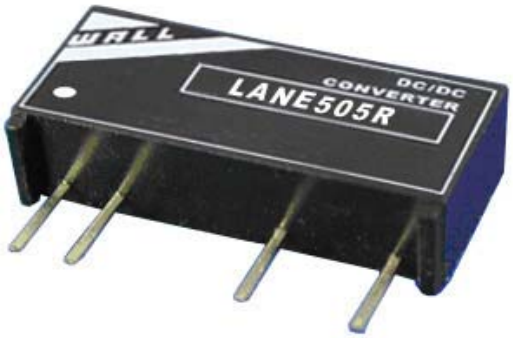
Wall Industries, Inc.

LANE R Series
Single Output
1KVDC I/O Isolation
1 Watt DC/DC Converter

FEATURES

- **Single Output**
- **7 Pin SIP Package**
- **1000VDC Isolation**
- **MTBF > 3,500,000 Hours**
- **Regulated Output Types**
- **UL 94V-0 Package Material**
- **Operating Temperature: -40°C to +85°C**

RoHS Compliant



DESCRIPTION

When your application demands low power, minimal board space, and a high level of input/output isolation is necessary, the LANE R series of miniature DC/DC converters offers superior solutions at an economical price. Users have a multitude of options and operational ratings to choose from in custom-tailoring the converter to application demands. The LANE R series provides one watt of power while maintaining specifications over the entire commercial operating temperature range.

SPECIFICATIONS: *LANE R Series*

All specifications apply @ ±25°C ambient unless otherwise noted

INPUT SPECIFICATIONS

Input Voltage Range	5V nom. input	4.75 – 5.25VDC
	12V nom. input	11.4 – 12.6VDC
	15V nom. Input	14.25 – 15.75VDC
	24V nom. input	22.8 – 25.2 VDC
Input Voltage Tolerance		±5% max.
Input Filter		capacitor

OUTPUT SPECIFICATIONS

Output Current	see table
Output Voltage	see table
Voltage Tolerance	±5% max.
Output Power	1 Watt
Line Regulation	0.5% max
Load Regulation	1.5% max.
Ripple/Noise (20MHz BW)	
5V output models	100mVp-p
12~48V output models	1% of Vout
Transient Response Setting Time (50% load step)	350µs

PROTECTION

Short Circuit Protection	Continuous

GENERAL SPECIFICATIONS

Switching Frequency	100kHz typical
Efficiency	see table
Isolation Voltage (input to output)	1000VDC
Isolation Resistance	1000MΩ min. (500VDC)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C ~ +85°C
Humidity (non-condensing)	95% max.
Cooling	Free air convection
MTBF	> 3,500,000 hours

PHYSICAL SPECIFICATIONS

Weight	2.4 grams
Case Material	non-conductive black plastic
Dimensions	0.77(L) x 0.28(W) x 0.39(H) inches 19.5(L) x 7.1(W) x 10.0(H) mm
Package Material	UL 94V-0

Due to advances in technology, specifications subject to change without notice

Wall Industries, Inc. 5 Watson Brook Road Exeter, NH 03833
603-778-2300 www.wallindustries.com Fax 603-778-9797

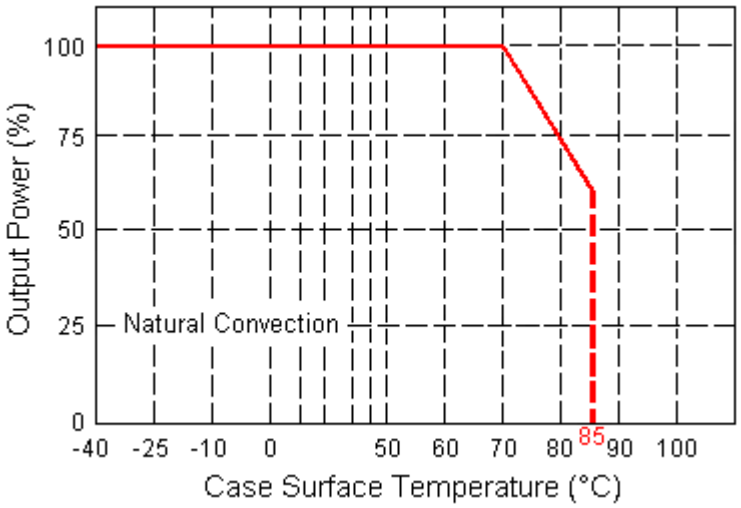
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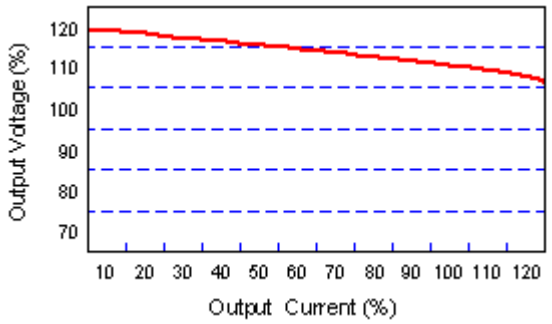
OUTPUT VOLTAGE / CURRENT RATING CHART

