



Size: 0.77in x 0.28in x 0.39in (19.50mm x 7.10mm x 10mm)

### **FEATURES**

- 5 PIN SIP Package
- Industry Standard Pinout
- Single and Dual Outputs
- RoHS Compliant
- Internal SMD Construction
- Short Circuit Protection
- High Efficiency up to 85%
- Unregulated Output Types
- No External Component Required
- Recognized by UL 60950-1

### **DESCRIPTION**

The LANE2 series of DC/DC converters offers 2 watts of output power in a miniature 0.77" x 0.28" x 0.39" 5 pin SIP package. This series consists of unregulated single and dual output models with internal SMD construction. This series has short circuit protection, high efficiency, and no external components are required. The LANE2 series is RoHS compliant and is recognized by UL 60950-1. Please contact factory for order details.

	MODEL SELECTION TABLE						
Single Output Models							
Model Number	Input Voltage Range	Output Voltage	Output Current	Efficiency	Ripple & Noise	Output Power	
LANE505N2		5VDC	400mA	70%	100mVp-p	2 Watts	
LANE509N2	5VDC (4.5~5.5VDC)	9VDC	222mA	75%			
LANE512N2		12VDC	167mA	80%			
LANE515N2		15VDC	133mA	80%			
LANE524N2		24VDC	84mA	85%			
LANE905N2	9VDC (8.1~9.9VDC)	5VDC	400mA	70%		2 Watts	
LANE909N2		9VDC	222mA	75%	100mVp-p		
LANE912N2		12VDC	167mA	80%			
LANE915N2		15VDC	133mA	80%			
LANE924N2		24VDC	84mA	85%			
LANE1205N2	12VDC (10.8~13.2VDC)	5VDC	400mA	70%	100mVp-p	2 Watts	
LANE1209N2		9VDC	222mA	75%			
LANE1212N2		12VDC	167mA	80%			
LANE1215N2		15VDC	133mA	80%			
LANE1224N2		24VDC	84mA	85%			
LANE1505N2		5VDC	400mA	70%		2 Watts	
LANE1509N2	45) /50	9VDC	222mA	75%	100mVp-p		
LANE1512N2	15VDC (13.5~16.5VDC)	12VDC	167mA	80%			
LANE1515N2		15VDC	133mA	80%			
LANE1524N2		24VDC	84mA	85%			
LANE2405N2	24VDC (21.6~26.4VDC)	5VDC	400mA	70%	100mVp-p	2 Watts	
LANE2409N2		9VDC	222mA	75%			
LANE2412N2		12VDC	167mA	80%			
LANE2415N2		15VDC	133mA	80%			
LANE2424N2		24VDC	84mA	85%			



MODEL SELECTION TABLE						
Dual Output Models						
Model Number	Input Voltage Range	Voltage Range Output Voltage Output Current Efficiency Ripple & Noise				Output Power
LANE505ND2		±5VDC	±200mA	70%		2 Watts
LANE509ND2	5VDC (4.5~5.5VDC)	±9VDC	±111mA	75%		
LANE512ND2		±12VDC	±84mA	80%	100mVp-p	
LANE515ND2		±15VDC	±67mA	80%		
LANE524ND2		±24VDC	±42mA	85%		
LANE905ND2	9VDC (8.1~9.9VDC)	±5VDC	±200mA	70%		2 Watts
LANE909ND2		±9VDC	±111mA	75%		
LANE912ND2		±12VDC	±84mA	80%	100mVp-p	
LANE915ND2		±15VDC	±67mA	80%		
LANE924ND2		±24VDC	±42mA	85%		
LANE1205ND2		±5VDC	±200mA	70%		2 Watts
LANE1209ND2	12VDC	±9VDC	±111mA	75%	100mVp-p	
LANE1212ND2		±12VDC	±84mA	80%		
LANE1215ND2	(10.8~13.2VDC)	±15VDC	±67mA	80%		
LANE1224ND2		±24VDC	±42mA	85%		
LANE1505ND2		±5VDC	±200mA	70%		2 Watts
LANE1509ND2	15VDC (13.5~16.5VDC)	±9VDC	±111mA	75%		
LANE1512ND2		±12VDC	±84mA	80%	100mVp-p	
LANE1515ND2		±15VDC	±67mA	80%		
LANE1524ND2		±24VDC	±42mA	85%		
LANE2405ND2		±5VDC	±200mA	70%		2 Watts
LANE2409ND2	24VDC (21.6~26.4VDC)	±9VDC	±111mA	75%		
LANE2412ND2		±12VDC	±84mA	80%	100mVp-p	
LANE2415ND2		±15VDC	±67mA	80%		
LANE2424ND2		±24VDC	±42mA	85%		

