

**FEATURES :**

- 20 Watt DIL Package
- 4:1 Wide Input Voltage
- 100% Burned In
- High Efficiency to 87%
- Customized Solutions Available
- Remote Control: On/Off
- UL94V-0 Package Material
- Operating Temperature: -40°C to +82°C
- 3 Years Warranty

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

| Part Number    | Input Voltage |         | Input Current (mA TYP) |     | Output Voltage | Output Current | Efficiency | Capacitor load |
|----------------|---------------|---------|------------------------|-----|----------------|----------------|------------|----------------|
|                | Vdc           | No Load | Full Load              | Vdc | Full Load (mA) | %TYP           | uF MAX     |                |
| 95DW-24S03B3NL | 9-36          | 60      | 900                    | 3.3 | 5500           | 84             | 3300       |                |
| 95DW-24S05B3NL | 9-36          | 60      | 968                    | 5   | 4000           | 86             | 3300       |                |
| 95DW-24S12B3NL | 9-36          | 40      | 970                    | 12  | 1670           | 86             | 330        |                |
| 95DW-24S15B3NL | 9-36          | 20      | 966                    | 15  | 1330           | 86             | 330        |                |
| 95DW-24D05B3NL | 9-36          | 70      | 900                    | ±5  | ±2000          | 84             | ±2000      |                |
| 95DW-24D12B3NL | 9-36          | 40      | 959                    | ±12 | ±835           | 87             | ±330       |                |
| 95DW-24D15B3NL | 9-36          | 40      | 944                    | ±15 | ±665           | 88             | ±330       |                |
| 95DW-48S03B3NL | 18-75         | 30      | 450                    | 3.3 | 5500           | 84             | 5600       |                |
| 95DW-48S05B3NL | 18-75         | 30      | 484                    | 5   | 4000           | 86             | 5600       |                |
| 95DW-48S12B3NL | 18-75         | 30      | 485                    | 12  | 1670           | 86             | 680        |                |
| 95DW-48S15B3NL | 18-75         | 30      | 483                    | 15  | 1330           | 86             | 680        |                |
| 95DW-48D05B3NL | 18-75         | 30      | 496                    | ±5  | ±2000          | 84             | ±3300      |                |
| 95DW-48D12B3NL | 18-75         | 30      | 497                    | ±12 | ±835           | 84             | ±220       |                |
| 95DW-48D15B3NL | 18-75         | 30      | 483                    | ±15 | ±665           | 86             | ±220       |                |

**Input Specifications**

| Parameters    | Conditions | Min | Typ     | Max | Units |
|---------------|------------|-----|---------|-----|-------|
| Voltage Types |            |     |         | 4:1 |       |
| Filter        |            |     | Pi TYPE |     |       |

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DC-DC Converter

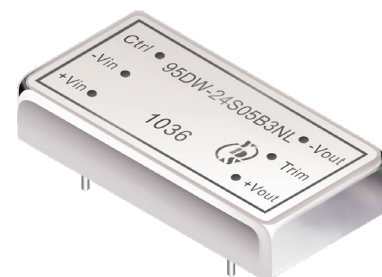
95DW-B3 SERIES

20Watt 1.5KV Isolated

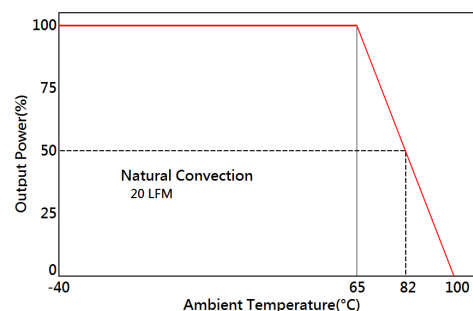
4 : 1 Input Voltage Range

Single & Dual Output

2" x 1"



