



VRA SERIES

WIDE INPUT VOLTAGE RANGE 20 WATTS DC-DC CONVERTER

FEATURES

- 2:1 WIDE INPUT VOLTAGES:9-18V,18-36V,36-72V
- 20 WATTS (2x1.6x0.5) PACKAGE
- EFFICIENCY TO 80%
- PI INPUT FILTER

GENERAL SPECIFICATIONS

- SWITCHING FREQUENCY : 500KHz TYP.
- OUTPUT RIPPLE & NOISE : 100mVp-p(20MHz B.W.)
- ISOLATION VOLTAGE : 1500VDC
- ISOLATION RESISTANCE : 10^9 ohms
- STORAGE TEMPERATURE RANGE : -40°C TO 100°C
- OPERATING TEMPERATURE RANGE : -25°C TO +71°C
- SHORT CIRCUIT PROTECTION : CONTINUOUS
- CASE MATERIAL : BLACK COATED METAL WITH NON-CONDUCTIVE BASE

ELECTRICAL SPECIFICATIONS

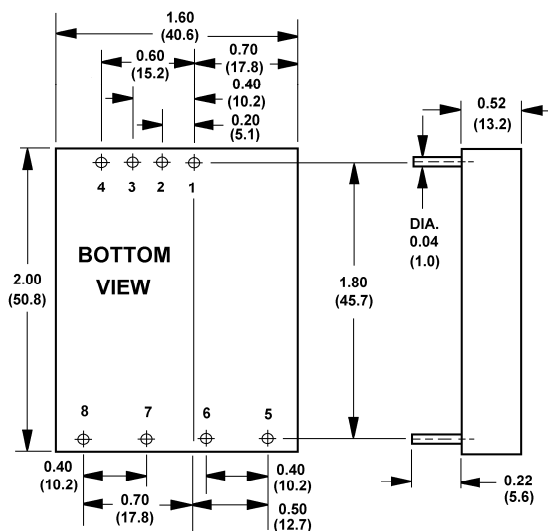
- INPUT VOLTAGE RANGE :12V nominal ...9-18V
:24V nominal ...18-36V
:48V nominal ...36-72V
- OUTPUT VOLTAGE ACCURACY :±2%
- LINE REGULATION(FULL LINE) :±0.1%
- LOAD REGULATION(SINGLE) :±1.0%(FL-NL)
- LOAD REGULATION(DUAL) :±3%(FN-NL)
- EFFICIENCY :see table
- EMI/RFI :six-sided continuous shield
- TEMPERATURE PROTECTION :when case temp. at 95°C ± 5°C

PART NO.	INPUT RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFFICIENCY (%)
VRA1205D-20W	9-18VDC	±5VDC	4000mA	81
VRA1212D-20W	9-18VDC	±12VDC	1670mA	83
VRA1215D-20W	9-18VDC	±15VDC	1330mA	83
VRA2405D-20W	18-36VDC	±5VDC	4000mA	84
VRA2412D-20W	18-36VDC	±12VDC	1670mA	82
VRA2415D-20W	18-36VDC	±15VDC	1330mA	84
VRA4805D-20W	36-72VDC	±5VDC	4000mA	84
VRA4812D-20W	36-72VDC	±12VDC	1670mA	85
VRA4815D-20W	36-72VDC	±15VDC	1330mA	85

MARKINGS AND DIMENSIONS

PIN CONNECTION

1.



ALL DIMENSIONS IN INCHES(mm)

Dimensions:inches/mm

Unless otherwise specified, all tolerances are $\pm 0.005/\pm 0.13$

PIN#	DUAL	
1	+Vin	
2	-Vin	
3	No Pin	
4	Ctrl	
5	+Vout	
6	Common	
7	-Vout	
8	Trim	

*Ctrl: Remote on/off Control