

FEATURES :

- 10W DIL PACKAGE
- 4:1 WIDE INPUT RANGE
- 100% BURNED IN
- HIGH EFFICIENCY
- UL94V-0 PACKAGE MATERIAL
- CUSTOMIZED SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- Design refer to EN50155
- Remote Control: On/Off

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 |
| 68DW-24S03R1 | 9-36 | 50 | 485 | 3.3 | 3000 | 85 |
| 68DW-24S05R1 | 9-36 | 50 | 485 | 5 | 2000 | 86 |
| 68DW-24S12R1 | 9-36 | 30 | 479 | 12 | 833 | 87 |
| 68DW-24S15R1 | 9-36 | 30 | 474 | 15 | 670 | 88 |
| 68DW-24D05R1 | 9-36 | 30 | 502 | ± 5 | ± 1000 | 83 |
| 68DW-24D12R1 | 9-36 | 30 | 474 | ± 12 | ± 420 | 88 |
| 68DW-24D15R1 | 9-36 | 30 | 474 | ± 15 | ± 340 | 88 |
| 68DW-48S03R1 | 18-75 | 30 | 243 | 3.3 | 3000 | 85 |
| 68DW-48S05R1 | 18-75 | 30 | 243 | 5 | 2000 | 86 |
| 68DW-48S12R1 | 18-75 | 20 | 240 | 12 | 833 | 87 |
| 68DW-48S15R1 | 18-75 | 20 | 237 | 15 | 670 | 88 |
| 68DW-48D05R1 | 18-75 | 20 | 251 | ± 5 | ± 1000 | 83 |
| 68DW-48D12R1 | 18-75 | 20 | 237 | ± 12 | ± 420 | 88 |
| 68DW-48D15R1 | 18-75 | 20 | 237 | ± 15 | ± 340 | 88 |
| 68DW-110S03R1 | 40-160 | 12 | 106 | 3.3 | 3000 | 85 |
| 68DW-110S05R1 | 40-160 | 12 | 106 | 5 | 2000 | 86 |
| 68DW-110S12R1 | 40-160 | 6 | 105 | 12 | 833 | 87 |
| 68DW-110S15R1 | 40-160 | 6 | 104 | 15 | 670 | 88 |
| 68DW-110D05R1 | 40-160 | 6 | 110 | ± 5 | ± 1000 | 83 |
| 68DW-110D12R1 | 40-160 | 6 | 104 | ± 12 | ± 420 | 88 |
| 68DW-110D15R1 | 40-160 | 6 | 104 | ± 15 | ± 340 | 88 |

Input Specifications

| Parameters | Conditions | Min | Typ | Max | Units |
|---------------|------------|-----|------------|-----|-------|
| Voltage Types | | | | 4:1 | % |
| Filter | | | PI Network | | |

YUAN DEAN SCIENTIFIC



DC-DC Converter

68DW-R1 SERIES

10Watt 1.6KV Isolated

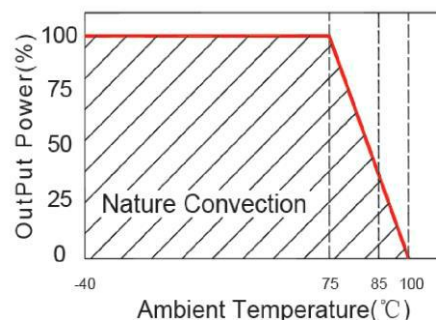
4 : 1 Input Voltage Range

Single & Dual Output

DIL



Temperature Derating Graph



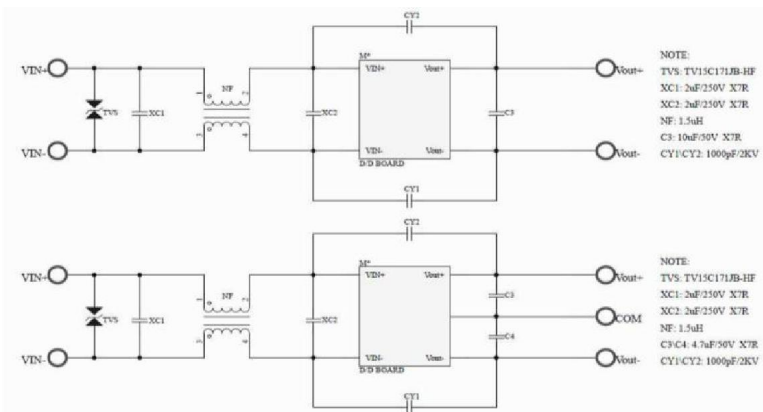
Output Specifications

| 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 | | | ±0.5 | % |
| | Dual(Balance Load) | | | ±0.5 | % |
| Cross Regulation | Dual(25% To 100% Load) | | | ±5 | % |
| Ripple & Noise | Output:3-15V TYPES BW=DC To 20MHz | | | 100 | mVp-p |
| Ripple & Noise | Output > 15V TYPES BW=DC To 20MHz | | | 1% of Vout | mVp-p |
| Transient response setting time | 25% load step change | | | 350 | us |

General Specifications

| Parameters | Conditions | Min | Typ | Max | Units |
|-----------------------|--|--------|----------------|-----|-------|
| Isolation Voltage | | | 1600 | | Vdc |
| Isolation Resistance | 500Vdc | 1000 | | | MΩ |
| Switching Frequency | | | 400 | | KHz |
| Operating Temperature | With derating | -40 | | 100 | °C |
| Storage Temperature | | -55 | | 125 | °C |
| Humidity | Non Condensing | | | 95 | % |
| Cooling | Free air Convection | | | | |
| Case material | Nickel coated copper with no-conductive base | | | | |
| MTBF | MIL-HDBK-217F@25°C | 900000 | | | Hours |
| Weight | | | 17.5 | | g |
| Dimensions | | | 31.6x20.1x10.0 | | mm |

Recommended Test Circuit

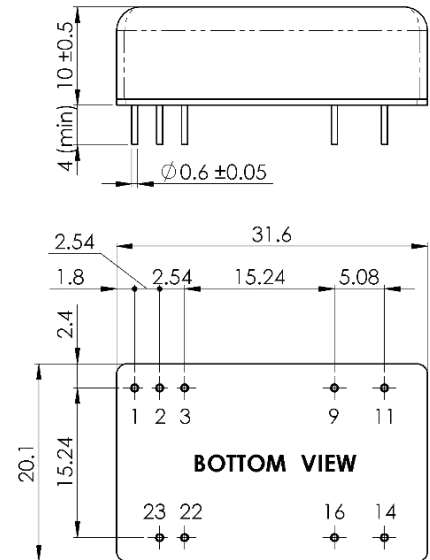


Part Number

| | | | | | | |
|------|---|----|---|----|---|---|
| 68DW | - | 24 | S | 03 | R | 1 |
| A | | B | C | D | E | F |

- A : Series
- B : Input Voltage
- C : Single(S);Dual(D)
- D : Output Voltage
- E : Regulated(R)
- F : Case Type

Markings and dimensions



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

PIN Assignment

| Pin | 1 | 2,3 | 9 | 11 | 14 | 16 | 22,23 |
|--------|--------|------|--------|-------|-------|--------|-------|
| Single | Remote | -Vin | NC | NC | +Vout | -Vout | +Vin |
| Dual | Remote | -Vin | Common | -Vout | +Vout | Common | +Vin |