



Size: 1.25in x 0.8in x 0.40in (31.8mm x 20.30mm x 10.20mm)

**FEATURES**

- Wide Input Voltage Ranges
- Low Ripple & Noise
- 24Pin DIL Package
- Unregulated & Regulated Output Types
- RoHS Compliant
- Industry Standard Pinout
- Internal SMD Construction
- No External Component Required
- Short Circuit Protection
- High Efficiency

**DESCRIPTION**

The LANCY series of DC/DC converters offers 1.8 watts of output power in a compact 1.25" x 0.8" x 0.40" 24 pin DIL package. This series consists of regulated or unregulated single and dual output models with several wide input voltage ranges available. Each model features an industry standard pinout, internal SMD construction, as well as low ripple and noise and high efficiency. This series also has short circuit protection and RoHS compliance.

**MODEL SELECTION TABLE**

**Non-Regulated Single Output Models**

Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
LANCY-05S05	5VDC	5VDC	360mA	50mVp-p	1.8W	70%
LANCY-05S09		9VDC	200mA	50mVp-p	1.8W	70%
LANCY-05S12		12VDC	150mA	50mVp-p	1.8W	75%
LANCY-05S15		15VDC	120mA	50mVp-p	1.8W	75%
LANCY-05S24		24VDC	75mA	50mVp-p	1.8W	80%
LANCY-09S05	9VDC	5VDC	360mA	50mVp-p	1.8W	70%
LANCY-09S09		9VDC	200mA	50mVp-p	1.8W	70%
LANCY-09S12		12VDC	150mA	50mVp-p	1.8W	75%
LANCY-09S15		15VDC	120mA	50mVp-p	1.8W	75%
LANCY-09S24		24VDC	75mA	50mVp-p	1.8W	80%
LANCY-12S05	12VDC	5VDC	360mA	50mVp-p	1.8W	70%
LANCY-12S09		9VDC	200mA	50mVp-p	1.8W	70%
LANCY-12S12		12VDC	150mA	50mVp-p	1.8W	75%
LANCY-12S15		15VDC	120mA	50mVp-p	1.8W	75%
LANCY-12S24		24VDC	75mA	50mVp-p	1.8W	80%
LANCY-15S05	15VDC	5VDC	360mA	50mVp-p	1.8W	70%
LANCY-15S09		9VDC	200mA	50mVp-p	1.8W	70%
LANCY-15S12		12VDC	150mA	50mVp-p	1.8W	75%
LANCY-15S15		15VDC	120mA	50mVp-p	1.8W	75%
LANCY-15S24		24VDC	75mA	50mVp-p	1.8W	80%
LANCY-24S05	24VDC	5VDC	360mA	50mVp-p	1.8W	70%
LANCY-24S09		9VDC	200mA	50mVp-p	1.8W	70%
LANCY-24S12		12VDC	150mA	50mVp-p	1.8W	75%
LANCY-24S15		15VDC	120mA	50mVp-p	1.8W	75%
LANCY-24S24		24VDC	75mA	50mVp-p	1.8W	80%

