SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 1119, REV. A

DC-DC Converters Wide Input (2:1), 1000V Isolation, Regulated

FEATURES:

•	Isolation Voltage:	1000Vdc
•	Isolation Resistance (1):	1000MΩ
٠	Short-Circuit Duration:	Continuous
٠	Case Temperature Rise:	Max. 25°C, Typ. 15°C
٠	Cooling Method:	Free-Air Cooling
٠	Operating Temp.:	-40°C ~ + 85°C
٠	Storage Temp.:	-50°C ~ + 125°C
٠	Humidity:	≤ 95 %
٠	Soldering Temp. (2):	300°C
٠	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.

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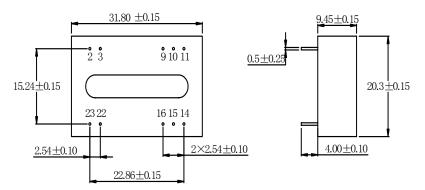
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W-1W Single-Dual Output Series Part Number List

Input	Output	Power	Single-1W	Dual-1W
	5V/200mA		W2405HDA1	W2405GDA1
24) (da	9V/111mA		W2409HDA1	W2409GDA1
24Vdc	12V/83mA		W2412HDA1	W2412GDA1
	15V/67mA 1W	1W	W2415HDA1	W2415GDA1
	± 5V/100mA		W4805HDA1	W4805GDA1
40) (-1-	\pm 9V/55mA		W4809HDA1	W4809GDA1
48Vdc	± 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

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