V-INFINITY
a division of CUI INC

date 08/2007

PART NUMBER: VCD30 series

DESCRIPTION: DC/DC converter

features
- **25-30W isolated output**
- **efficiency to 85%**
- **2:1 input range**
- **six sided shield**
- **remote on/off control**
- **output trimming**

model number	input voltage	output voltage	output current	input current no load	input current full load	efficiency
VCD30-D12-S3R3	9-18VDC	3.3VDC	5000mA	30mA	1860mA	74%
VCD30-D12-S5	9-18VDC	5VDC	5000mA	30mA	2675mA	78%
VCD30-D12-S12	9-18VDC	12VDC	2500mA	30mA	3050mA	82%
VCD30-D12-S15	9-18VDC	15VDC	2000mA	30mA	3050mA	82%
VCD30-D12-D5	9-18VDC	±5VDC	±2500mA	35mA	2675mA	78%
VCD30-D12-D12	9-18VDC	±12VDC	±1250mA	35mA	3050mA	82%
VCD30-D12-D15	9-18VDC	±15VDC	±1000mA	35mA	3050mA	82%
VCD30-D12-T512	9-18VDC	5/±12VDC	3500/±310mA	35mA	2640mA	79%
VCD30-D15-T515	9-18VDC	5/±15VDC	3500/±250mA	35mA	2640mA	79%
VCD30-D24-S3R3	18-36VDC	3.3VDC	5000mA	30mA	920mA	75%
VCD30-D24-S5	18-36VDC	5VDC	5000mA	30mA	1336mA	79%
VCD30-D24-S12	18-36VDC	12VDC	2500mA	30mA	1525mA	82%
VCD30-D24-S15	18-36VDC	15VDC	2000mA	30mA	1525mA	82%
VCD30-D24-D5	18-36VDC	±5VDC	±2500mA	30mA	1336mA	79%
VCD30-D24-D12	18-36VDC	±12VDC	±1250mA	30mA	1470mA	85%
VCD30-D24-D15	18-36VDC	±15VDC	±1000mA	30mA	1470mA	85%
VCD30-D24-T512	18-36VDC	5/±12VDC	3500/±310mA	30mA	1320mA	80%
VCD30-D24-T515	18-36VDC	5/±15VDC	3500/±250mA	30mA	1320mA	80%
VCD30-D48-S3R3	36-72VDC	3.3VDC	5000mA	20mA	460mA	75%
VCD30-D48-S5	36-72VDC	5VDC	5000mA	20mA	660mA	79%
VCD30-D24-S12	36-72VDC	12VDC	2500mA	20mA	765mA	82%
VCD30-D48-S15	36-72VDC	15VDC	2000mA	20mA	765mA	82%
VCD30-D48-D5	36-72VDC	±5VDC	±2500mA	25mA	660mA	79%
VCD30-D48-D12	36-72VDC	±12VDC	±1250mA	25mA	735mA	85%
VCD30-D48-D15	36-72VDC	±15VDC	±1000mA	25mA	735mA	85%
VCD30-D48-T512	36-72VDC	5/±12VDC	3500/±310mA	25mA	655mA	80%
VCD30-D48-T515	36-72VDC	5/±15VDC	3500/±250mA	25mA	655mA	80%

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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 balance (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
safety	UL 60950-1 file # E222736
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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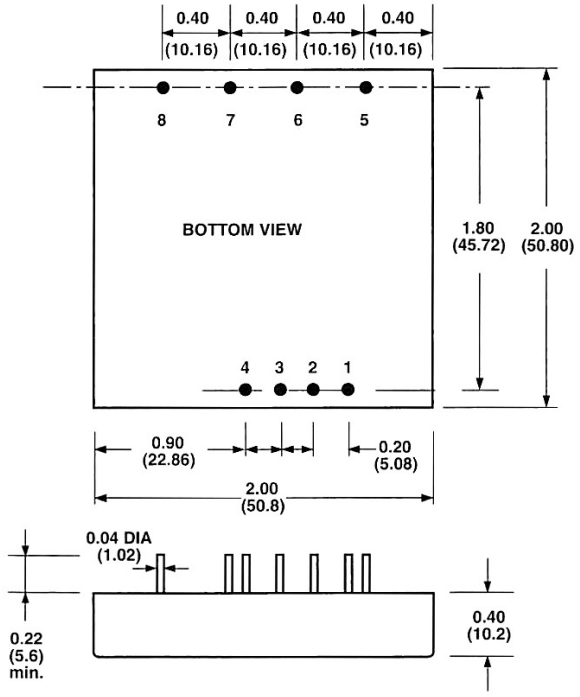
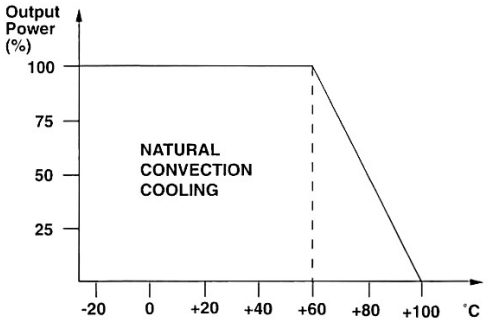
DIMENSIONS (mm)

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



OPERATING LIMITS AND OUTPUT POWER RANGE



PIN CONNECTION

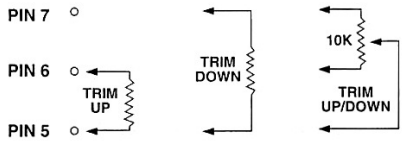
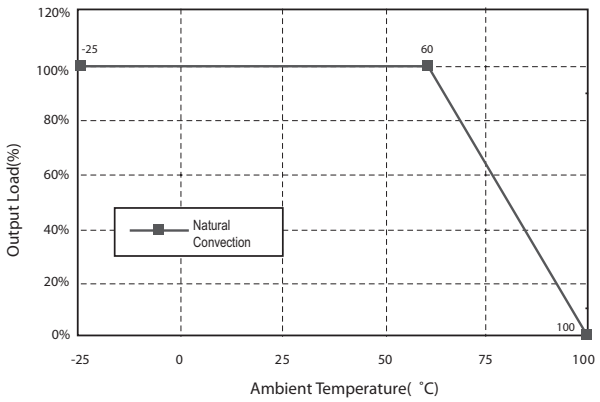
Pin	Single	Daul	Triple
1.	Remote On/Off Control		
2.	No Pin	No Pin	No Pin
3.	-Vin	-Vin	-Vin
4.	+Vin	+Vin	+Vin
5.	Trim	Trim	-Aux. Out
6.	-Vout	-Vout	Common
7.	+Vout	Common	+5V out
8.	No Pin	+Vout	+Aux. Out

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 (±10%) with a fixed resistor or an external trimpot as shown.



DERATING CURVE