V·INFINITY

VCD30-T Series Screw Terminal Dc-Dc Converter

Rev. 01-2009

Features

- 25-30W isolated output
- Efficiency to 85%
- 2:1 input range
- Six sided shield
- Remote On/Off Control
- Output Trimming



RoHS

Model Number	Input Voltage	Output Voltage	Output Current	Input Current No Load	Input Current Full Load	Effic.	Case
VCD30-D12-S5-T	9-18VDC	5VDC	5000mA	30mA	2675mA	78%	C
VCD30-D12-S12-T	9-18VDC	12VDC	2500mA	30mA	3050mA	82%	C
VCD30-D12-S15-T	9-18VDC	15VDC	2000mA	30mA	3050mA	82%	C
VCD30-D12-D5-T	9-18VDC	±5VDC	±2500mA	35mA	2675mA	78%	C
VCD30-D12-D12-T	9-18VDC	±12VDC	±1250mA	35mA	3050mA	82%	C
VCD30-D12-D15-T	9-18VDC	±15VDC	±1000mA	35mA	3050mA	82%	C
VCD30-D12-S3R3-T	9-18VDC	3.3VDC	5000mA	30mA	1860mA	74%	C
VCD30-D24-S5-T	18-36VDC	5VDC	5000mA	30mA	1336mA	79%	C
VCD30-D24-S12-T	18-36VDC	12VDC	2500mA	30mA	1525mA	82%	C
VCD30-D24-S15-T	18-36VDC	15VDC	2000mA	30mA	1525mA	82%	C
VCD30-D24-D5-T	18-36VDC	±5VDC	±2500mA	30mA	1336mA	79%	C
VCD30-D24-D12-T	18-36VDC	±12VDC	±1250mA	30mA	1470mA	85%	C
VCD30-D24-D15-T	18-36VDC	±15VDC	±1000mA	30mA	1470mA	85%	C
VCD30-D48-S5-T	36-72VDC	5VDC	5000mA	20mA	660mA	79%	C
VCD30-D48-S12-T	36-72VDC	12VDC	2500mA	20mA	765mA	82%	C
VCD30-D48-S15-T	36-72VDC	15VDC	2000mA	20mA	765mA	82%	C
VCD30-D48-D5-T	36-72VDC	±5VDC	±2500mA	25mA	660mA	79%	C
VCD30-D48-D12-T	36-72VDC	±12VDC	±1250mA	25mA	735mA	85%	C
VCD30-D48-D15-T	36-72VDC	±15VDC	±1000mA	25mA	735mA	85%	C
VCD30-D48-S3R3-T	36-72VDC	3.3VDC	5000mA	20mA	460mA	75%	C

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Input

Input Voltage Range	12V:	9-18V
	24V:	18-36V
	48V:	36-72V
Input Filter		Pi Type

Output

Voltage Accuracy	Single Output	±2.0% max.
	Dual +Output	±2.0% max.
	-Output	±3.0% max.
	Triple, 5V	±2.0% max.
	12V/15V	±5.0% max.
Voltage Balence (Dual)		±1.0%max
Transient Response:	Single Output: 25% Step Load Change	<500μS
	Dual Output: FL~1/2L, ±1% Error Band	<500μS
External Trim Adj. Range		±10%
Ripple & Noise	20MHz BW	10mV RMS., max
		75mV p-p, max
Temperature Coefficient		±0.02%/°C
Short Circuit Protection		Continuous
Line Regulation[1]	Single/Dual	±0.5% max.
	Triple	±1.0% max.
Load Regulation[2]	Single/Dual	±1.0% max.
	Triple	±5.0% max.

General Specifications

Efficiency	see table
Isolation Voltage	500VDC min.
Isolation Resistance	10^9Ohm min.
Switching Frequency	300KHz, Typical
Case Grounding	Connected to Output common
Operating Temperature Range	-25°C to +71°C
Case Temperature	100°C max.
Cooling	Free-Air Convection
Storage Temperature	-55°C to +105°C
EMI/RFI	Six Sided Continuous Shield
Dimensions	2x2x0.4 inches (50.8x50.8x10.2mm)
Case Material	Black coated copper with non-conductive base

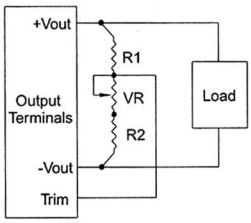
NOTES:
1. Measured from High Line to Low Line
2. Measured from Full Load to 1/4 Load

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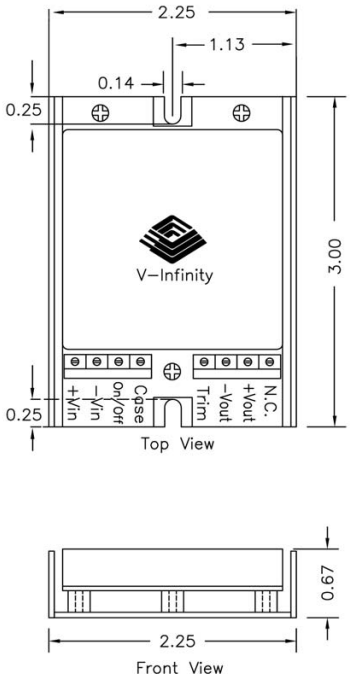
Trim Method



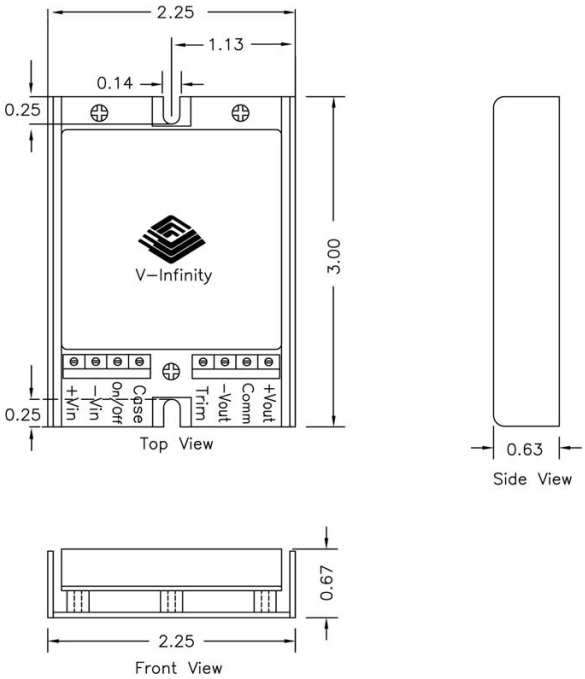
External Trim Resistors

Model	Output Voltage	VR	R1	R2
Single Output Models	5V	1K	1.0K	680Ω
	12V	1K	3.9K	680Ω
	15V	1K	5.6K	750Ω
Dual Output Models	±5V(10V)	1K	3.3K	680Ω
	±12V(24V)	5K	9.0K	820Ω
	+15V(30V)	5K	20.0K	910Ω

Single Output



Dual Output



*DIN rail mounting kit available (part# STK-DIN)

PIN Definitions

+Vin:	Input positive terminal
-Vin:	Input negative terminal
CNT:	Remote On/Off control of output voltage. Referenced to -Vin
+Vout:	Main output positive terminal
-Vout:	Output negative terminal
Com:	Common node for dual- or triple-output models
Trim:	For trimming output voltage on single- or dual-output models
Case:	Connected to chassis

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