

## 3 Watts SIP Type DC - DC Converter

### FEATURES

- ◆ 3W Regulated Output Power
- ◆ High Efficiency
- ◆ MTBF > 400,000 Hours
- ◆ SIP8 Package
- ◆ 100% Burn In
- ◆ 3 Years Warranty

### SPECIFICATIONS

Input Voltage Range ..... 2:1 or 4:1  
 Input Filter ..... Capacitor Type  
 Voltage Set-Point Accuracy.....  $\pm 2\%$  max.  
 Temperature Coefficient.....  $\pm 0.05\%/^{\circ}\text{C}$   
 Ripple & Noise (20MHz BW)..... 100mVp-p max.  
 Line Regulation<sup>1</sup>.....  $\pm 0.5\%$  max.  
 Load Regulation<sup>2</sup>.....  $\pm 0.5\%$  max.  
 Minimum Load ..... 20% of full load  
 Short Circuit Protection ..... Continuous  
 Efficiency..... 75% min.  
 Isolation Voltage<sup>3</sup>..... 1500 or 3000VDC  
 Isolation Resistance.....  $10^9 \Omega$  min.  
 Switching Frequency..... 100KHz min.  
 Isolation Capacitance ..... 80pF max.  
 Operating Temperature .....  $-40^{\circ}\text{C}$  To  $+71^{\circ}\text{C}$   
 Storage Temperature .....  $-55^{\circ}\text{C}$  To  $+105^{\circ}\text{C}$   
 Cooling..... Free-Air Convection  
 Case Material..... Non-Conductive Plastic  
 Case Size..... 21.8\*9.20\*11.1 mm  
 Weight ..... 4.8 g  
 Packing ..... 23 pcs / tube ; 2300 pcs per carton

Note:

(1) Line Regulation is for 1.0% change in input Voltage.

(2) Load Regulation is for output Load current change from 20% to 100%.

(3) 1500VDC for 10 seconds



| Model Number | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | EFF. % (min.) |
|--------------|---------------------|----------------------|---------------------|---------------|
| DP03-01 (A3) | 4.5-9               | 5                    | 600                 | 75            |
| DP03-02 (A3) | 4.5-9               | 12                   | 250                 | 77            |
| DP03-03 (A3) | 4.5-9               | 15                   | 200                 | 77            |
| DP03-04      | 4.5-9               | $\pm 5$              | $\pm 300$           | 76            |
| DP03-05      | 4.5-9               | $\pm 12$             | $\pm 125$           | 77            |
| DP03-06      | 4.5-9               | $\pm 15$             | $\pm 100$           | 75            |
| DP03-x1 (A3) | see note            | 5                    | 600                 | 74            |
| DP03-x2 (A3) | see note            | 12                   | 250                 | 78            |
| DP03-x3 (A3) | see note            | 15                   | 200                 | 81            |
| DP03-x4      | see note            | $\pm 5$              | $\pm 300$           | 77            |
| DP03-x5      | see note            | $\pm 12$             | $\pm 125$           | 78            |
| DP03-x6      | see note            | $\pm 15$             | $\pm 100$           | 78            |

Remark:

Suffix "A3" for 3KVDC isolation

Note:

0=inputrange 4.5-9VDC (CaseA)

x=1,inputrange 9-18VDC (CaseA)

x=2,inputrange 18-36VDC (CaseA)

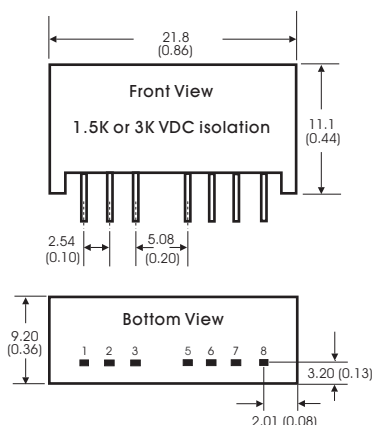
x=3,inputrange 36-75VDC (CaseA)

x=4,inputrange 9-36VDC (CaseB)

x=5,inputrange 18-75VDC (CaseB)

### MECHANICAL DRAWING (Unit: mm[inch])

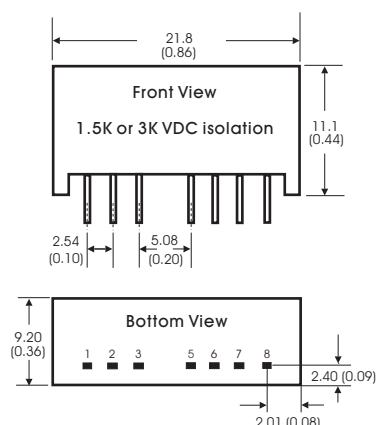
Case A



Pin Connection

| Pin# | Single | Dual   |
|------|--------|--------|
| 1    | Vi-    | Vi-    |
| 2    | Vi+    | Vi+    |
| 3    | Remote | On/Off |
| 5    | NC     | NC     |
| 6    | Vo+    | Vo+    |
| 7    | Vo-    | Com.   |
| 8    | NC     | Vo-    |

Case B



Pin Connection

| Pin# | Single | Dual   |
|------|--------|--------|
| 1    | Vi-    | Vi-    |
| 2    | Vi+    | Vi+    |
| 3    | Remote | On/Off |
| 5    | NC     | NC     |
| 6    | Vo+    | Vo+    |
| 7    | Vo-    | Com.   |
| 8    | NC     | Vo-    |