

**TECHNICAL DATA**  
**DATA SHEET 1235, REV. -****DC-DC Converters**  
**Wide Input (2:1), 1500V Isolation, Regulated, Dual Output****FEATURES:**

- Isolation Voltage: 1500Vdc
- Isolation Resistance (1): 1G $\Omega$
- 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: > 1,000,000 hours (Operating Temp. 25°C)

**W-SMD-2W/3W Series Input Characteristics**

| Part Number | Nominal Input Voltage | Input Voltage Range | Maximum Input Voltage* |
|-------------|-----------------------|---------------------|------------------------|
| W12XXGT2/3  | 12Vdc                 | 9~18Vdc             | 18Vdc                  |
| W24XXGT2/3  | 24Vdc                 | 18~36Vdc            | 36Vdc                  |
| W48XXGT2/3  | 48Vdc                 | 36~75Vdc            | 75Vdc                  |

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

**W-SMD-2W/3W Series Output Characteristics**

| Parameter                        | MIN | TYP     | MAX     | Units |
|----------------------------------|-----|---------|---------|-------|
| Output Power                     |     |         | 3       | W     |
| Output Voltage Accuracy          |     | $\pm 1$ | $\pm 3$ | %     |
| Efficiency at 25% Load           | 60  | 65      | 70      | %     |
| Efficiency at 100% Load          | 65  | 75      | 83      | %     |
| Voltage Regulation               |     | 0.1     | 0.2     | %     |
| Load Regulation (+Vo)            |     | 0.2     | 0.5     | %     |
| Load Regulation (-Vo)            |     | 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.

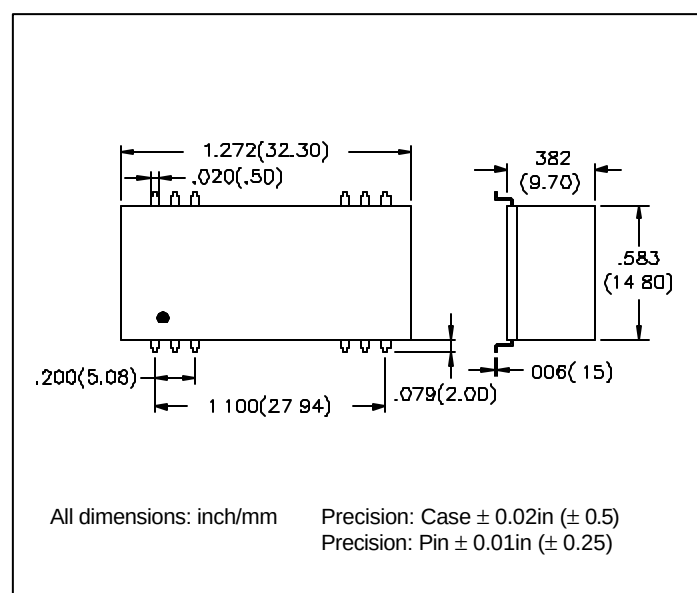
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**W-SMD-2W/3W Series Part Number List**

| Input | Output      | Power    | Dual-2W  | Dual-3W  |
|-------|-------------|----------|----------|----------|
| 12Vdc | ± 5V/200mA  | 2W<br>3W | W1205GT2 | W1205GT3 |
| 24Vdc | ± 12V/111mA |          | W1212GT2 | W1212GT3 |
|       | ± 15V/83mA  |          | W1215GT2 | W1215GT3 |
|       | ± 5V/300mA  |          | W2405GT2 | W2405GT3 |
| 48Vdc | ± 12V/125mA |          | W2412GT2 | W2412GT3 |
|       | ± 15V/100mA |          | W2415GT2 | W2415GT3 |
|       |             |          | W4805GT2 | W4805GT3 |
|       |             |          | W4812GT2 | W4812GT3 |
|       |             |          | W4815GT2 | W4815GT3 |

**Mechanical Dimensions**

**WxxyyGT2/3 PACKAGE DIMENTIONS**



**PIN CONFIGURATION**

| Pin | Function   |
|-----|------------|
|     | WxxyyGT2/3 |
| 1   | GND        |
| 2   | GND        |
| 3   | NC         |
| 10  | CMN        |
| 11  | NC         |
| 12  | -Vo        |
| 13  | +Vo        |
| 14  | NC         |
| 15  | CMN        |
| 22  | NC         |
| 23  | Vin        |
| 24  | Vin        |