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

FEATURES

- SIP Package
- 7 Pins
- High Efficiency
- Unregulated Output Types
- Internal SMD Construction
- No External Components Required
- 6KV Isolation
- Short Circuit Protection
- RoHS Compliant
- UL 60950-1 Approval on Certain Models

APPLICATIONS

- Industrial Equipment
- Sensing Equipment
- Wireless Network
- Telecom/Datacom
- Measurement
- Aviation

DESCRIPTION

The ELANE-6KV series of DC/DC converters offers 1 watt of output power in a compact 0.77" x 0.28" x 0.39" SIP package. This series consists of both single and dual unregulated output models that feature 6kv isolation and high efficiency. The ELANE-6KV series is protected against short circuit conditions, is RoHS compliant, and certain models are UL 60950-1 approved.

MODEL SELECTION TABLE

Single Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current	Efficiency	Ripple & Noise	Output Power	UL 60950-1 Approval ⁽¹⁾
ELANE305S6KV	3.3VDC (2.97~3.63VDC)	5VDC	200mA	70%	100mVp-p	1 Watt	-
ELANE309S6KV		9VDC	112mA	75%			-
ELANE312S6KV		12VDC	84mA	78%			-
ELANE315S6KV		15VDC	67mA	80%			-
ELANE324S6KV		24VDC	42mA	82%			-
ELANE505S6KV	5VDC (4.5~5.5VDC)	5VDC	200mA	70%	100mVp-p	1 Watt	Yes
ELANE509S6KV		9VDC	112mA	75%			Yes
ELANE512S6KV		12VDC	84mA	78%			Yes
ELANE515S6KV		15VDC	67mA	80%			Yes
ELANE524S6KV		24VDC	42mA	82%			-
ELANE905S6KV	9VDC (8.1~9.9VDC)	5VDC	200mA	70%	100mVp-p	1 Watt	-
ELANE909S6KV		9VDC	112mA	75%			-
ELANE912S6KV		12VDC	84mA	78%			-
ELANE915S6KV		15VDC	67mA	80%			-
ELANE924S6KV		24VDC	42mA	82%			-
ELANE1205S6KV	12VDC (10.8~13.2VDC)	5VDC	200mA	70%	100mVp-p	1 Watt	Yes
ELANE1209S6KV		9VDC	112mA	75%			Yes
ELANE1212S6KV		12VDC	84mA	78%			Yes
ELANE1215S6KV		15VDC	67mA	80%			Yes
ELANE1224S6KV		24VDC	42mA	82%			-
ELANE1505S6KV	15VDC (13.5~16.5VDC)	5VDC	200mA	70%	100mVp-p	1 Watt	Yes
ELANE1509S6KV		9VDC	112mA	75%			Yes
ELANE1512S6KV		12VDC	84mA	78%			Yes
ELANE1515S6KV		15VDC	67mA	80%			Yes
ELANE1524S6KV		24VDC	42mA	82%			-
ELANE2405S6KV	24VDC (21.6~26.4VDC)	5VDC	200mA	70%	100mVp-p	1 Watt	Yes
ELANE2409S6KV		9VDC	112mA	75%			Yes
ELANE2412S6KV		12VDC	84mA	78%			Yes
ELANE2415S6KV		15VDC	67mA	80%			Yes
ELANE2424S6KV		24VDC	42mA	82%			-

MODEL SELECTION TABLE							
Dual Output Models							
Model Number	Input Voltage Range	Output Voltage	Output Current	Efficiency	Ripple & Noise	Output Power	UL 60950-1 Approval ⁽¹⁾
ELANE305D6KV	3.3VDC (2.97~3.63VDC)	±5VDC	±100mA	70%	100mVp-p	1 Watt	-
ELANE309D6KV		±9VDC	±56mA	75%			
ELANE312D6KV		±12VDC	±42mA	78%			
ELANE315D6KV		±15VDC	±34mA	80%			
ELANE324D6KV		±24VDC	±21mA	82%			
ELANE505D6KV	5VDC (4.5~5.5VDC)	±5VDC	±100mA	70%	100mVp-p	1 Watt	-
ELANE509D6KV		±9VDC	±56mA	75%			
ELANE512D6KV		±12VDC	±42mA	78%			
ELANE515D6KV		±15VDC	±34mA	80%			
ELANE524D6KV		±24VDC	±21mA	82%			
ELANE905D6KV	9VDC (8.1~9.9VDC)	±5VDC	±100mA	70%	100mVp-p	1 Watt	-
ELANE909D6KV		±9VDC	±56mA	75%			
ELANE912D6KV		±12VDC	±42mA	78%			
ELANE915D6KV		±15VDC	±34mA	80%			
ELANE924D6KV		±24VDC	±21mA	82%			
ELANE1205D6KV	12VDC (10.8~13.2VDC)	±5VDC	±100mA	70%	100mVp-p	1 Watt	-
ELANE1209D6KV		±9VDC	±56mA	75%			
ELANE1212D6KV		±12VDC	±42mA	78%			
ELANE1215D6KV		±15VDC	±34mA	80%			
ELANE1224D6KV		±24VDC	±21mA	82%			
ELANE1505D6KV	15VDC (13.5~16.5VDC)	±5VDC	±100mA	70%	100mVp-p	1 Watt	-
ELANE1509D6KV		±9VDC	±56mA	75%			
ELANE1512D6KV		±12VDC	±42mA	78%			
ELANE1515D6KV		±15VDC	±34mA	80%			
ELANE1524D6KV		±24VDC	±21mA	82%			
ELANE2405D6KV	24VDC (21.6~26.4VDC)	±5VDC	±100mA	70%	100mVp-p	1 Watt	-
ELANE2409D6KV		±9VDC	±56mA	75%			
ELANE2412D6KV		±12VDC	±42mA	78%			
ELANE2415D6KV		±15VDC	±34mA	80%			
ELANE2424D6KV		±24VDC	±21mA	82%			

