



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

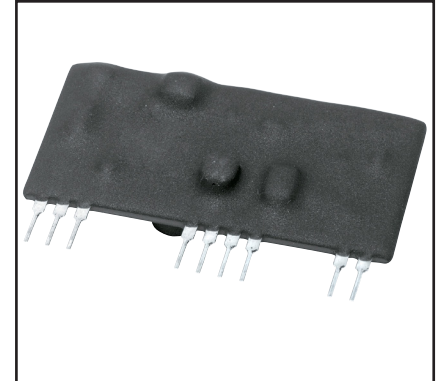
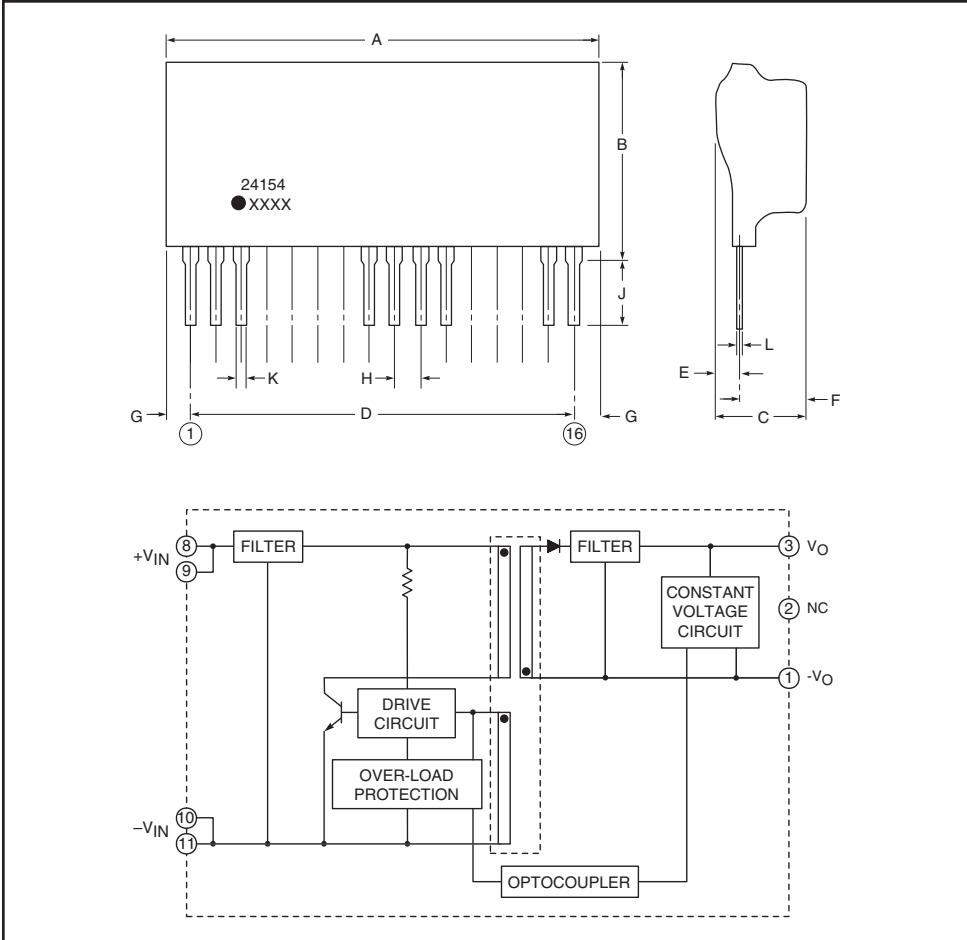
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Isolated DC/DC Converter



Description:

VLA106-24154 is a DC-DC converter. Its output power is 4.5W and the input is isolated from the output. The over-load protection circuit is built-in. This device is used for on-board power supplies and industrial control equipment.

