



5 Watts Wide Input Range DC - DC Converter

FEATURES

- ◆5W DIP & SMD PACKAGE
- ◆100% Burn in
- ◆High Efficiency
- ◆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).....200 μs 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 $^{\circ}\text{C}$ To +71 $^{\circ}\text{C}$
Storage Temperature.....-55 $^{\circ}\text{C}$ To +125 $^{\circ}\text{C}$
Case Temperature.....+95 $^{\circ}\text{C}$ 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 1 μF 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
DW05-01 (A3)	4.5-9	5	800	74	A/B
DW05-02 (A3)	4.5-9	12	333	75	A/B
DW05-03 (A3)	4.5-9	15	267	75	A/B
DW05-04	4.5-9	± 5	± 400	71	A/B
DW05-05	4.5-9	± 12	± 167	75	A/B
DW05-06	4.5-9	± 15	± 133	75	A/B
DW05-x0 (A3)	see note	3.3	1200	76	A/B
DW05-x1 (A3)	see note	5	1000	77	A/B
DW05-x1B (A3)	see note	9	556	81	A/B
DW05-x2 (A3)	see note	12	470	80	A/B
DW05-x3 (A3)	see note	15	400	83	A/B
DW05-x9	see note	24	208	80	A/B
DW05-x4 (A3)	see note	± 5	± 500	75	A/B
DW05-x5 (A3)	see note	± 12	± 230	79	A/B
DW05-x6 (A3)	see note	± 15	± 190	81	A/B
DW05-y0 (A3)	see note	3.3	1200	70	A
DW05-y1 (A3)	see note	5	1000	76	A
DW05-y1B (A3)	see note	9	556	77	A
DW05-y2 (A3)	see note	12	417	77	A
DW05-y3 (A3)	see note	15	333	78	A
DW05-y4 (A3)	see note	± 5	± 500	74	A
DW05-y5 (A3)	see note	± 12	± 208	77	A
DW05-y6 (A3)	see note	± 15	± 167	78	A

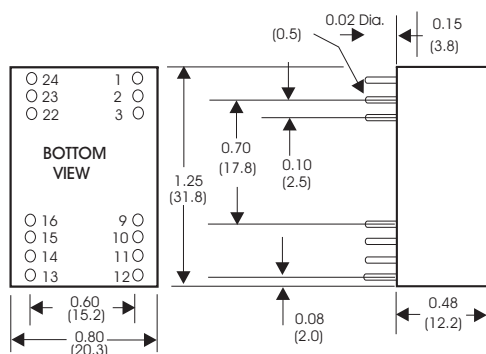
Remark:

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
x=3, input 48VDC, range: 36-72VDC
y=4, input 12VDC, range: 9-36VDC
y=5, input 24VDC, range: 18-72VDC

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