**MODEL SELECTION TABLE**

**Regulated Single Output Models**

Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
LANCY-05S05R	5VDC	5VDC	360mA	50mVp-p	1.8W	58%
LANCY-05S09R		9VDC	200mA	50mVp-p	1.8W	60%
LANCY-05S12R		12VDC	150mA	50mVp-p	1.8W	60%
LANCY-05S15R		15VDC	120mA	50mVp-p	1.8W	60%
LANCY-05S24R		24VDC	75mA	50mVp-p	1.8W	60%
LANCY-09S05R	9VDC	5VDC	360mA	50mVp-p	1.8W	58%
LANCY-09S09R		9VDC	200mA	50mVp-p	1.8W	60%
LANCY-09S12R		12VDC	150mA	50mVp-p	1.8W	60%
LANCY-09S15R		15VDC	120mA	50mVp-p	1.8W	60%
LANCY-09S24R		24VDC	75mA	50mVp-p	1.8W	60%
LANCY-12S05R	12VDC	5VDC	360mA	50mVp-p	1.8W	58%
LANCY-12S09R		9VDC	200mA	50mVp-p	1.8W	60%
LANCY-12S12R		12VDC	150mA	50mVp-p	1.8W	60%
LANCY-12S15R		15VDC	120mA	50mVp-p	1.8W	60%
LANCY-12S24R		24VDC	75mA	50mVp-p	1.8W	60%
LANCY-15S05R	15VDC	5VDC	360mA	50mVp-p	1.8W	58%
LANCY-15S09R		9VDC	200mA	50mVp-p	1.8W	60%
LANCY-15S12R		12VDC	150mA	50mVp-p	1.8W	60%
LANCY-15S15R		15VDC	120mA	50mVp-p	1.8W	60%
LANCY-15S24R		24VDC	75mA	50mVp-p	1.8W	60%
LANCY-24S05R	24VDC	5VDC	360mA	50mVp-p	1.8W	58%
LANCY-24S09R		9VDC	200mA	50mVp-p	1.8W	60%
LANCY-24S12R		12VDC	150mA	50mVp-p	1.8W	60%
LANCY-24S15R		15VDC	120mA	50mVp-p	1.8W	60%
LANCY-24S24R		24VDC	75mA	50mVp-p	1.8W	60%

**MODEL SELECTION TABLE**

**Non-Regulated Dual Output Models**

Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
LANCY-05D05	5VDC	±5VDC	±180mA	50mVp-p	1.8W	70%
LANCY-05D09		±9VDC	±100mA	50mVp-p	1.8W	70%
LANCY-05D12		±12VDC	±75mA	50mVp-p	1.8W	75%
LANCY-05D15		±15VDC	±60mA	50mVp-p	1.8W	75%
LANCY-05D24		±24VDC	±38mA	50mVp-p	1.8W	80%
LANCY-09D05	9VDC	±5VDC	±180mA	50mVp-p	1.8W	70%
LANCY-09D09		±9VDC	±100mA	50mVp-p	1.8W	70%
LANCY-09D12		±12VDC	±75mA	50mVp-p	1.8W	75%
LANCY-09D15		±15VDC	±60mA	50mVp-p	1.8W	75%
LANCY-09D24		±24VDC	±38mA	50mVp-p	1.8W	80%
LANCY-12D05	12VDC	±5VDC	±180mA	50mVp-p	1.8W	70%
LANCY-12D09		±9VDC	±100mA	50mVp-p	1.8W	70%
LANCY-12D12		±12VDC	±75mA	50mVp-p	1.8W	75%
LANCY-12D15		±15VDC	±60mA	50mVp-p	1.8W	75%
LANCY-12D24		±24VDC	±38mA	50mVp-p	1.8W	80%
LANCY-15D05	15VDC	±5VDC	±180mA	50mVp-p	1.8W	70%
LANCY-15D09		±9VDC	±100mA	50mVp-p	1.8W	70%
LANCY-15D12		±12VDC	±75mA	50mVp-p	1.8W	75%
LANCY-15D15		±15VDC	±60mA	50mVp-p	1.8W	75%
LANCY-15D24		±24VDC	±38mA	50mVp-p	1.8W	80%
LANCY-24D05	24VDC	±5VDC	±180mA	50mVp-p	1.8W	70%
LANCY-24D09		±9VDC	±100mA	50mVp-p	1.8W	70%
LANCY-24D12		±12VDC	±75mA	50mVp-p	1.8W	75%
LANCY-24D15		±15VDC	±60mA	50mVp-p	1.8W	75%
LANCY-24D24		±24VDC	±38mA	50mVp-p	1.8W	80%

