

WDD15 SERIES

DC-DC CONVERTER 12 ~ 15W



WDD15 - 03 S 4

WATTAGE

03 : 3.3V OUT

05 : 5V OUT

12 : 12V OUT

15 : 15V OUT

4: 10~36V IN

5: 18~72V IN

S : SINGLE OUTPUT

D : DUAL OUTPUT

MODEL LIST

| MODEL NO. | INPUT VOLTAGE | OUTPUT WATTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | EFF. (TYP.) | EFF. (MIN.) | CASE |
|-----------------------------|---------------|----------------|----------------|----------------|-------------|-------------|------|
| Single Output Models | | | | | | | |
| WDD15 - 03S4 | 10~36 VDC | 12 WATTS | +3.3 VDC | 3600 mA | 80% | 77% | FF |
| WDD15 - 05S4 | 10~36 VDC | 15 WATTS | + 5 VDC | 3000 mA | 81% | 79% | FF |
| WDD15 - 12S4 | 10~36 VDC | 15 WATTS | + 12 VDC | 1250 mA | 83% | 81% | FF |
| WDD15 - 15S4 | 10~36 VDC | 15 WATTS | + 15 VDC | 1000 mA | 83% | 81% | FF |
| WDD15 - 03S5 | 18~72 VDC | 12 WATTS | +3.3 VDC | 3600 mA | 80% | 77% | FF |
| WDD15 - 05S5 | 18~72 VDC | 15 WATTS | + 5 VDC | 3000 mA | 81% | 79% | FF |
| WDD15 - 12S5 | 18~72 VDC | 15 WATTS | + 12 VDC | 1250 mA | 84% | 82% | FF |
| WDD15 - 15S5 | 18~72 VDC | 15 WATTS | + 15 VDC | 1000 mA | 82% | 80% | FF |
| Dual Output Models | | | | | | | |
| WDD15 - 12D4 | 10~36 VDC | 15 WATTS | ± 12 VDC | ± 630 mA | 82% | 80% | FF |
| WDD15 - 15D4 | 10~36 VDC | 15 WATTS | ± 15 VDC | ± 500 mA | 81% | 79% | FF |
| WDD15 - 12D5 | 18~72 VDC | 15 WATTS | ± 12 VDC | ± 630 mA | 82% | 80% | FF |
| WDD15 - 15D5 | 18~72 VDC | 15 WATTS | ± 15 VDC | ± 500 mA | 81% | 79% | FF |

FEATURES

- * LOW COST
- * 4:1 WIDE INPUT RANGE
- * I/O ISOLATION
- * INPUT Pi FILTER
- * SHORT CIRCUIT PROTECTION
- * HIGH PERFORMANCE
- * 2 YEARS WARRANTY

DESCRIPTION

THE WDD15 SERIES ARE 12 WATTS AND 15 WATTS SINGLE & DUAL OUTPUT DC/DC CONVERTERS, 4:1 WIDE INPUT RANGE WITH I/O ISOLATION AND SHORT CIRCUIT PROTECTION FEATURES MAKES IT SUITABLE USED ON VARIABLE APPLICATIONS WITH LOW COST. ALL WDD15 MODELS CONTAIN PI INPUT FILTER TO MINIMIZE REFLECTED RIPPLE & NOISE. ALL MODELS ARE PACKAGED IN 2" x 1.6" x 0.4" BLACK COATED METAL CASE, AND PCB MOUNTABLE DIRECTLY.



SPECIFICATION

All Specifications Typical At Nominal Line, Full Load, 25°C Unless Otherwise Noticed

GENERAL SPECIFICATION

- * Switching frequency: 230KHz
- * Isolation voltage: 1,500VDC
- * Isolation resistance: 100M Ω(min.)
- * Operating ambient temperature: -25 to +71°C
- * Storage temperature: -40 to +100°C
- * Max. Case temperature: 100°C
- * M.T.B.F.: 277,400Hrs at @ GF40, according to MIL-HDBK-217F
- * Cooling: Free air convection
- * Temperature coefficient: ±0.02% / °C
- * Dimension: 50.8 x 40.6 x 10.2mm

INPUT SPECIFICATIONS

- * Input voltage range / frequency: 10 ~ 36VDC for 24V
18 ~ 72VDC for 48V
- * Input filter: Pi type
- * No load input current: 15mA for 24V in
10mA for 48V in
- * Max. Input voltage: 40VDC for 24V in
75VDC for 48V in
- * Startup voltage: 9.5VDC for 24V in
33VDC for 48V in

OUTPUT SPECIFICATIONS

- * Output voltage accuracy: ±2% at Vo_nom
- * Minimum load: No load for single output models
±10% at Vo_nom for dual output models
- * Line regulation: ±1% at Vo_nom
- * Load regulation: ±2% at Vo_nom for single output models
±5% at Vo_nom for dual output models
- * Efficiency: Up to 84%, see model list
- * Voltage trim range: Vout x 10%
- * Derating: See table 1
- * Case material: Metal

CONTROL AND PROTECTION

- * Remote on/off: ON : open or 8 ~ 10VDC
OFF : -0.3 ~ 2VDC
- * Input reversed: Shunt diode use external fuse
- * Output short circuit: Continuous

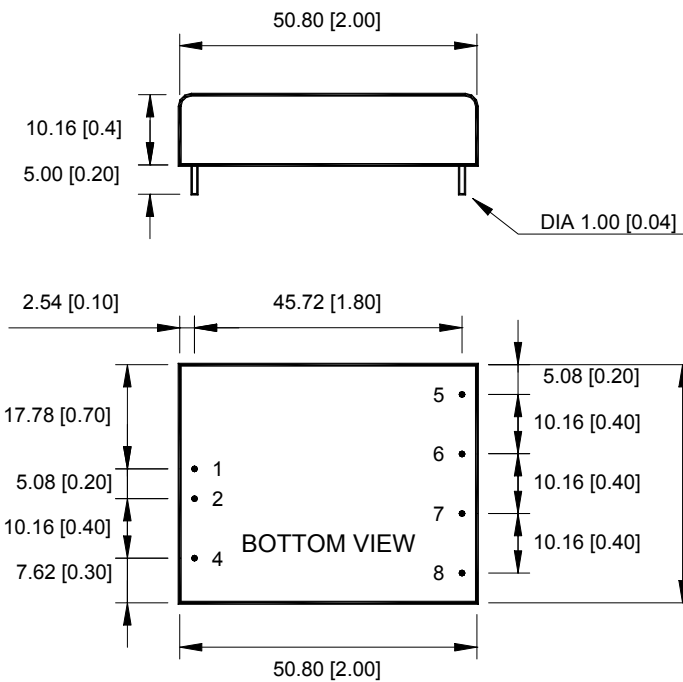


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MECHANISM & PIN CONFIGURATION

mm [inch]



PHYSICAL CHARACTERISTICS

| | |
|---------------|---|
| CASE SIZE | 50.7 x 40.6 x 10.2mm 2 x 1.6 x 0.4inches |
| CASE MATERIAL | Metal |
| WEIGHT | 60 g |

PIN ASSIGMENT

| PIN NO. | 1 | 2 | 4 | 5 | 6 | 7 | 8 |
|---------|-----|-----|------|--------|-----|-----|------|
| SINGLE | Vi+ | Vi- | S.D. | NO PIN | Vo+ | Vo- | Trim |
| DUAL | Vi+ | Vi- | S.D. | Vo+ | com | Vo- | Trim |

S.D. : REMOTE ON/OFF

Derating:

[TABLE 1]