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
INPUT SPECIFICATIONS							
Input Voltage Range ⁽²⁾				See Table			
Input Voltage Tolerance	Vo, Io Nom					±10	%
Input Filter				Capacitor			
OUTPUT SPECIFICATIONS							
Output Voltage				See Table			
Voltage Tolerance	100% Full Load					±5	%
Line Regulation	For 1.0% of Vin			±1.2			%
Load Regulation	10% to 100% FL			5V Output		±15	%
				9V, 12V, 15V, 24V Outputs		±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

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.

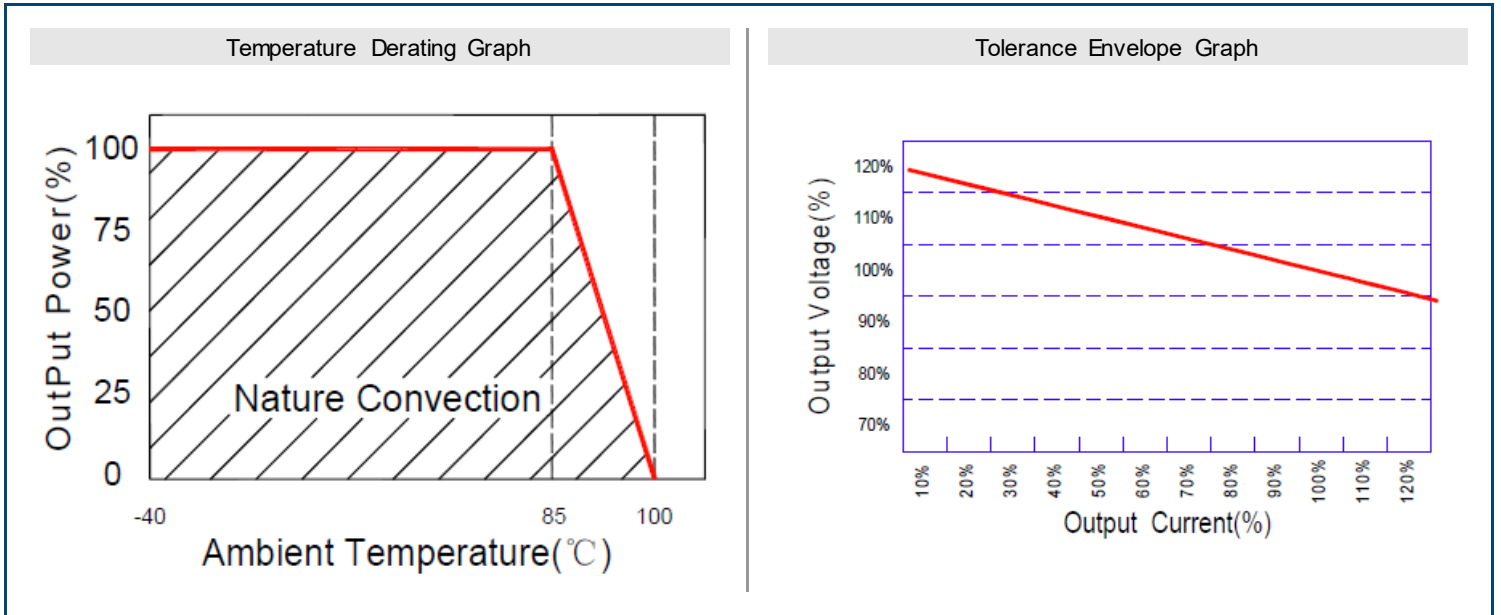
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature		-40		+85	°C
Storage Temperature		-40		+100	°C
Humidity	Non Condensing			95	%
Cooling		Free Air Convection			
MTBF	MIL-HDBK-217F @25°C, Ground Benign	3,500,000			Hours
GENERAL SPECIFICATIONS					
Efficiency		See Table			
Switching Frequency	Full Load, Nominal Input		100		KHz
Isolation	Input to Output (2sec/0.5mA)		6		KV
Isolation Resistance	500VDC	1000			MΩ
PHYSICAL SPECIFICATIONS					
Weight		0.095oz (2.7g)			
Dimensions(L x W x H)		0.77in x 0.28in x 0.39in (19.5mm x 7.10mm x 10.0mm)			
Case Material		DAP			
SAFETY CHARACTERISTICS					
Safety Approvals		See Table			

