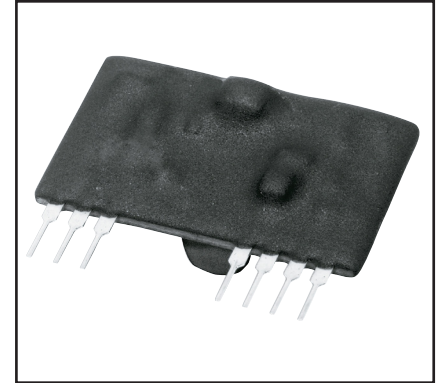
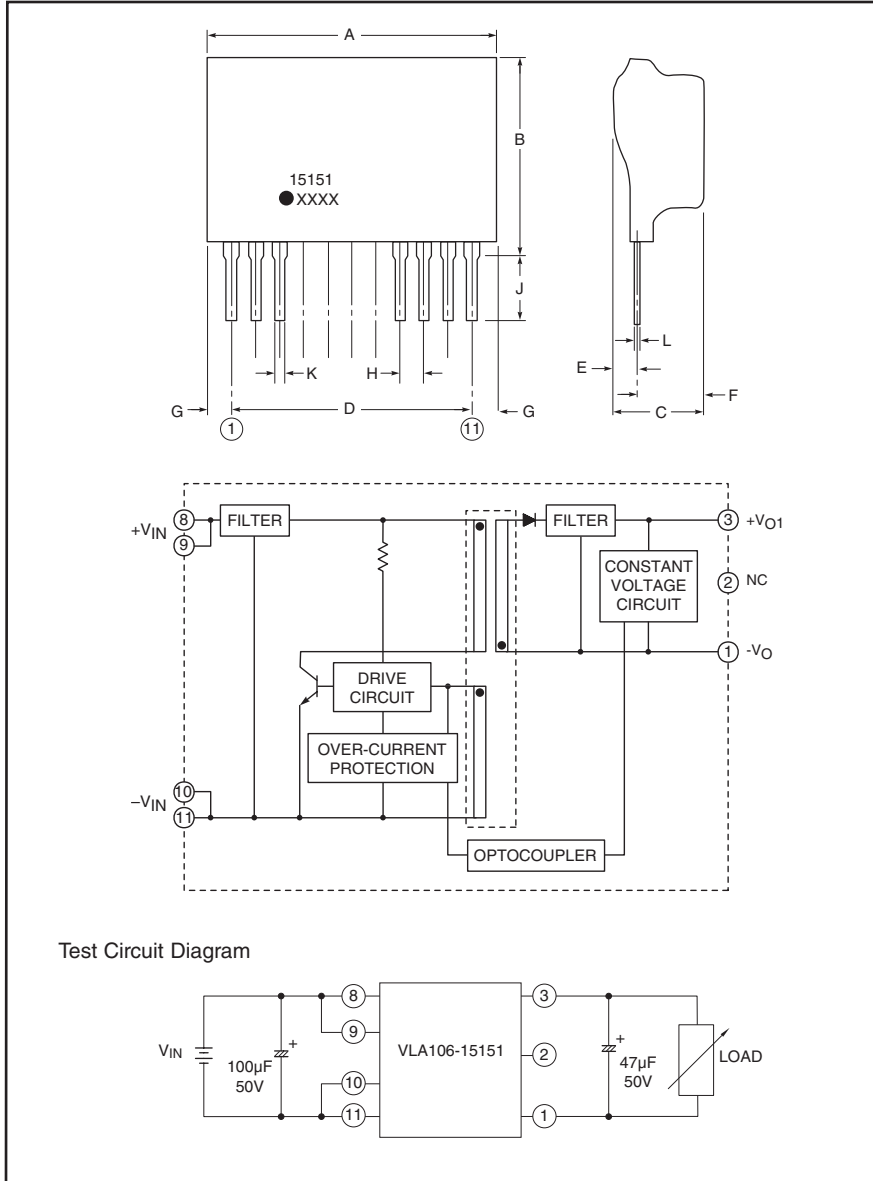


### Isolated DC/DC Converter



#### Description:

VLA106-15151 is a DC-DC converter. Its output power is 1.5W and the input is isolated from the output. The over-current protection circuit is built-in. This device is best for on-board power supplies such as industrial equipment and control equipment.

#### Features:

- Input Voltage Range: 12 to 18V DC
- Output: +15V, 100mA (Output Power: 1.5W)
- Thin Profile, Lightweight Design
- Electrical Isolation Voltage Between Input and Output: 2500  $V_{rms}$  for 1 Minute
- Built in Over-current Protection Circuit

#### Application:

On-board power supplies such as industrial equipment and control equipment.

#### Outline Drawing and Circuit Diagram

Dimensions	Inches	Millimeters
A	1.3	33.0
B	0.945	24.0
C	0.71	18.0
D	1.0	25.4
E	0.22	5.5
F	0.53	13.5
G	0.18	4.5
H	0.10	2.54
J	0.18±0.06	4.5±1.5
K	0.02+0.004/-0.002	0.5+0.1/-0.05
L	0.01+0.01/-0.002	0.25+0.2/-0.05

Note: All dimensions listed are maximums except D.



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VLA106-15151  
Isolated DC/DC Converter

**Absolute Maximum Ratings,  $T_a = 25^\circ\text{C}$  unless otherwise specified**

Characteristics	Symbol	VLA106-15151	Units
Input Voltage (Between Pins 8, 9, and 10, 11)	$V_{IN}$	18	Volts
Output Current (Between Pins 3 and 1)	$I_O$	100	mA
Operating Temperature (No Condensation)*	$T_{opr}$	-20 ~ +70	$^\circ\text{C}$
Storage Temperature (No Condensation)	$T_{stg}$	-20 to +85	$^\circ\text{C}$
Input-Output Isolation Voltage (AC, 1 Minute)	$V_{ISO}$	2500	$V_{rms}$

\*Please refer to derating characteristics.

**Electrical and Mechanical Characteristics,  $T_a = 25^\circ\text{C}$ ,  $V_{IN} = 15\text{V}$  unless otherwise specified**

Characteristics	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Input Voltage	$V_{IN}$	Recommended Range	12	15	18	Volts
Output Voltage	$V_O$	$I_O = 0 \sim 100\text{mA}$	14.25	15.0	15.75	Volts
Input Regulation	$R_{eg-I}$	$I_O = 100\text{mA}$ , $V_{IN} = 12 \sim 18\text{V}$	—	—	50	mV
Load Regulation	$R_{eg-L}$	$I_O = 0 \sim 100\text{mA}$	—	—	50	mV
Ripple Voltage	$V_{P-P}$	$I_O = 100\text{mA}$	—	—	150	mV
Efficiency	$\eta$	$I_O = 100\text{mA}$	—	75	—	%

