

FEATURES :

- 20 Watt DIL Package
- 4:1Wide Input Voltage
- 100% Burned In
- High Efficiency To 85%
- Customized Solutions Available
- Remote Control:On/Off
- UL94V-0 Package Material
- Operating Temperature:-40°C TO +85°C
- 3 Years Warranty

YUAN DEAN SCIENTIFIC



DC-DC Converter

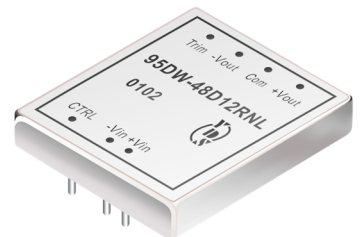
95DW SERIES

20Watt 1.5KV Isolated

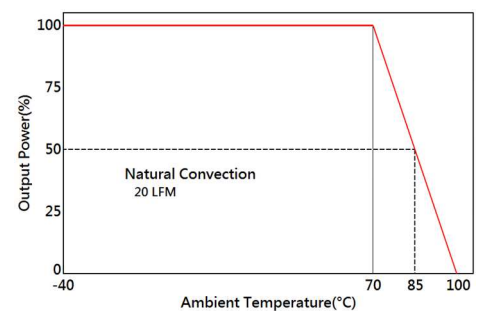
4 : 1 Input Voltage Range

Single & Dual Output

2" x 2"



Temperature Derating Graph



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

| Part Number | Input Voltage | Input Current | | Output Voltage | Output Current | Efficiency |
|---------------|---------------|------------------|--------------------|----------------|----------------|------------|
| | Vdc | No Load (mA TYP) | Full Load (mA TYP) | Vdc | Full Load (mA) | %TYP |
| 95DW-24S05RNL | 9-36 | 25 | 1016 | 5 | 4000 | 82 |
| 95DW-24S12RNL | 9-36 | 25 | 982 | 12 | 1670 | 85 |
| 95DW-24S15RNL | 9-36 | 25 | 978 | 15 | 1330 | 85 |
| 95DW-24D12RNL | 9-36 | 25 | 991 | ±12 | ±833 | 84 |
| 95DW-24D15RNL | 9-36 | 25 | 991 | ±15 | ±666 | 84 |
| 95DW-48S05RNL | 18-72 | 20 | 508 | 5 | 4000 | 82 |
| 95DW-48S12RNL | 18-72 | 20 | 491 | 12 | 1670 | 85 |
| 95DW-48S15RNL | 18-72 | 20 | 489 | 15 | 1330 | 85 |
| 95DW-48D12RNL | 18-72 | 20 | 495 | ±12 | ±833 | 84 |
| 95DW-48D15RNL | 18-72 | 20 | 495 | ±15 | ±666 | 84 |

Input Specifications

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

Output Specifications

| Parameters | Conditions | Min | Typ | Max | Units |
|---------------------------------|--------------------------------------|-----|-----|------|-------|
| Voltage Tolerance | Full load@Vin(nom.) | | | ±2 | % |
| Short Circuit Protection | Hiccup, automatic recovery | | | | |
| Line Regulation | | | | ±0.5 | % |
| Load Regulation | Single(25% to 100% load) | | | ±0.5 | % |
| Load Regulation | Dual(Balance load), 25% to 100% load | | | ±2.0 | % |
| Cross Regulation | Dual (25% to 100% load) | | | ±5.0 | % |
| Ripple & Noise | BW=DC To 20MHz | | | 100 | mVp-p |
| Transient response setting time | 25% load step change | | 350 | | us |



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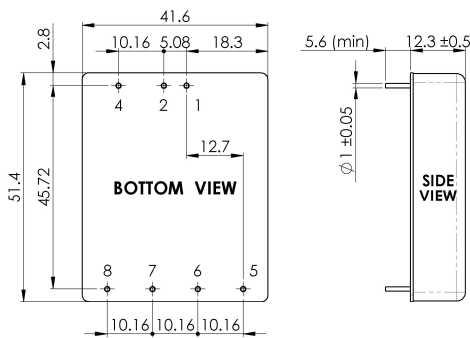
Rev:0 2018/10/31