Features:

- Input Voltage Range: 21.6 to 26.4V DC
- Output: +15V, 300mA (Output Power: 4.5W)
- 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	1.81	46.0
B	1.063	27.0
C	0.71	18.0
D	1.5	38.1
E	0.22	5.5
F	0.53	13.5

Dimensions	Inches	Millimeters
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.



VLA106-24154
Isolated DC/DC Converter

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

Characteristics	Symbol	VLA106-24154	Units
Input Voltage (Between Pins 8, 9, and 10, 11)	V_{IN}	27	Volts
Output Current (Between Pins 3 and 1)	I_O	300	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}

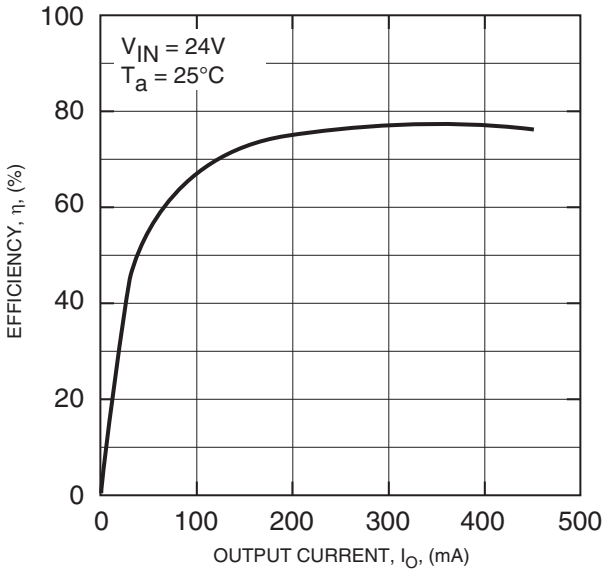
*Please refer to derating characteristics.

Electrical and Mechanical Characteristics, $T_a = 25^\circ\text{C}$, $V_{IN} = 24\text{V}$ unless otherwise specified

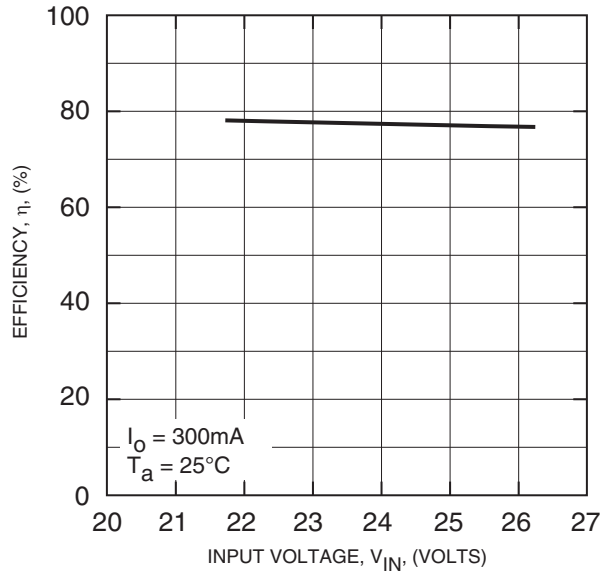
Characteristics	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Input Voltage	V_{IN}	Recommended Range	21.6	24.0	26.4	Volts
		Maximum Operating Range	18.0	—	26.4	Volts
Output Voltage	V_O	$I_O = 0 \sim 300\text{mA}$	14.25	15.0	15.75	Volts
Input Regulation	R_{eg-I}	$I_O = 0 \sim 300\text{mA}$, $V_{IN} = 21.6 \sim 26.4\text{V}$	—	—	75	mV
Load Regulation	R_{eg-L}	$I_O = 0 \sim 300\text{mA}$	—	—	120	mV
Ripple Voltage	V_{P-P}	$I_O = 300\text{mA}$	—	—	120	mV
Efficiency	η	$I_O = 300\text{mA}$	—	75	—	%

