

PART NUMBER: VSCD25 series

DESCRIPTION: DC/DC converter

features

- 14.4 to 25W isolated output
- efficiency up to 91%
- fixed 300KHz switching frequency
- regulated outputs
- 2:1 input range
- continuous short circuit protection
- six-sided metal case or open-frame
- 2" X 1.6" size
- industry standard pin-out



model number	input voltage	output voltage	output current	input current		efficiency	size
				no load	full load		
VSCD25-D24-S1R8	18-36VDC	1.8VDC	8A	70mA	723mA	83%	SC
VSCD25-D24-S2R5	18-36VDC	2.5VDC	8A	70mA	970mA	86%	SC
VSCD25-D24-S3R3	18-36VDC	3.3VDC	6A	70mA	940mA	88%	SC
VSCD25-D24-S5	18-36VDC	5.0VDC	5A	70mA	1170mA	89%	SC
VSCD25-D24-S12	18-36VDC	12VDC	2A	50mA	1136mA	88%	SC
VSCD25-D24-S15	18-36VDC	15VDC	1.6A	50mA	1136mA	88%	SC
VSCD25-D48-S1R8	36-75VDC	1.8VDC	8A	50mA	353mA	85%	SC
VSCD25-D48-S2R5	36-75VDC	2.5VDC	8A	50mA	479mA	87%	SC
VSCD25-D48-S3R3	36-75VDC	3.3VDC	6A	50mA	465mA	89%	SC
VSCD25-D48-S5	36-75VDC	5.0VDC	5A	50mA	572mA	91%	SC
VSCD25-D48-S12	36-75VDC	12VDC	2A	30mA	562mA	89%	SC
VSCD25-D48-S15	36-75VDC	15VDC	1.6A	30mA	562mA	89%	SC

GENERAL SPECIFICATIONS

efficiency	see table	
isolation voltage	1500VDC max.	
isolation resistance	10 ⁸ Ohm min.	
switching frequency	300KHz, Typ	
operating temperature range	-40°C to +85°C	
case temperature	100°C max.	
storage temperature range	-55°C to +125°C	
thermal shutdown, case temp.	100°C Typ.	
dimensions:	metal case	2.00x1.60x0.45 inches
	open frame	1.95x1.55x0.35 inches
metal case material:	black coated copper with non-conductive base	

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input voltage range		24V 18-36V 48V 36-75V
undervoltage lockout	24Vin power up	17V
	24Vin power down	16V
	48Vin power up	34V
	48Vin power down	32V
positive logic remote on/off ^{3,4}		
input filter		PI type

OUTPUT

voltage accuracy		±1% max.
transient response		75-100% step load change
recovery time		<300μ sec.
error band		± 5%Vout nominal
output voltage adjustment range, %Vo		90-110%
ripple and noise, 20MHz BW (measured with 0.1μF MLCC)		
1.8V & 2.5V & 3.3V & 5V		20mV RMS, max. 75mV pk-pk, max.
12V & 15V		20mV RMS, max. 100mV pk-pk, max.
temperature coefficient		±0.02% / °C
output line regulation ¹		±0.5 max.
output load regulation ²		±0.5 max.
output over voltage protection (Zener diode clamp)		
1.8V & 2.5V		3.3V
3.3V		3.9V
5V		6.2V
12V		15V
15V		18V
output current limit,% nominal output		110%-150%
output short circuit protection		continuous (hiccup mode)

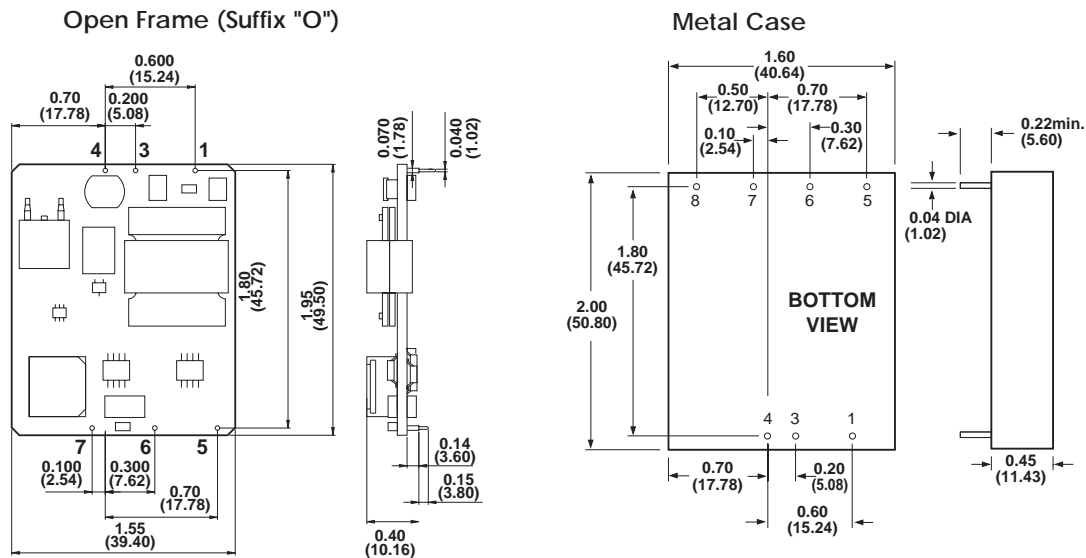
NOTE:

1. measured from high line to low line
2. measured from full load to 10% load
3. logic compatibility (CMOS or open collector TTL, ref. to -Vin)
 - module on >3.5Vdc or open circuit
 - module off <1.8Vdc
4. suffix "N" to the model number with negative logic remote on/off
 - module on <1.8Vdc
 - module off >3.5Vdc or open circuit

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DIMENSIONS (mm)

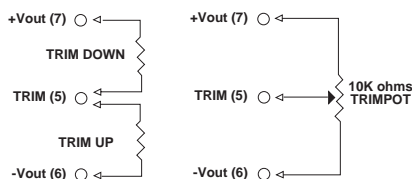


All Dimensions In Inches(mm)
Tolerances: .XX±.04 .XXX±.010

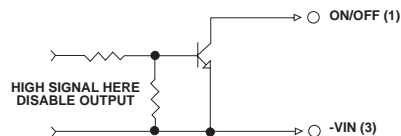
PIN CONNECTION

Pin	Function
1.	On/Off Control
3.	-V Input
4.	+V Input
5.	Trim
6.	-V Output
7.	+V Output
8.	No Pin

External Output Trim



Remote ON/OFF Control



DERATING CURVE