SPECIFICATIONS							
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.							
	We reserve the right to change specifications based or						
SPECIFICATION	TEST CONDITIONS	Min	Тур	Max	Unit		
INPUT SPECIFICATIONS							
Input Voltage Range			See T				
Voltage Tolerance	Vo, Io Nom			±10	%		
Input Filter			Capacitor				
OUTPUT SPECIFICATIONS							
Output Voltage			See T	able			
Voltage Tolerance	100% Full Load			±5	%		
Line Regulation	For 1.0% of Vin		1.2		%		
Load Regulation	5V (10% to 100% FL)			15	%		
	9V, 12V, 15V, 24V (10% to 100% FL)			10			
Output Power			See Table				
Output Current			See Table				
Ripple & Noise (20MHz bandwidth)	BW=DC to 20MHz			100	mVp-p		
Transient Response Setting Time	50% Load Step Change		350		us		
PROTECTION							
Short Circuit Protection	Short Term			1	Sec		
<b>ENVIRONMENTAL SPECIFICATIONS</b>							
Operating Temperature		-40		+85	°C		
Humidity	Non-Condensing			95	%		
Cooling			Free Air Convection				
MTBF	@25°C MIL-HDBK-217F	3,500,000			Hours		
GENERAL SPECIFICATIONS							
Efficiency			See Table				
Switching Frequency	Full Load, Nominal Input		75		KHz		
Isolation Resistance	500VDC	1000			ΜΩ		
PHYSICAL SPECIFICATIONS							
Weight			0.095oz (2.7g)				
Dimensions (L x W x H)		0.77in x 0.28ir	0.77in x 0.28in x 0.39in (19.50mm x 7.10mm x 10mm)				
Case Material							
SAFETY CHARACTERISTICS							
Safety Approvals					UL 60950-1 <sup>(2)</sup>		

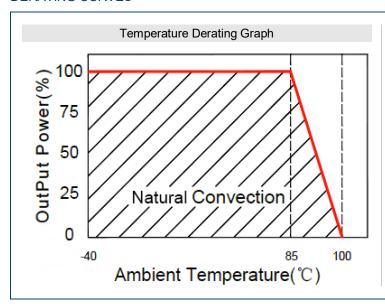


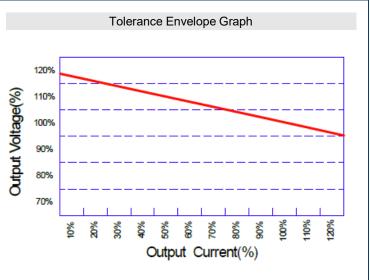
# **NOTES**

- 1. If the input voltage increases, there will be an increase in efficiency.
- 2. This product is Listed to applicable standards and requirements by UL.

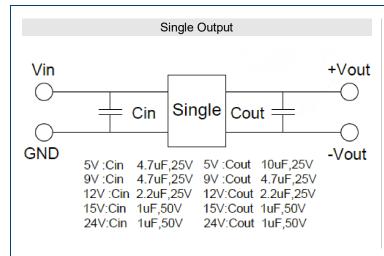
\*Due to advances in technology, specifications subject to change without notice.

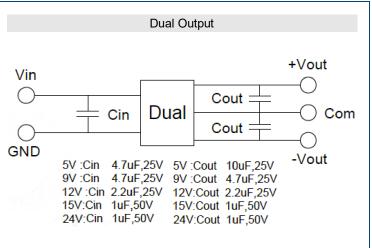
## **DERATING CURVES** :





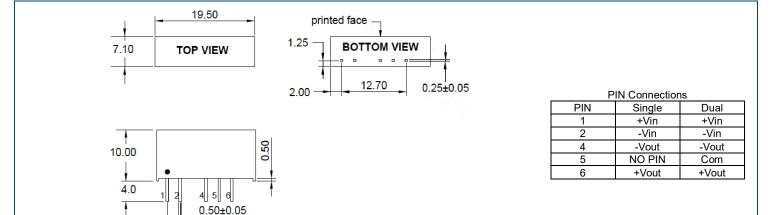
# RECOMMENDED TEST CIRCUIT -





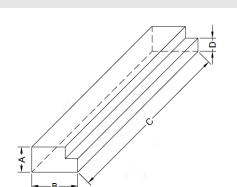


### MECHANICAL DRAWINGS



**PACKAGING** 

UNIT: mm Unless otherwise specified, all tolerances are ±0.25



Size (mm)					
Α	В	С	D		
9.50	16.50	522	5.0		

# **COMPANY INFORMATION**

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact Wall Industries for further information:

Phone: ☎(603)778-2300 Toll Free: ☎(888)597-9255 Fax: ☎(603)778-9797

E-mail: sales@wallindustries.com
Web: www.wallindustries.com
Address: 37 Industrial Drive
Exeter, NH 03833

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