

Unit measures 0.24"W x 0.77"L x 0.4"H

- Low Cost
- 1 Watt in SIP Package
- Unregulated Outputs
- Input/Output Isolation up to 3KVDC
- UL 94-V0 Non-Conductive Case
- Internal Input & Output Filters



Model Number	Output Voltage	Output mA	Input Range	Efficiency	Max I.P. Current	Max Load Capacitance
<b>SINGLE OUTPUT</b>						
DU1P0-05S05(N)	5 VDC	200	4.5-5.5 VDC	77%	274mA	6.2uF
DU1P0-12S05(N)		200	10.8-13.2 VDC	77%	114mA	6.2uF
DU1P0-15S05(N)		200	13.5-16.5 VDC	73%	97mA	6.2uF
DU1P0-24S05(N)		200	21.6-26.4 VDC	72%	61mA	6.2uF
DU1P0-05S12(N)	12 VDC	83	4.5-5.5 VDC	82%	255mA	6.2uF
DU1P0-12S12(N)		83	10.8-13.2 VDC	82%	106mA	6.2uF
DU1P0-15S12(N)		83	13.5-16.5 VDC	79%	89mA	6.2uF
DU1P0-24S12(N)		83	21.6-26.4 VDC	78%	56mA	6.2uF
DU1P0-05S15(N)	15 VDC	67	4.5-5.5 VDC	81%	261mA	6.2uF
DU1P0-12S15(N)		67	10.8-13.2 VDC	79%	112mA	6.2uF
DU1P0-15S15(N)		67	13.5-16.5 VDC	80%	88mA	6.2uF
DU1P0-24S15(N)		67	21.6-26.4 VDC	78%	57mA	6.2uF
<b>DUAL OUTPUT</b>						
DU1P0-05D05(N)	+/-5 VDC	+/-100	4.5-5.5 VDC	78%	270mA	3.0uF
DU1P0-12D05(N)		+/-100	10.8-13.2 VDC	77%	114mA	3.0uF
DU1P0-15D05(N)		+/-100	13.5-16.5 VDC	75%	94mA	3.0uF
DU1P0-24D05(N)		+/-100	21.6-26.4 VDC	75%	59mA	3.0uF
DU1P0-05D12(N)	+/-12 VDC	+/-42	4.5-5.5 VDC	82%	258mA	3.0uF
DU1P0-12D12(N)		+/-42	10.8-13.2 VDC	81%	109mA	3.0uF
DU1P0-15D12(N)		+/-42	13.5-16.5 VDC	80%	88mA	3.0uF
DU1P0-24D12(N)		+/-42	21.6-26.4 VDC	78%	57mA	3.0uF
DU1P0-05D15(N)	+/-15 VDC	+/-33	4.5-5.5 VDC	81%	257mA	3.0uF
DU1P0-12D15(N)		+/-33	10.8-13.2 VDC	82%	106mA	3.0uF
DU1P0-15D15(N)		+/-33	13.5-16.5 VDC	80%	87mA	3.0uF
DU1P0-24D15(N)		+/-33	21.6-26.4 VDC	79%	55mA	3.0uF

**Note** - (N) Denotes that there is an optional 3000VDC Input to Output Isolation version available for the DU1P0 family of products. To order a DU1P0 product with the optional 3000VDC Isolation, simply add an "N" to the end of the standard Part Number. For example DU1P0-05S05N.



Isolated and Unregulated 1 WATT Modular DC/DC Converters

DU1P0 series

INPUT SPECIFICATIONS

Input Voltage Ranges:	5 VDC Nominal	4.5-5.5 VDC
	12 VDC Nominal	10.8-13.2 VDC
	15 VDC Nominal	13.5-16.5 VDC
	24 VDC Nominal	21.6-26.4 VDC
Input Current	(Nom Vin, Full Load)	
	See Selection Chart	
Input Filter	Capacitor	

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart	
Load Regulation (Note 1)	+/- 10% on 5V output	
	20% - FL	+/- 8% on all others
Line Regulation (HL-LL)	+/- 1.3%/1% of Vin	
Temperature Coefficient	+/-0.1%/°C max.	
Ripple/Noise(Single/Dual)	100mV Pk-Pk, typ	
Voltage Accuracy	+/-5%, max	
Short Circuit Protection	1 Second max	
Minimum Load (Note 1)	10% of FL	
Max. Load Capacitance	Min Vin & Resistive Load	
	See Selection Chart	

GENERAL SPECIFICATIONS

Input-Out Isolation	1000VDC; (3000VDC suffix-N)	
Efficiency (Nom I/P & FL)	See Selection Chart	
Switching Frequency	60Khz	
Isolation Resistance	10000 M Ohms	
Isolation Capacitance	30pF, max.	
Safety	UL, TUV, CB, CE	

All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

\* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +85°C(See Derate Curve)
Storage Temperature	-55 to +105°C *
Relative Humidity	5% to 95% RH *
MTBF (Note 2)	1.471 MHrs
Thermal Shock	MIL-STD-810D
Vibration	10-55Hz, 10G, 30 Minutes
	along X, Y, and Z

PHYSICAL SPECIFICATIONS

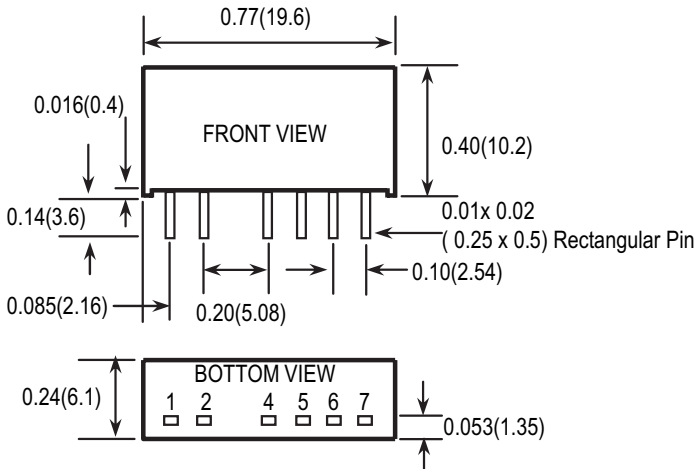
Dimensions	0.77 x 0.24 x 0.40"
Case Material	UL 94-V0 Non-Conductive
	Black Plastic
Construction	Fully Encapsulated (UL94-V0)
Weight	2g (0.071oz)

NOTES

- 1) A Minimum 10% Load is required to maintain regulation
- 2) BELLCORE TR-NWT-000332. Case 1: 50% Stress, Temperature at 40°C. (Ground fixed and controlled environment)

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

### MECHANICAL DIMENSIONS



All dimensions in inches(mm)  
 Tolerance : x.xx±0.02(x.x±0.5)  
 x.xxx±0.01(x.xx±0.25)  
 Pin pitch tolerance ±0.014(0.35)

### STANDARD MODELS

Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
4	- Output	- Output
5	NC	Common
6	+ Output	+ Output
7	No Pin	No Pin

### “N” MODELS

Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
4	No Pin	No Pin
5	- Output	- Output
6	NC	Common
7	+ Output	+ Output

### OUTPUT DERATING CURVE

