

TECHNICAL DATA
DATA SHEET 1120, REV. -**DC-DC Converters**
Wide Input (2:1), 1000V Isolation, Regulated**FEATURES:**

- **Isolation Voltage:** 1000Vdc
- **Isolation Resistance (1):** 1000MW
- **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:** ≤ 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
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.

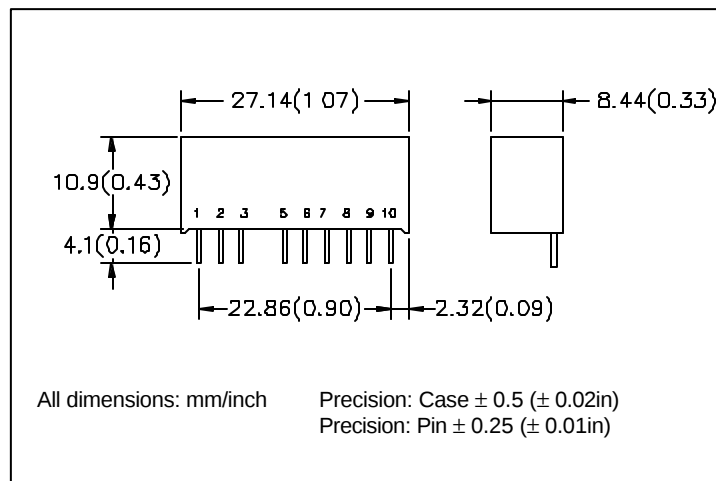
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W-1W Single-Dual Output Series Part Number List

Input	Output	Power	Single-1W	Dual-1W
5Vdc	5V/200mA	1W	W0505HS1	W0505GS1
			W0509HS1	W0509GS1
			W0512HS1	W0512GS1
			W0515HS1	W0515GS1
12Vdc	9V/111mA		W1205HS1	W1205GS1
	12V/83mA		W1209HS1	W1209GS1
			W1212HS1	W1212GS1
			15V/67mA	W1215HS1
	24Vdc		± 5V/100mA	W2405HS1
± 9V/55mA			W2409HS1	W2409GS1
± 12V/34mA			W2412HS1	W2412GS1
			W2415HS1	W2415GS1
48Vdc	± 15V/50mA		W4805HS1	W4805GS1
			W4809HS1	W4809GS1
			W4812HS1	W4812GS1
			W4815HS1	W4815GS1

Mechanical Dimensions

WxxyyH/GS1 PACKAGE DIMENTIONS



PIN CONFIGURATION

Pin	Function	
	WxxyyHS1	WxxyyGS1
1	GND	GND
2	Vin	Vin
3	CTRL*	CTRL*
5	NC	NC
6	+Vo	+Vo
7	0V	0V
8	CS	CS
9	-	0V
10	-	-Vo

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