V·INFINITY

VDZ200 Series Dc-Dc Converter

Rev. 05-2006

Features

- ·Input PI filter
- ·High Density
- ·2:1, 4:1 input range
- ·High reliability
- ·Easy Installation
- ·Rugged
- ·Compact
- ·Low profile
- ·Six side metal shielding
- ·Low EMI interference
- ·Able to withstand high vibration and shock
- ·Perfectly suited for: transportation, base station, telecom, and test equipment

Model Number	Nominal Input	Input Range	Output Voltage	Output Current	Output Power	Ripple & Noise	Typical Efficiency
VDZ200-D12-S12	12	9-18 Vdc	12V	6.25 A	75W	120 (mVpp)	83%
VDZ200-D12-S15	12	9-18 Vdc	15V	5.0 A	75W	150 (mVpp)	83%
VDZ200-D12-S24	12	9-18 Vdc	24V	4.16 A	100W	200 (mVpp)	83%
VDZ200-D12-S28	12	9-18 Vdc	28V	4.46 A	125W	280 (mVpp)	84%
VDZ200-D12-S48	12	9-18 Vdc	48V	2.6 A	125W	400 (mVpp)	84%
VDZ200-D24-S12	24	18-36 Vdc	12V	6.25 A	75W	120 (mVpp)	85%
VDZ200-D24-S15	24	18-36 Vdc	15V	5.0 A	75W	120 (mVpp)	85%
VDZ200-D24-S24	24	18-36 Vdc	24V	4.16 A	100W	200 (mVpp)	88%
VDZ200-D24-S28	24	18-36 Vdc	28V	4.46 A	125W	280 (mVpp)	88%
VDZ200-D24-S48	24	18-36 Vdc	48V	3.13 A	150W	400 (mVpp)	89%
VDZ200-D48-S12	48	36-72 Vdc	12V	10.4 A	125W	120 (mVpp)	88%
VDZ200-D48-S15	48	36-72 Vdc	15V	8.33A	125W	120 (mVpp)	88%
VDZ200-D48-S24	48	36-72 Vdc	24V	5.2 A	125W	200 (mVpp)	89%
VDZ200-D48-S28	48	36-72 Vdc	28V	4.46 A	125W	280 (mVpp)	89%
VDZ200-D48-S48	48	36-72 Vdc	48V	3.125 A	150W	400 (mVpp)	88%
VDZ200-Q24-S12	18	9-36 Vdc	12V	6.25 A	75W	120 (mVpp)	83%
VDZ200-Q24-S15	18	9-36 Vdc	15V	5.0 A	75W	150 (mVpp)	83%
VDZ200-Q24-S24	18	9-36 Vdc	24V	5.0 A	120W	200 (mVpp)	85%
VDZ200-Q24-S28	18	9-36 Vdc	28V	4.29 A	120W	280 (mVpp)	85%
VDZ200-Q24-S48	18	9-36 Vdc	48V	2.6 A	125W	480 (mVpp)	84%
VDZ200-Q48-S12	48	18-72 Vdc	12V	6.25 A	75W	120 (mVpp)	84%
VDZ200-Q48-S15	48	18-72 Vdc	15V	5.0 A	75W	150 (mVpp)	84%
VDZ200-Q48-S24	48	18-72 Vdc	24V	5.0 A	120W	200 (mVpp)	84%
VDZ200-Q48-S28	48	18-72 Vdc	28V	4.29 A	120W	280 (mVpp)	84%
VDZ200-Q48-S48	48	18-72 Vdc	48V	3.125 A	150W	400 (mVpp)	83%

Input

Specification	Typical	Range	Units
Input Voltage Range	12V	9~18	Vdc
	24V	18~36	Vdc
	48V	36~72	Vdc
	18V	9~36	Vdc
	48V	18-72	Vdc
Input Reversal Protection	Protected if an external input fuse is installed.		

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Output

Specification	Min.	Typ.	Max.	Units
Voltage Accuracy			±1%	
Trim Adjustment		±10%		
Ripple and Noise(@ 20MHz Bandwidth)			<1%	mVpp
Line Regulation			±0.2%	
Load Regulation			±0.4%	
Temperature Coefficient			±0.01	%/°C
Transient Response (25%-50%-25% & 50%-75%-50%)			200	µs

General Specifications

Specification		Min.	Typ.	Max.	Units
Switching Frequency		160K	180K	200K	Hz
Isolation Resistance		200M			Ω
MTBF		200K			hours
Isolation Voltage	Input-Output	1000			Vdc
	Input-Case	1000			Vdc
	Output-Case	1000			Vdc