NOTES

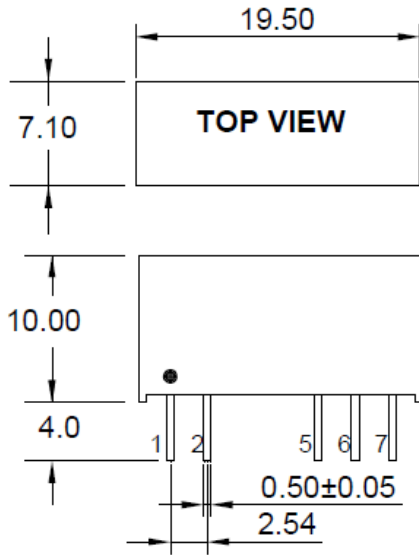
1. This product is Listed to applicable standards and requirements by UL.
2. If input voltage increases, there will be an increase in efficiency.

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

CHARACTERISTIC CURVES

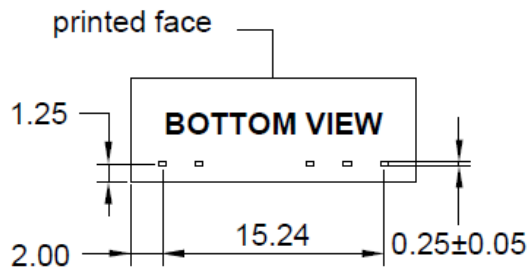


MECHANICAL DRAWINGS



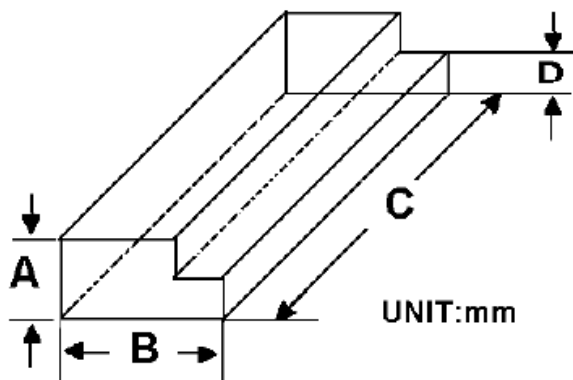
Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Common
7	+Vout	+Vout



Unit: mm unless otherwise specified.
 All tolerances ± 0.25

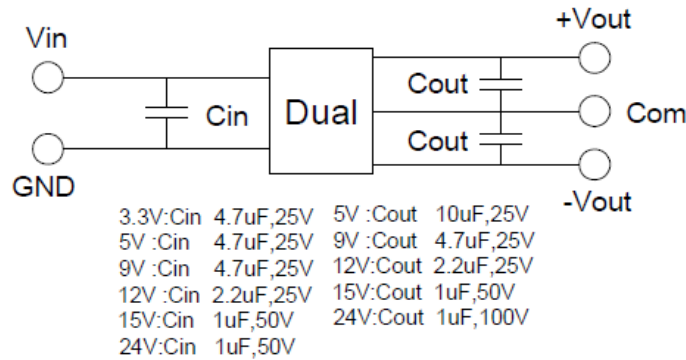
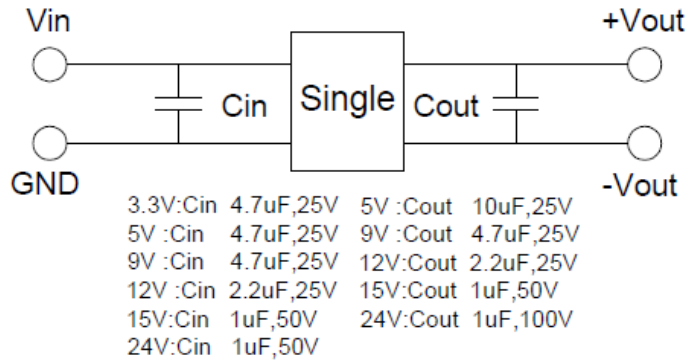
Packaging



Size (mm)

A	B	C	D
9.5	16.5	522	5.0

RECOMMENDED TEST CIRCUIT



MODEL NUMBER SETUP

ELANE	5	05	S	6KV
SeriesName	Input Voltage	Output Voltage	Output Quantity	Isolation
	3: 3.3VDC 5: 5VDC 9: 9VDC 12: 12VDC 15: 15VDC 24: 24VDC	05: 5VDC 09: 9VDC 12: 12VDC 15: 15VDC 24: 24VDC 05: ±5VDC 09: ±9VDC 12: ±12VDC 15: ±15VDC 24: ±24VDC	S: Single D: Dual	

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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