General Specifications

| Parameters | Conditions | Min | Typ | Max | Units |
|-----------------------|--|----------------|-----|-----|-------|
| Isolation Resistance | 500Vdc | 1000 | | | MΩ |
| Switching Frequency | | | 300 | | KHz |
| Operating Temperature | | -40 | | 85 | °C |
| Humidity | Non Condensing | | | 95 | % |
| Cooling | Natural Convection (20LFM) | | | | |
| Case material | Nickel Coated with Non-Conductive Base | | | | |
| Weight | | | 55 | | g |
| Dimensions | Package 1 | 51.4x41.6x12.3 | | | mm |
| | Package 2 | 51.0x51.0x10.3 | | | mm |
| Potting Material | Epoxy (UL94V-0 rated) | | | | |
| Radiated Emissions | EN55022 | CLASS A | | | |
| Conducted Emissions | EN55022 | CLASS A | | | |

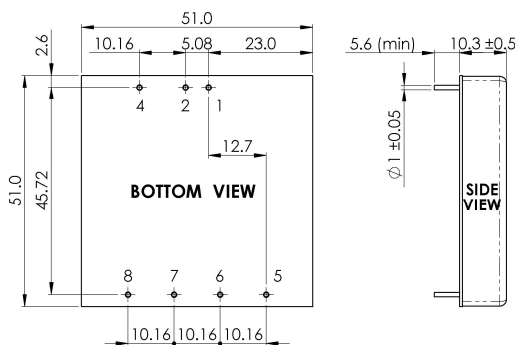
Dimensions

Standard Model (-RNL)



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

Extended model(-R2NL)



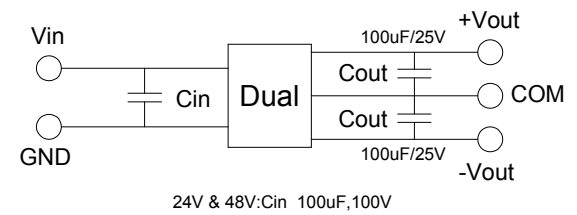
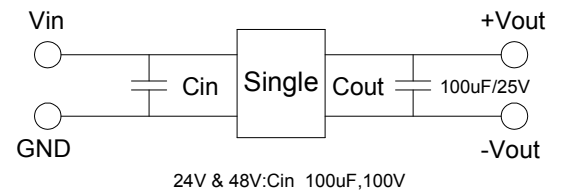
Unit : mm
Tolerance : XX.X ±0.5 , XX.XX ±0.25

Part Number

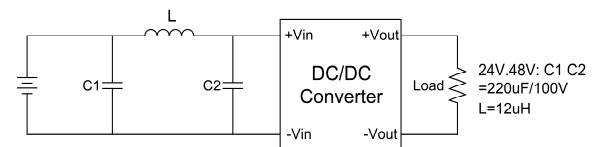
95DW - 24 S 05 R 2 NL
A B C D E F G

- A: Series
- B: Input Voltage
- C: Single Output (S),Dual (D)
- D: Output Voltage
- E: Regulated(R)
- F: Package
- G: RoHs Version

Recommended Test Circuit



Input filter components(C1,C2,L) are used to help meet conducted emissions requirement for the module .
These components should be mounted as close as possible to the module; and all leads should be minimized to decrease radiated noise.



PIN Connection

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------|------|------|--------|---------------|-------|-------|-------|------|
| Single | +Vin | -Vin | No Pin | Remote On/Off | NC | +Vout | -Vout | Trim |
| Dual | +Vin | -Vin | No Pin | Remote On/Off | +Vout | Com | -Vout | Trim |

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