

TECHNICAL DATA
DATA SHEET 1119, REV. A**DC-DC Converters**
Wide Input (2:1), 1000V Isolation, Regulated**FEATURES:**

- Isolation Voltage: 1000Vdc
- Isolation Resistance (1): 1000M Ω
- Short-Circuit Duration: Continuous
- Case Temperature Rise: Max. 25°C, Typ. 15°C
- Cooling Method: Free-Air Cooling
- Operating Temp.: -40°C ~ + 85°C
- Storage Temp.: -50°C ~ + 125°C
- Humidity: $\leq 95\%$
- Soldering Temp. (2): 300°C
- Case Material: Non-Flammable Material (UL94-V0)
- Mean Time Before Failure: > 1,500,000 hours (Operating Temp. 25°C)

W-1W Single-Dual Output Series Input Characteristics

Part Number	Nominal Input Voltage	Input Voltage Range	Maximum Input Voltage*
W24XXH/GDA1	24Vdc	18~36Vdc	40Vdc
W48XXH/GDA1	48Vdc	36~72Vdc	80Vdc

* Voltage above this value may cause permanent damage to the device.

W-1W Single-Dual Output Series Output Characteristics

Parameter	MIN	TYP	MAX	Units
Output Power	-	-	1	W
Output Voltage Accuracy	-	± 1	± 3	%
Efficiency at 25% Load	60	65	70	%
Efficiency at 100% Load	65	75	83	%
Voltage Regulation	-	0.1	0.2	%
Load Regulation	-	0.2	0.5	%
Temperature Coefficient	-	-	0.02	%/°C
Ripple	-	10	20	mVp-p
Noise	-	50	100	mVp-p
Switching Frequency at 100% Load	80	-	200	kHz
Switching Frequency at 25% Load	250	-	550	kHz

1. All specifications at TA=25°C, 75% of the humidity, Nominal input voltage, full output load unless otherwise specified.
2. Soldering for 10 seconds at 1.5mm away from the edge.

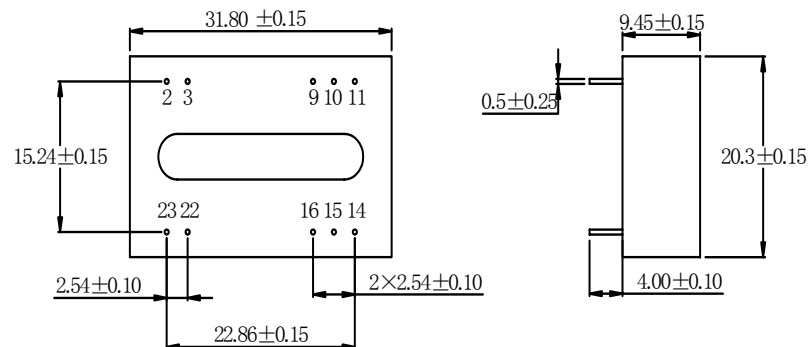
TECHNICAL DATA
DATA SHEET 1119, REV. A

W-1W Single-Dual Output Series Part Number List

Input	Output	Power	Single-1W	Dual-1W
24Vdc	5V/200mA	1W	W2405HDA1	W2405GDA1
	9V/111mA		W2409HDA1	W2409GDA1
	12V/83mA		W2412HDA1	W2412GDA1
	15V/67mA		W2415HDA1	W2415GDA1
48Vdc	± 5V/100mA		W4805HDA1	W4805GDA1
	± 9V/55mA		W4809HDA1	W4809GDA1
	± 12V/41mA		W4812HDA1	W4812GDA1
	± 15V/33mA		W4815HDA1	W4815GDA1

Mechanical Dimensions: in mm

WxxyyH/GDA1 PACKAGE DIMENTIONS



PIN CONFIGURATION

Pin	Function	
	WxxyyHDA1	WxxyyGDA1
2,3	GND	GND
10,15	NC	NC
22, 23	Vin	Vin
14	+Vo	+Vo
11	NC	-Vo
16	0V	0V
9	NC	0V

TECHNICAL DATA
DATA SHEET 1119, REV. A

DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.