

DC/DC CONVERTERS

FOR LINE DRIVERS AND RECEIVERS

2VP505, VA5-5 & 2VA5-5

FEATURES

- 24 pin package
- Input/Output isolated
- PC or socket mountable, low profile
- Continuous short circuit protected
- Thermal overload protected
- Designed for analog applications
- 100% burned-in and triple tested
- 3 year warranty

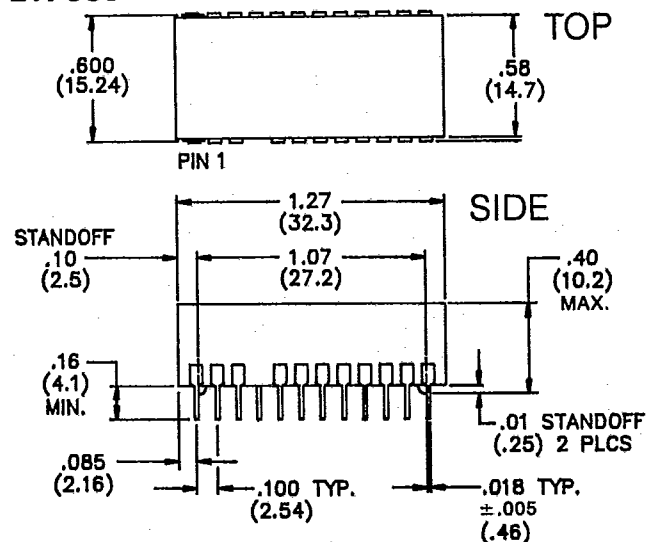
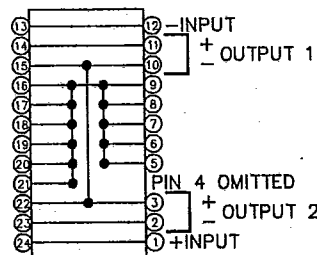
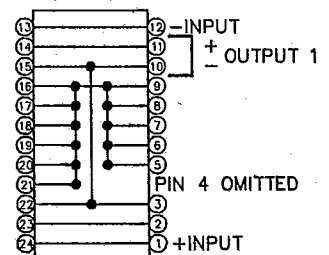
GENERAL DESCRIPTION

The 1 watt VA5-5 and 2 watt 2VA5-5 DC/DC converters operate from a 5V input and make available $\pm 5V$ output voltages at board level. The converters are encapsulated and operate without derating or heat sinking over their full temperature range. Solid tantalum capacitors are used for enhanced reliability. They are designed to meet the power and isolation requirements of line drivers and receivers for RS232, 422 and 423 interface requirements, as well as various other logic applications.

GENERAL ELECTRICAL SPECIFICATIONS

(Specifications at Nominal Input and 25°C)

PARAMETER	LIMIT	CONDITIONS
Output Voltage: VA5-5	$\pm 5\%$	Output #1: +5V, 130 ma Output #2: -5V, 25 ma
2VA5-5	$\pm 5\%$	Output #1: +5V, 300 ma Output #2: -5V, 45 ma
2VP5U5	$\pm 5\%$	Output: +5V, 400 ma
Output Ripple & Noise: VA5-5	200mV, P-P Max.	20 HZ - 20 MHZ
2VA5-5	300mV, P-P Max.	20 HZ - 20 MHZ
2VP5U5	100mV, P-P Max.	20 HZ - 20 MHZ
Input/Output Isolation	500 VDC; 10^3 megohms (Min.)	
Short Circuit Protection	Continuous	
Input Voltage Range	$\pm 5\%$	5VDC
Input Current: VA5-5	250 ma Max.	Nom. Line at Full Load
2VA5-5	500 ma Max.	Nom. Line at Full Load
2VP5U5	570 ma Max.	Nom. Line at Full Load
Operating Temperature	-25°C to 85°C	VA5-5 and 2VA5-5
	-25°C to 71°C	2VP5U5
Storage Temperature	-55°C to 125°C	
Line Regulation	1.25%/1% Vin	Typical
Load Regulation: VA5-5	10% Max.	10% to 100% FL
2VA5-5	10% Max.	20% to 100% FL
Frequency: VA5-5	100 KHZ Typical	Nom. Line at Full Load
2VA5-5	75 KHZ Typical	Nom. Line at Full Load
Efficiencies	70% Typical	Nom. Line at Full Load
Offset Load Conditions: VA5-5		Output #1: +5V, 155 ma Output #2: -5V, 0 ma
		Output #1: +5V, 80 ma Output #2: -5V, 75 ma
2VA5-5		Output #1: +5V, 345 ma Output #2: -5V, 0 ma
		Output #1: +5V, 250 ma Output #2: -5V, 95 ma

MECHANICAL DIMENSIONS AND PIN CONNECTIONS**2VP5U5****TOP VIEW
VA & 2VA5-5****TOP VIEW
2VP5U5**

Note: All dimensions in parentheses are mm.

Tolerances unless otherwise specified: .XX $\pm$.03.XXX $\pm$.010