

3 Watts Wide Input Range DC - DC Converter

FEATURES

- ◆ 3W DIP & SMD PACKAGE
- ◆ High Efficiency
- ◆ 100% Burn in
- ◆ UL94-V0 Package Material

SPECIFICATIONS

Input Voltage Range 2:1 or 4:1 Input Range
Input Filter.....Pi Network
Protection.....Fuse Recommended
Voltage Setpoint Accuracy..... $\pm 2\%$ max.
Temperature Coefficient..... $\pm 0.05\%/^{\circ}\text{C}$
Ripple & Noise¹ (20MHz BW).....100mVp-p max.
Load Regulation²..... $\pm 0.5\%$ max.
Line Regulation³..... $\pm 1.0\%$ max.
Minimum Load20% of Full Load
Short Circuit ProtectionContinuous
Short Circuit RestartAutomatic
Overload Protection.....110%~180%
Transient Response (25% step load change).....200uS max.
Efficiency.....70%min.
Switching Frequency.....50KHz min.
Isolation Voltage.....1500VDC or 3000VDC min.
Isolation Resistance..... 10^9 ohms min.
Isolation Capacitance.....40pF max.
Operating Temperature.....-40°C To +71°C
Storage Temperature.....-55°C To +125°C
Case Temperature.....+95°C max.
Humidity.....95% max.
Cooling.....Free-Air Convection
Case.....Black Coated Five Side Shielded Case
Case Size (DIL).....31.8mmx20.3mmx12.2mm
(SMD).....31.8mmx20.3mmx11.4mm
Weight.....17.5g Typ.

Note:

(1) Measured with 1uF ceramic capacitor connect to the output pins.

(2) Load Regulation is for output load current change from 10% to 100%.

(3) High line to low line.



Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	EFF. % (min.)	Case
DW03-00 (A3)	4.5-9	3.3	755	73	A/B/C
DW03-01 (A3)	4.5-9	5	500	73	A/B/C/D
DW03-02 (A3)	4.5-9	12	250	76	A/B/C/D
DW03-03 (A3)	4.5-9	15	200	76	A/B/C/D
DW03-04	4.5-9	± 5	± 300	70	A
DW03-05	4.5-9	± 12	± 125	74	A/B/C
DW03-06	4.5-9	± 15	± 100	75	A/B/C
DW03-x0 (A3)	see note	3.3	700	68	A/B/C/D
DW03-x1 (A3)	see note	5	600	72	A/B/C/D
DW03-x1B (A3)	see note	9	330	79	A/B/C/D
DW03-x2 (A3)	see note	12	250	78	A/B/C/D
DW03-x3 (A3)	see note	15	200	78	A/B/C/D
DW03-x9	see note	24	125	78	A/B/C/D
DW03-x4 (A3)	see note	± 5	± 300	71	A/B/C
DW03-x5 (A3)	see note	± 12	± 125	78	A/B/C
DW03-x6 (A3)	see note	± 15	± 100	78	A/B/C

Remark:

Suffix "A3" for 3KVDC isolation; only available in Package A

Note:

x=1, input 12VDC, range: 9-18VDC

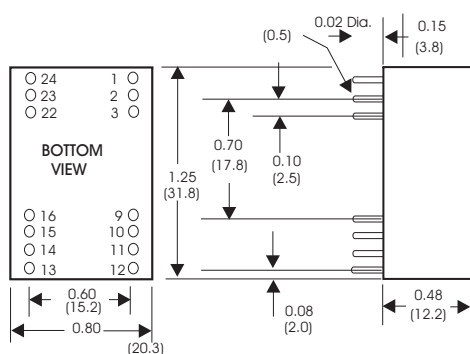
x=2, input 24VDC, range: 18-36VDC
(3.3V is with 910mA current output)

x=3, input 48VDC, range: 36-72VDC

x=4, input 12VDC, range: 9-36VDC
(not available for 9Vout)

x=5, input 24VDC, range: 18-72VDC
(not available for 9Vout)

MECHANICAL DRAWING (Unit: inch(mm))



Package A

PIN CONNECTIONS		
Pin#	Single	Dual
2 & 3	-Vin	-Vin
9	NC	Com.
10 & 15	N.P.	N.P.
11	NC	-Vo
14	+Vo	+Vo
16	-Vo	Com.
22 & 23	+Vin	+Vin
1, 24, 12, 13	N.P.	N.P.

Package B

PIN CONNECTIONS		
Pin#	Single	Dual
1 & 24	+Vin	+Vin
2 & 23	N.P.	-Vo
3 & 22	N.P.	Com.
10 & 15	-Vo	Com.
11 & 14	+Vo	+Vo
12 & 13	-Vin	-Vin
9 & 16	N.P.	N.P.

*N.P.=No Pin NC=No Connection

Package C

PIN CONNECTIONS		
Pin	Single	Dual
1 & 2	+Vin	+Vin
10 & 11	NC	Com.
12	-Vout	NC
13	+Vout	-Vout
15	NC	+Vout
23 & 24	-Vin	-Vin

Package D (for 2:1 only)

PIN CONNECTIONS	
Pin	Single
1 & 24	+Vin
2 & 23	-Vin
3	NC
10 & 15	+Vout
11 & 14	NC
23 & 24	-Vout