**MODEL SELECTION TABLE**

## Regulated Dual Output Models

Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
LANCY-05D12R	5VDC	±12VDC	±75mA	50mVp-p	1.8W	60%
LANCY-05D15R		±15VDC	±60mA	50mVp-p	1.8W	60%
LANCY-05D24R		±24VDC	±38mA	50mVp-p	1.8W	60%
LANCY-09D12R	9VDC	±12VDC	±75mA	50mVp-p	1.8W	60%
LANCY-09D15R		±15VDC	±60mA	50mVp-p	1.8W	60%
LANCY-09D24R		±24VDC	±38mA	50mVp-p	1.8W	60%
LANCY-12D12R	12VDC	±12VDC	±75mA	50mVp-p	1.8W	60%
LANCY-12D15R		±15VDC	±60mA	50mVp-p	1.8W	60%
LANCY-12D24R		±24VDC	±38mA	50mVp-p	1.8W	60%
LANCY-15D12R	15VDC	±12VDC	±75mA	50mVp-p	1.8W	60%
LANCY-15D15R		±15VDC	±60mA	50mVp-p	1.8W	60%
LANCY-15D24R		±24VDC	±38mA	50mVp-p	1.8W	60%
LANCY-24D12R	24VDC	±12VDC	±75mA	50mVp-p	1.8W	60%
LANCY-24D15R		±15VDC	±60mA	50mVp-p	1.8W	60%
LANCY-24D24R		±24VDC	±38mA	50mVp-p	1.8W	60%

**SPECIFICATIONS**

All specifications are based on 25°C, Nominal Input Voltage, and Rated Output Current unless otherwise noted.  
 We reserve the right to change specifications based on technological advances.

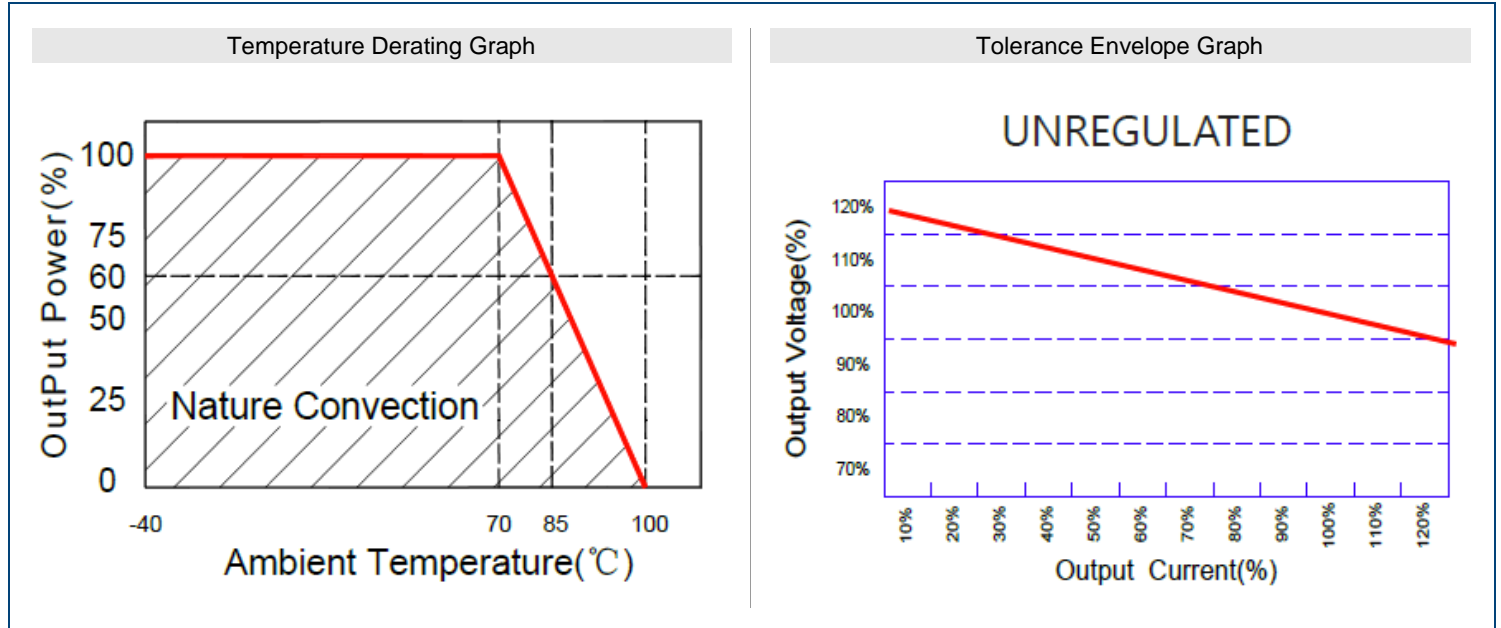
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
<b>INPUT SPECIFICATIONS</b>					
Input Tolerance	Vo, Io Nom			±10	%
Input Filter		Capacitor			
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Voltage Accuracy				±5	%
Line Regulation	Unregulated (For 1% of Vin)	1.2			%
	Regulated			±0.3	
Load Regulation	Unregulated (20% to 100% FL)			10	%
	Regulated			±0.5	
Output Power		See Table			
Output Current		See Table			
Ripple & Noise	BW=DC to 20MHz			50	mVp-p
<b>PROTECTION</b>					
Short Circuit Protection	Unregulated	Short Term			
	Regulated	Continuous			
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature		-40		+85	°C
Humidity	Non Condensing			95	%
Cooling		Free Air Convection			
MTBF	MIL-HDBK-217F @25°C	2,500,000			Hours
	MIL-HDBK-217F @25°C, Regulated	1,500,000			
<b>GENERAL SPECIFICATIONS</b>					
Efficiency		See Table			
Switching Frequency	Full Load, Nominal Input		50		KHz
Isolation Resistance	500VDC	1000			MΩ
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		0.55oz (15.5g)			
Dimensions (L x W x H)		1.25in x 0.8in x 0.40in (31.8mm x 20.30mm x 10.20mm)			
Case Material		DAP			