Environmental Specifications

Specification		Min.	Typ.	Max.	Units
Case Temperature	(Industrial Grade)	-25		+85	°C
	(Military Grade I)	-40		+85	°C
	(Military Grade II)	-55		+85	°C
Storage Temperature	(Industrial Grade)	-45		+105	°C
	(Military Grade)	-55		+105	°C
Case Humidity	(Non-condensing)	5%		85%	RH
Storage Humidity	(Non-condensing)	5%		95%	RH

Thermal Characteristics

Cooling Method		Thermal Impedance
Natural convection		4.38°C/W
0.5 (M/S)	1.64 (LF/S)	3.65°C/W
1.0 (M/S)	3.28 (LF/S)	2.72°C/W
1.5 (M/S)	4.92 (LF/S)	1.98°C/W
2.0 (M/S)	6.56 (LF/S)	1.64°C/W

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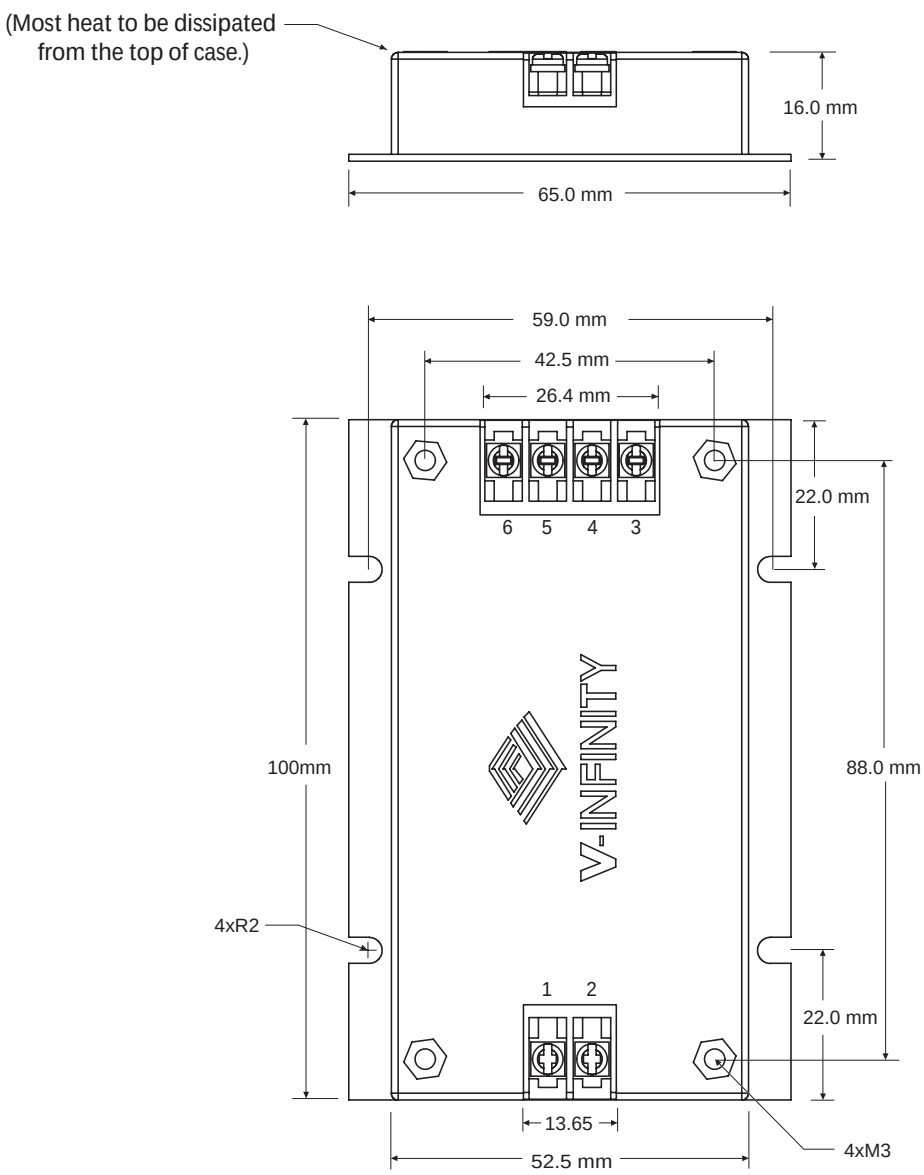
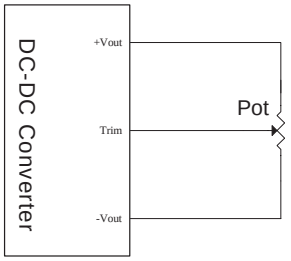
Dimensions



Pin	Function
1	+Vin
2	-Vin
3	-Vout
4	-Vout
5	+Vout
6	Trim

Trim Diagram



Suggested Values

Vout	12V	15V	24V	28V	48V
Potentiometer	20K	33K	47K	47K	100K