

## 10 & 15 Watts DIP Package Wide Input Range DC - DC Converter



### FEATURES

- ◆ 9-18V, 18-36V, 36-72V, 9-27V, 18-54V, 9-36V, 18-72V Input Range
- ◆ UL 94V-0 Package Material
- ◆ Custom Solutions Available
- ◆ High Efficiency
- ◆ Industrial Standard Package
- ◆ 100% Burn in

### SPECIFICATIONS

Input Voltage Range..... 2:1 3:1 4:1 Input Range  
 Input Filter.....Pi Network  
 Voltage Accuracy.....±2% Max.  
 Line Regulation .....(HL-LL).....±0.5% Max.  
 Load Regulation.....(FL-10%FL).....±0.5% Max.  
 Ripple & Noise (20MHz BW).....100mVp-p Max.  
 Switching Frequency.....D10:200KHz(Min.); D(A)15:150KHz Min.  
 Minimum Load.....10% of Full Load  
 Efficiency.....74% Min.  
 Short Circuit Protection..... Continuous  
 Short Circuit Restart..... Automatic  
 Temperature Coefficient.....±0.05%/°C  
 Isolation Voltage.....1500VDC or 3000VDC  
 Isolation Resistance.....10<sup>9</sup>ohms Min.  
 Operating Temperature..... -25 To+71°C  
 Storage Temperature ..... -55°C To +125°C  
 Cooling.....Free-Air Convection  
 Case..... Black Coated Five Side Shielded Case

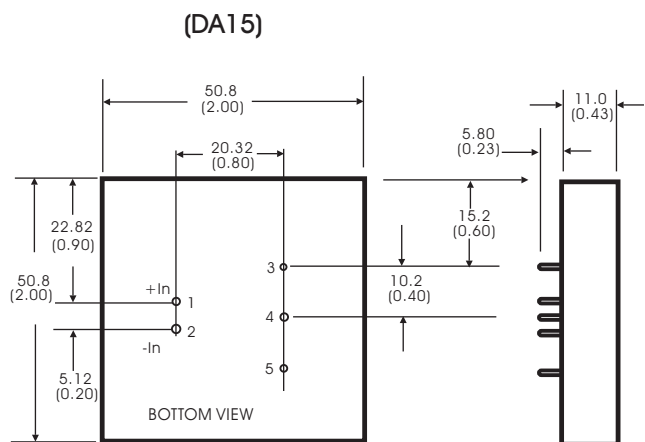
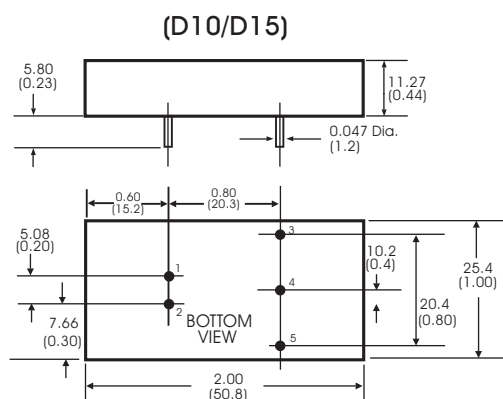
All Specifications are Typical at Nominal Line, full Load and 25°C.  
 Unless Otherwise Noted.

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	EFF. % (Min.)
<b>10W Output</b>				
D10-x0 (A3) <sup>2</sup>	See Note <sup>1</sup>	3.3	2400	74
D10-x1 (A3)	See Note	5	2000	77
D10-x2 (A3)	See Note	12	830	79
D10-x3 (A3)	See Note	15	670	80
D10-x9 (A3)	See Note	24	416	79
D10-x4 (A3)	See Note	± 5	± 1000	77
D10-x5 (A3)	See Note	± 12	± 416	80
D10-x6 (A3)	See Note	± 15	± 333	81
D10-x6A (A3)	See Note	± 24	± 208	79
<b>15W Output</b>				
DA15-x0 (A3) <sup>3</sup>	See Note	3.3	3600	75
D(A)15-x1 (A3)	See Note	5	3000	77
D(A)15-x2 (A3)	See Note	12	1250	80
D(A)15-x3 (A3)	See Note	15	1000	80
D(A)15-x9 (A3)	See Note	24	625	80
D(A)15-x4 (A3)	See Note	± 5	± 1500	77
D(A)15-x5 (A3)	See Note	± 12	± 625	80
D(A)15-x6 (A3)	See Note	± 15	± 500	80

Note:

- Input Voltage  
 x=1, input 12VDC, range: 9-18VDC  
 x=2, input 24VDC, range:18-36VDC  
 x=3, input 48VDC, range:36-72VDC  
 x=4, input 12VDC, range: 9-36VDC  
 x=5, input 24VDC, range:18-72VDC  
 x=4A, input 12VDC, range: 9-27VDC (±24V is not available)  
 x=5A, input 24VDC, range:18-54VDC (±24V is not available)
- Suffix "A3" on model no. for 3KV isolation.
- 3.3V is not available for D15.

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



#### Pin Connection

Single	
Pin#	Function
1	+Vi
2	-Vi
3	+Vo
4	N.P
5	-Vo

Dual	
Pin#	Function
1	+Vi
2	-Vi
3	+Vo
4	Com.
5	-Vo