**NOTES**

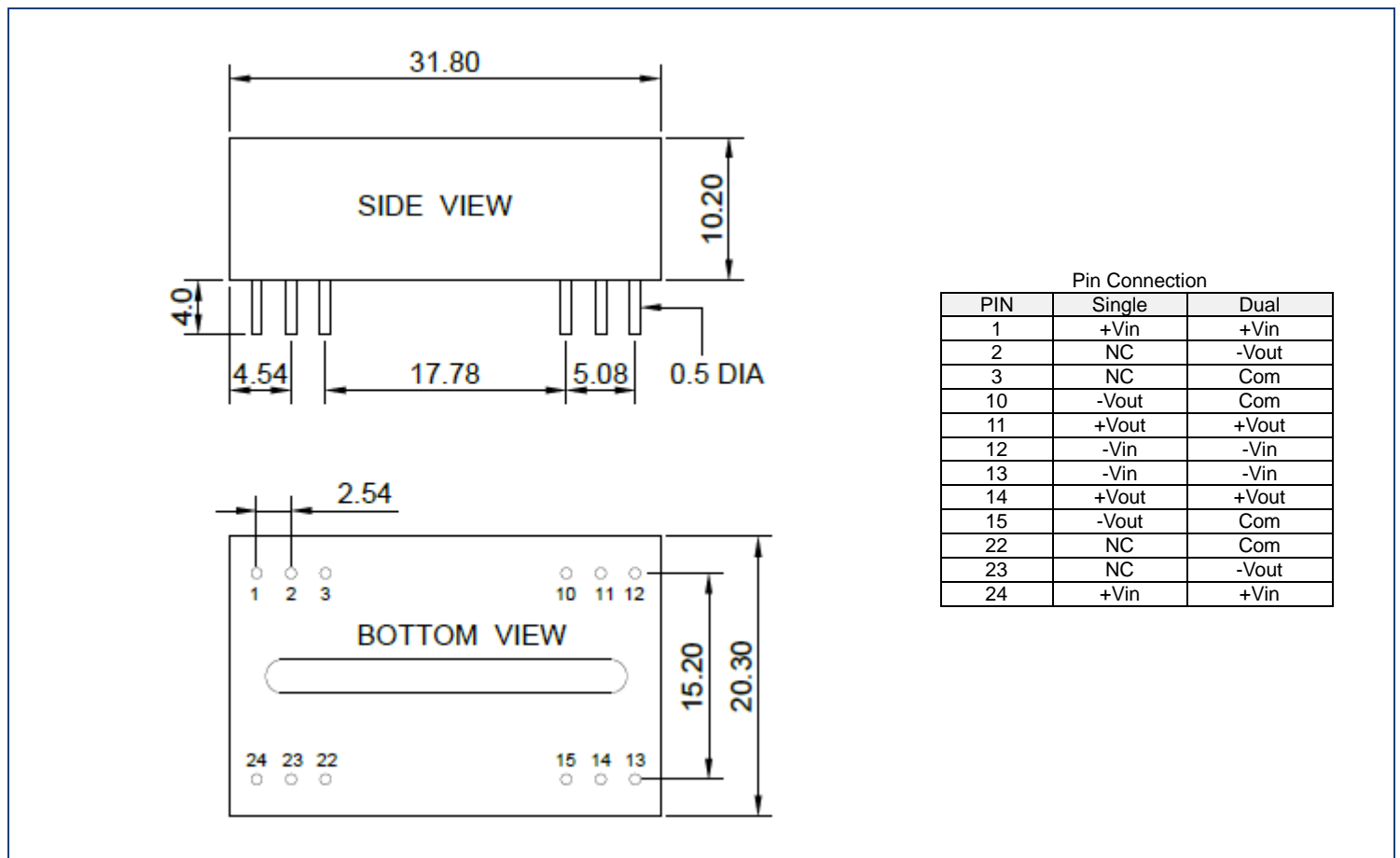
1. As the input increases, there will be an increase in efficiency.

