-72VDC	3.3VDC	1500mA	10mA	136mA	76%
VAD7R5-D48-S5	36-72VDC	5VDC	1500mA	10mA	195mA	80%
VAD7R5-D48-S12	36-72VDC	12VDC	625mA	10mA	190mA	82%
VAD7R5-D48-S15	36-72VDC	15VDC	500mA	10mA	190mA	82%
VAD7R5-D48-D5	36-72VDC	±5VDC	±750mA	15mA	193mA	81%
VAD7R5-D48-D12	36-72VDC	±12VDC	±310mA	15mA	188mA	83%
VAD7R5-D48-D15	36-72VDC	±15VDC	±250mA	15mA	188mA	83%

**NOTE:**

1. suffix "-SMT" for SMT case style

**PART NUMBER:** VAD7R5 series**DESCRIPTION:** DC/DC converter**INPUT**

input voltage range	12V:	9-18V
	24V:	18-36V
	48V:	36-72V
input filter	Pi type	

**OUTPUT**

voltage accuracy	±2.0% max.	
voltage balance (dual)	±1.0% max.	
ripple & noise, 20MHz BW	100mV p-p max.	
temperature coefficient	±0.05%/°C	
short circuit protection	continuous	
line regulation	single/dual	±0.2% max.
load regulation	single	±0.5% max.
	dual	±1.0% max.

**GENERAL SPECIFICATIONS**

efficiency	see table	
isolation voltage	1500VDC min.	
isolation resistance	10 <sup>9</sup> Ohm	
switching frequency	300KHz, typical	
operating temperature range	-25°C to +71°C	
case temperature	100°C max.	
cooling	free-air convection	
storage temperature range	-40°C to +100°C	
dimensions	1.25x0.8x0.4 inches (31.8x20.3x10.2mm)	
case material	black coated copper with non-conductive base	

**NOTES:**

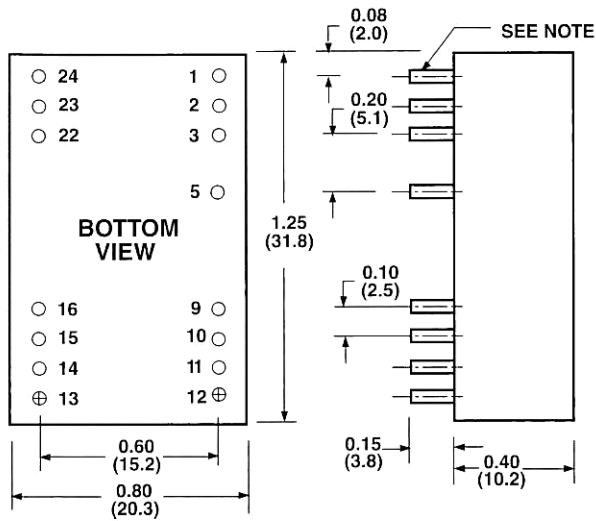
1. measured from high line to low line
2. measured from full load to 10% load
3. measured from full load to 1/4 load

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## DIMENSIONS (mm)

NOTE: Pin Size is 0.020" Inch (0.5mm) DIA  
All Dimensions In Inches(mm)  
Tolerance .xx= ±.02, .xxx= ±.010



### PIN CONNECTION

1500 VDC

Pin	Single Output	Dual Output
1	NP	NP
2	-V Input	-V Input
3	-V Input	-V Input
5	NP	NP
9	NC	Common
10	NC	NC
11	NC	-V Output
12	NP	NP
13	NP	NP
14	+V Output	+V Output
15	NC	NC
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input
24	NP	NP

\*NP-NO PIN

\*NC-NO CONNECTION WITH PIN

## DERATING CURVE