Temperature Derating Graph



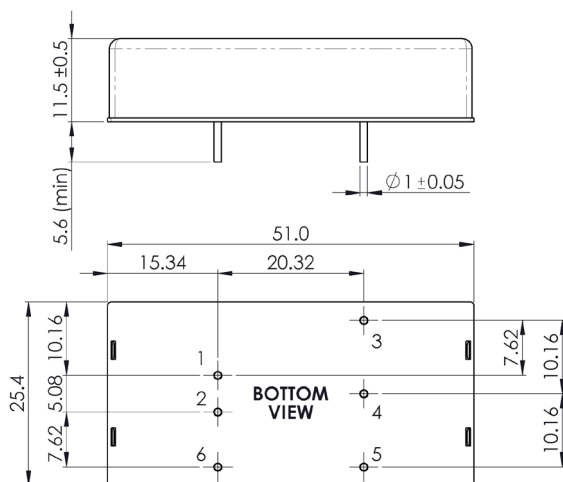
Output Specifications

| Parameters                      | Conditions                           | Min | Typ | Max        | Units |
|---------------------------------|--------------------------------------|-----|-----|------------|-------|
| Voltage Tolerance               | Full load @Vin(nom.)                 |     |     | ±2         | %     |
| Short Circuit Protection        | Hiccup,<br>automatic recovery        |     |     |            |       |
| Line Regulation                 |                                      |     |     | ±0.5       | %     |
| Load Regulation                 | Single<br>Dual (Balance Load)        |     |     | ±0.5<br>±1 | %     |
| Cross Regulation                | Dual (25% to 100% load)              |     |     | ±5         | %     |
| Ripple & Noise                  | Output:3-15V TYPES<br>BW=DC To 20MHz |     |     | 100        | mVp-p |
|                                 | Output > 15V TYPES<br>BW=DC To 20MHz |     |     | 1% of Vout | mVp-p |
| Transient response setting time | 25% load step change                 |     | 300 |            | us    |

General Specifications

| Parameters            | Conditions                             | Min            | Typ  | Max | Units |
|-----------------------|--|----------------|------|-----|-------|
| Isolation Voltage     |  |                | 1500 |     | Vdc   |
| Isolation Resistance  | 500Vdc                                 | 1000           |      |     | MΩ    |
| Switching Frequency   |  |                | 300  |     | KHz   |
| Operating Temperature | With derating                          | -40            |      | 82  | °C    |
| Storage Temperature   |  | -55            |      | 125 | °C    |
| Humidity              | Non Condensing                         | 5              |      | 95  | %     |
| Cooling               | Natural Convection (20LFM)             |                |      |     |       |
| Case material         | Nickel coated copper with plastic base |                |      |     |       |
| MTBF                  | MIL-HDBK-217F<br>@25°C                 | 659000         |      |     | Hours |
| Weight                |  |                | 32.6 |     | g     |
| Dimensions            |  | 50.8x25.4x11.5 |      |     | mm    |

Dimensions



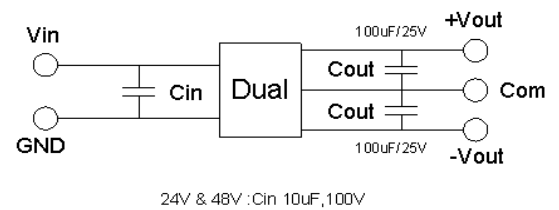
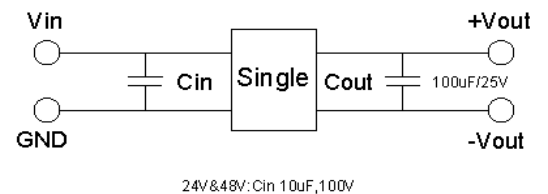
Unit : mm  
Tolerance : XX.X ± 0.5 · XX.XX ± 0.25

Part Number

**95DW- 24 S 05 B 3 NL**  
**A B C D E F G**

- A:** Series
- B:** Input Voltage
- C:** Single Output
- D:** Output Voltage
- E:** Version
- F:** Package
- G:** RoHs Version

Recommended Test Circuit



PIN Assignment

| Pin    | 1    | 2    | 3     | 4    | 5     | 6             |
|--------|------|------|-------|------|-------|---------------|
| Single | +Vin | -Vin | +Vout | Trim | -Vout | Remote On/Off |
| Dual   | +Vin | -Vin | +Vout | Com  | -Vout | Remote On/Off |

