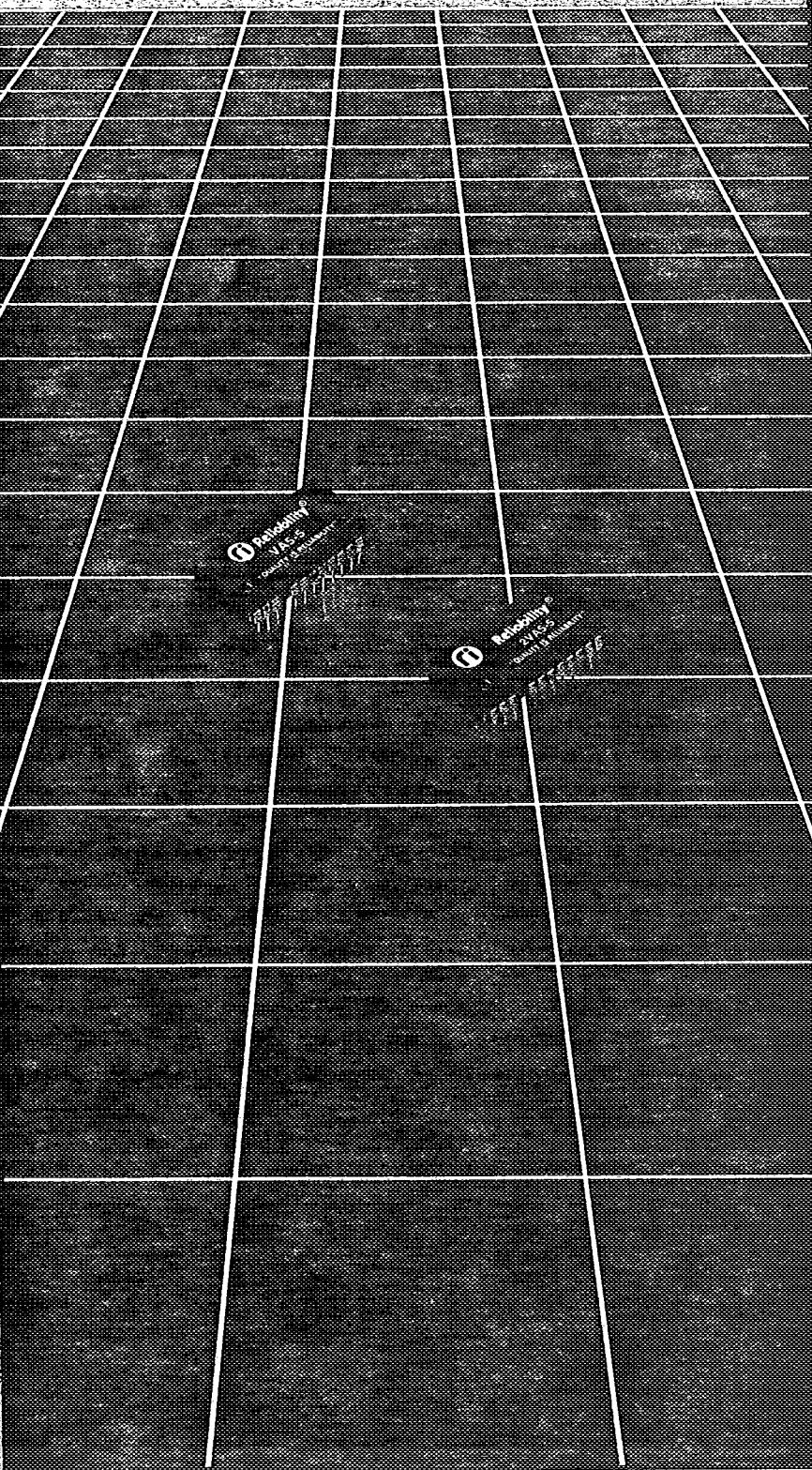


# DC/DC CONVERTERS

## FOR LINE DRIVERS AND RECEIVERS

2VPSU5, VA5-5 &amp; 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

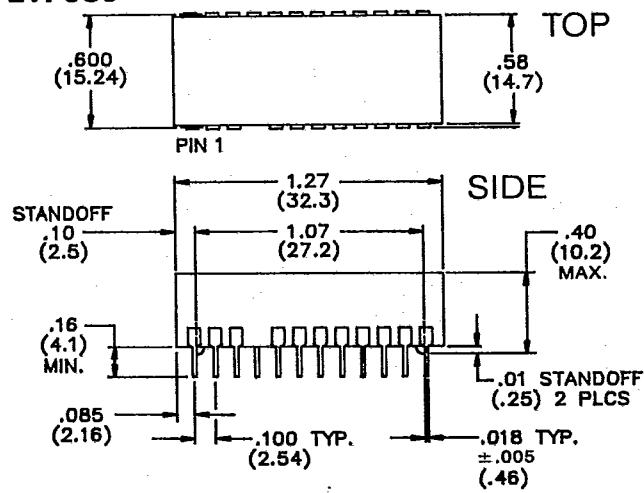
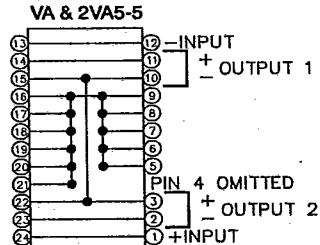
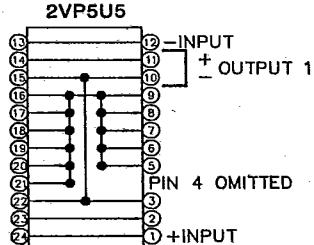
### GENERAL DESCRIPTION

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 2VA5-5 2VP5U5	± 5% ± 5% ± 5%	Output #1: + 5V, 130 ma Output #2: - 5V, 25 ma Output #1: + 5V, 300 ma Output #2: - 5V, 45 ma Output: + 5V, 400 ma
Output Ripple & Noise: VA5-5 2VA5-5 2VP5U5	200mV, P-P Max. 300mV, P-P Max. 100mV, P-P Max.	20 HZ - 20 MHZ 20 HZ - 20 MHZ 20 HZ - 20 MHZ
Input/Output Isolation	500 VDC; 10 <sup>3</sup> megohms (Min.)	
Short Circuit Protection	Continuous	
Input Voltage Range	± 5%	5VDC
Input Current: VA5-5 2VA5-5 2VP5U5	250 ma Max. 500 ma Max. 570 ma Max.	Nom. Line at Full Load Nom. Line at Full Load Nom. Line at Full Load
Operating Temperature	-25°C to 85°C -25°C to 71°C -55°C to 125°C	VA5-5 and 2VA5-5 2VP5U5
Storage Temperature	1.25%/1% Vin	
Line Regulation	10% Max.	Typical
Load Regulation: VA5-5 2VA5-5	10% Max. 100 KHZ Typical 75 KHZ Typical	10% to 100% FL 20% to 100% FL
Frequency: VA5-5 2VA5-5	70% Typical	Nom. Line at Full Load Nom. Line at Full Load Nom. Line at Full Load
Efficiencies		
Offset Load Conditions: VA5-5  2VA5-5		Output #1: + 5V, 155 ma Output #2: - 5V, 0 ma Output #1: + 5V, 80 ma Output #2: - 5V, 75 ma 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 ± .03  
.XXX ± .010



Reliability®