

**PART NUMBER:** VAD10 series

**DESCRIPTION:** DC/DC converter

**features**

- 7.5-10 W isolated output
- 24-pin DIP shielded metal case
- efficiency to 89%
- wide 2:1 input range
- regulated outputs
- Pi input filter
- continuous short circuit protection
- no tantalum capacitor inside



model number	input voltage	output voltage	output current	input current		efficiency
				no load	full load	
VAD10-D12-S2R5	9-18 VDC	2.5 VDC	3000 mA	40 mA	753 mA	83%
VAD10-D12-S3R3	9-18 VDC	3.3 VDC	3000 mA	40 mA	971 mA	85%
VAD10-D12-S5	9-18 VDC	5 VDC	2000 mA	40 mA	958 mA	87%
VAD10-D12-S12	9-18 VDC	12 VDC	835 mA	40 mA	949 mA	88%
VAD10-D12-S15	9-18 VDC	15 VDC	666 mA	40 mA	946 mA	88%
VAD10-D12-D12	9-18 VDC	±12 VDC	416 mA	20 mA	956 mA	87%
VAD10-D12-D15	9-18 VDC	±15 VDC	333 mA	20 mA	968 mA	86%
VAD10-D24-S2R5	18-36 VDC	2.5 VDC	3000 mA	30 mA	375 mA	83%
VAD10-D24-S3R3	18-36 VDC	3.3 VDC	3000 mA	30 mA	480 mA	85%
VAD10-D24-S5	18-36 VDC	5 VDC	2000 mA	30 mA	475 mA	88%
VAD10-D24-S12	18-36 VDC	12 VDC	835 mA	30 mA	470 mA	89%
VAD10-D24-S15	18-36 VDC	15 VDC	666 mA	30 mA	468 mA	89%
VAD10-D24-D12	18-36 VDC	±12 VDC	416 mA	20 mA	473 mA	88%
VAD10-D24-D15	18-36 VDC	±15 VDC	333 mA	20 mA	478 mA	87%
VAD10-D48-S2R5	36-75 VDC	2.5 VDC	3000 mA	15 mA	185 mA	83%
VAD10-D48-S3R3	36-75 VDC	3.3 VDC	3000 mA	15 mA	240 mA	85%
VAD10-D48-S5	36-75 VDC	5 VDC	2000 mA	15 mA	240 mA	87%
VAD10-D48-S12	36-75 VDC	12 VDC	835 mA	15 mA	235 mA	89%
VAD10-D48-S15	36-75 VDC	15 VDC	666 mA	15 mA	234 mA	89%
VAD10-D48-D12	36-75 VDC	±12 VDC	416 mA	10 mA	236 mA	88%
VAD10-D48-D15	36-75 VDC	±15 VDC	333 mA	10 mA	239 mA	87%

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**INPUT**

input voltage range	12 V	9-18 V
	24 V	18-36 V
	48 V	36-75 V
under voltage lockout	12 Vin power up	8.8 V
	12 Vin power down	8 V
	24 Vin power up	17 V
	24 Vin power down	16 V
	48 Vin power up	34 V
	48 Vin power down	32 V
input filter		Pi type

**OUTPUT**

voltage accuracy		±1.0% max.
temperature coefficient		±0.05% / °C max.
ripple and noise	20MHz BW	75mV p-p max.
short circuit protection		continuous
line regulation <sup>1</sup>	single	±0.2% max
	dual	±0.5% max
load regulation <sup>2</sup>	single - DIP / SMD	±0.5% / ±1.0% max
	dual	±1.0% max
over voltage protection	2.5 V	3.6 V
	3.3 V	3.9 V
	5 V	6.2 V
	12 V	15 V

**GENERAL SPECIFICATIONS**

efficiency		see table
isolation resistance		10 <sup>9</sup> Ohms
switching frequency		380KHz typ.
operating temperature range		-40°C to +85°C
storage temperature		-40°C to +125°C
case temp.		100°C max.
cooling		free air convection
dimensions		1.25x0.8x0.4 inches
		(31.8x20.3x10.2mm)
case material		black-coated copper with non-conductive base
weight		18.4 g

**NOTES:**

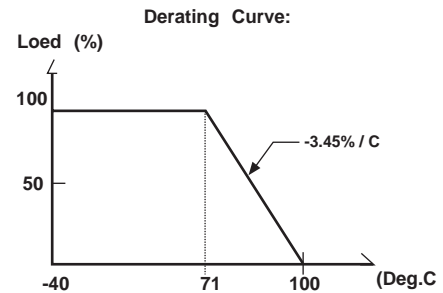
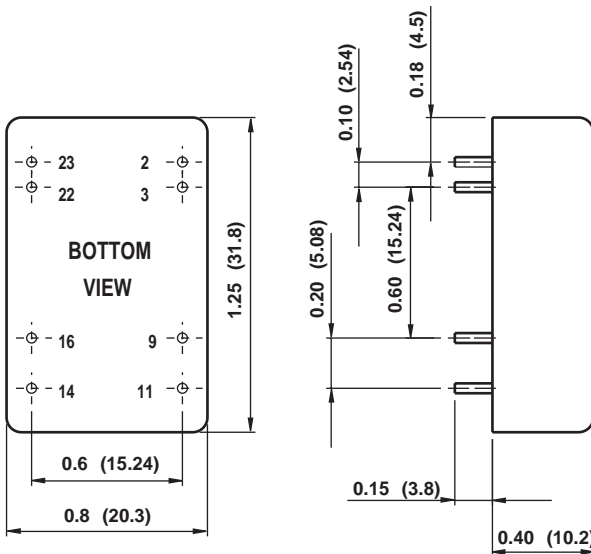
1. Measured from high line to low line
2. Measured from full load to 10% load

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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

Pin	Single Output	Dual Output
2	-V Input	
3		-V Input
9	NP	Common
11	NC	-V Input
14	+V Output	+V Output
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input

All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.

## DERATING CURVE