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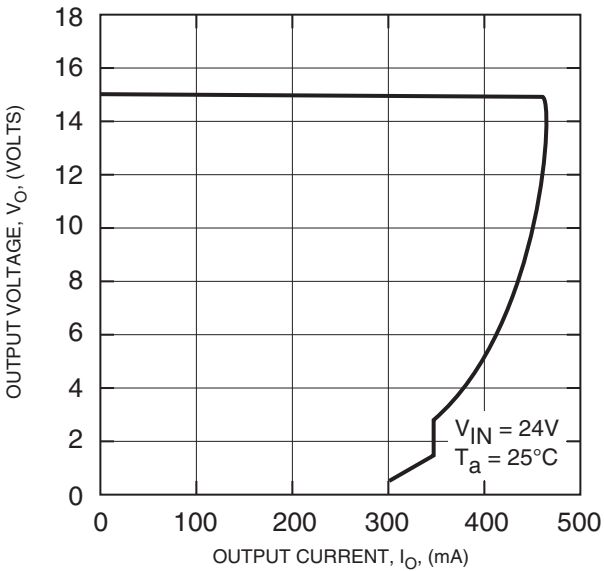
EFFICIENCY VS. OUTPUT CURRENT CHARACTERISTICS



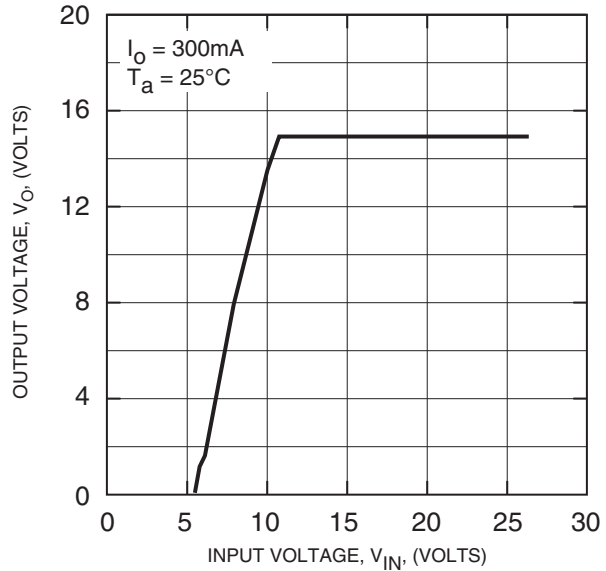
EFFICIENCY VS. INPUT VOLTAGE CHARACTERISTICS



OUTPUT VOLTAGE VS. OUTPUT CURRENT CHARACTERISTICS

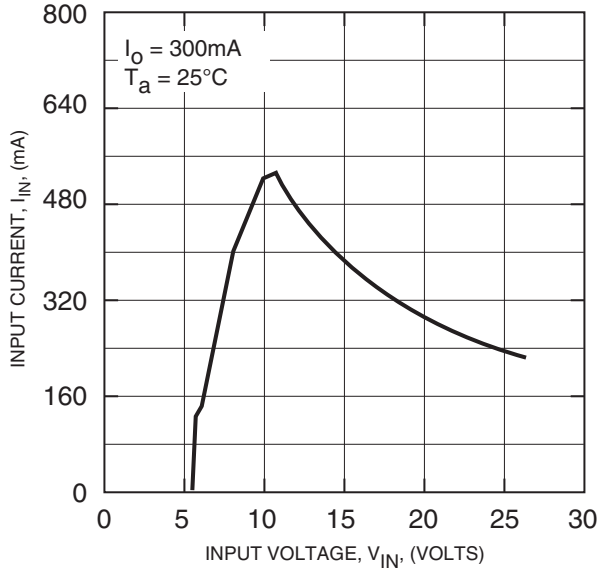


OUTPUT VOLTAGE VS. INPUT VOLTAGE CHARACTERISTICS



VLA106-24154
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INPUT CURRENT VS. INPUT VOLTAGE CHARACTERISTICS



DERATING CHARACTERISTICS