Model	Input Voltage Range	Output Voltage	Output Current	Output Power	Efficiency
LANE505R	5 VDC (4.75 – 5.25 VDC)	5 VDC	200mA	1W	65%
LANE509R		9 VDC	112mA	1W	70%
LANE512R		12 VDC	84mA	1W	70%
LANE515R		15 VDC	67mA	1W	70%
LANE1205R	12 VDC (11.4 – 12.6 VDC)	5 VDC	200mA	1W	70%
LANE1209R		9 VDC	112mA	1W	80%
LANE1212R		12 VDC	84mA	1W	80%
LANE1215R		15 VDC	67mA	1W	80%
LANE1505R	15 VDC (14.25 – 15.75 VDC)	5 VDC	200mA	1W	70%
LANE1509R		9 VDC	112mA	1W	80%
LANE1512R		12 VDC	84mA	1W	80%
LANE1515R		15 VDC	67mA	1W	80%
LANE2405R	24 VDC (22.8 – 25.2 VDC)	5 VDC	200mA	1W	75%
LANE2409R		9 VDC	112mA	1W	80%
LANE2412R		12 VDC	84mA	1W	80%
LANE2415R		15 VDC	67mA	1W	80%

DERATING CURVE

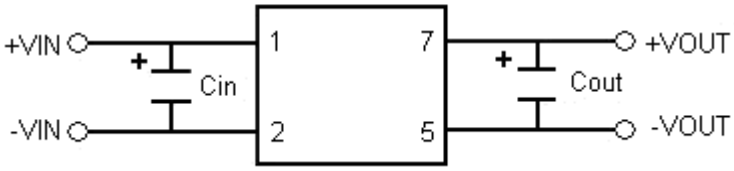


TOLERANCE ENVELOPE GRAPH



RECOMMENDED TEST CIRCUIT

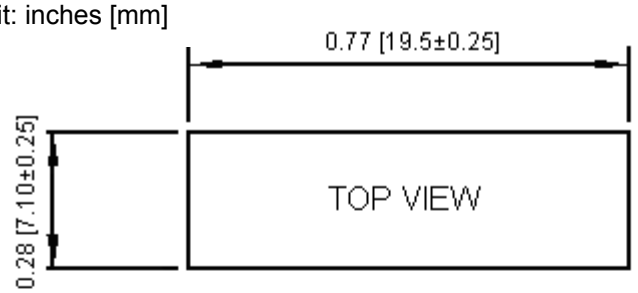
Cin: 10µF, 100V
Cout: 100µF, 25V

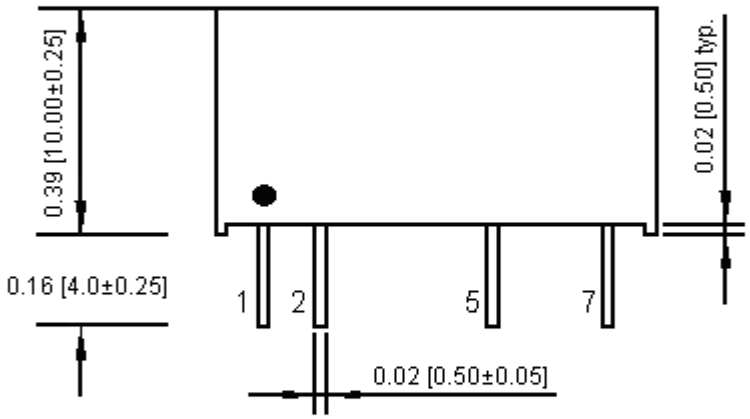


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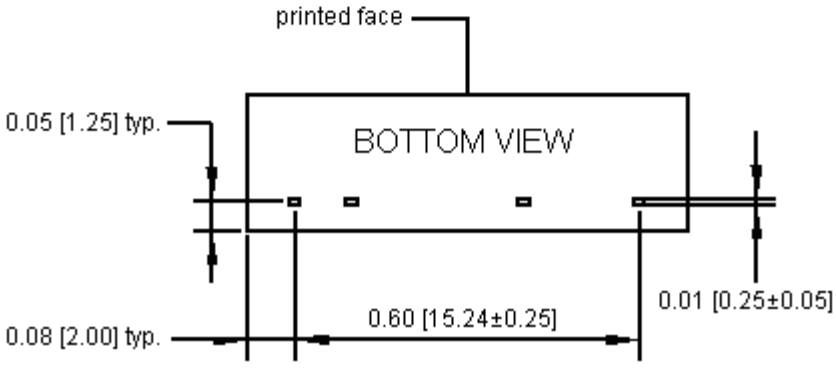
MECHANICAL DRAWING

Unit: inches [mm]





PIN CONNECTION	
Pin	**Single Output**
1	+Vin
2	-Vin
5	-Vout
7	+Vout



Typical tolerances are ±0.5