

TECHNICAL DATA
DATA SHEET 1120, REV. A

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

FEATURES:

- Isolation Voltage: 1000Vdc
- Isolation Resistance (1): 1000MΩ
- 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.: -55°C ~ +125°C
- Humidity: ≤ 95%
- Soldering Temp. (2): 300°C
- Case Material: Non-Flammable Material (UL94-V0)
- Mean Time Before Failure: > 580,000 hours (Operating Temp. 25°C)

W-1W Single-Dual Output Series Input Characteristics

Part Number	Nominal Input Voltage	Input Voltage Range	Maximum Input Voltage*
W05XXH/GS1	5Vdc	4.5~9Vdc	11Vdc
W12XXH/GS1	12Vdc	9~18Vdc	22Vdc
W15XXH/GS1	15Vdc	12~24Vdc	30Vdc
W24XXH/GS1	24Vdc	18~36Vdc	40Vdc
W48XXH/GS1	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	%
+Vo Load Regulation	-	0.2	0.5	%
-Vo Load Regulation	-	3	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.

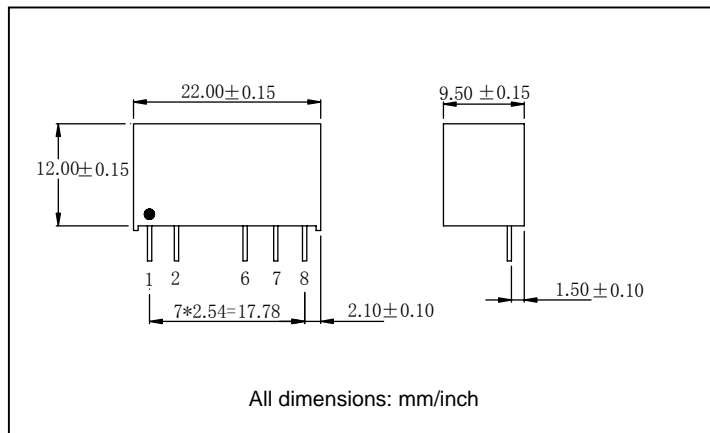
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W-1W Single-Dual Output Series Part Number List

Input	Output	Power	Single-1W	Dual-1W
5Vdc	5V/200mA	1W	W0505HS1	W050505GS1
			W0509HS1	W050909GS1
			W0512HS1	W051212GS1
			W0515HS1	W051515GS1
12Vdc	9V/111mA		W1205HS1	W120505GS1
	12V/83mA		W1209HS1	W120909GS1
	15V/67mA		W1212HS1	W121212GS1
			W1215HS1	W121515GS1
15Vdc	5V/100mA		W1505HS1	W150505GS1
	9V/55mA		W1509HS1	W150909GS1
	12V/34mA		W1512HS1	W151212GS1
			W1515HS1	W151515GS1
24Vdc	15V/50mA		W2405HS1	W240505GS1
			W2409HS1	W240909GS1
			W2412HS1	W241212GS1
			W2415HS1	W241515GS1
48Vdc		W4805HS1	W480505GS1	
		W4809HS1	W480909GS1	
		W4812HS1	W481212GS1	
		W4815HS1	W481515GS1	

Mechanical Dimensions

WxxyyHS1 PACKAGE DIMENTIONS

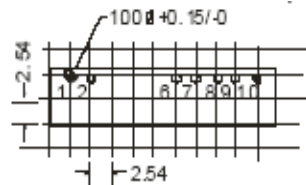
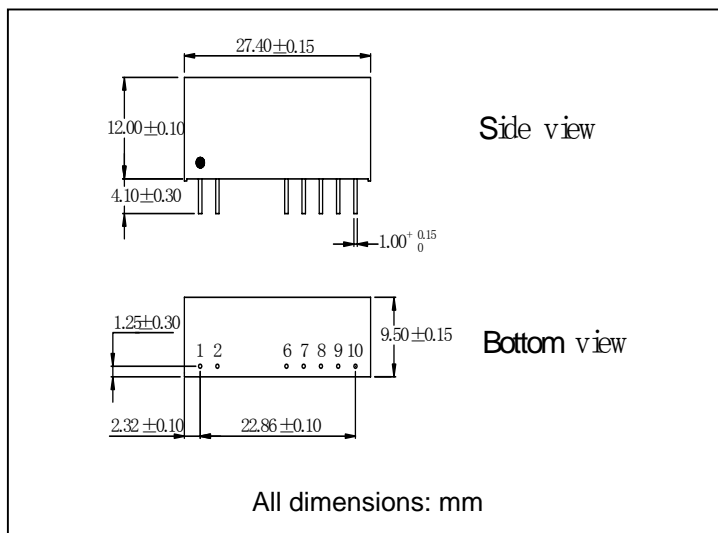


PIN CONFIGURATION

Pin	Function
1	GND
2	Vin
6	+Vo *
7	0V
8	CS

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WxyyyGS1 PACKAGE DIMENTIONS



Pin	Function
1	GND
2	Vin
6	+Vo *
7	0V1
8	CS
9	0V2
10	V02

*CTRL	DC/DC Converter Output
Low or Open	ON (Normal Operation)
High (TTL) Input current 1~5mA	OFF

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