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

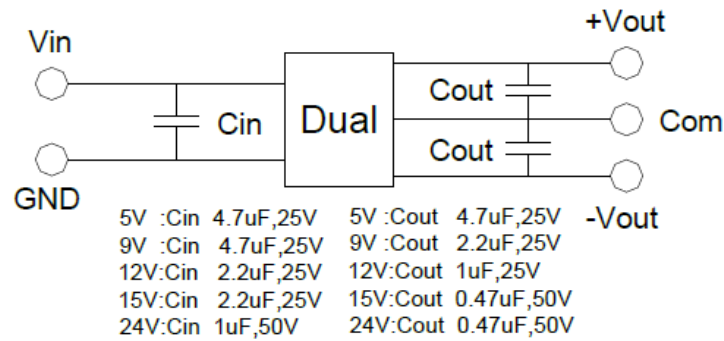
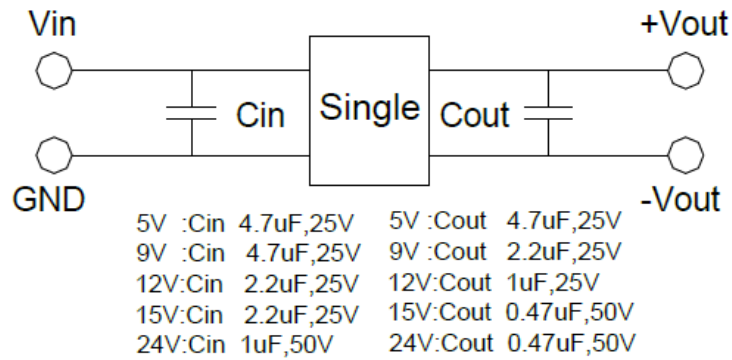
CHARACTERISTIC CURVES



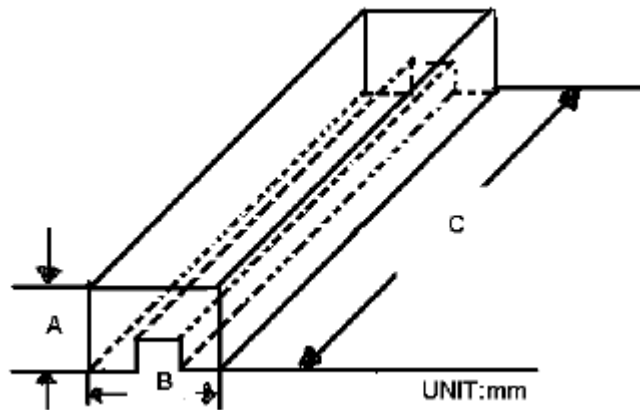
MECHANICAL DRAWINGS



RECOMMENDED TEST CIRCUIT



PACKAGING



Size (mm)		
A	B	C
18.71	23.00	522

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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 ISO9001-2008 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.

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