ASTRODYNE

CostCutter Isolated and Regulated 40 WATT Modular DC/DC Converters

- Wide 2 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 1600V Isolation
- Full EMI Shielding
- PI Input Filter

FDC40 Series

Unit measures 2.6"W x 3"L x 0.375"H

MODEL SELECTIONS

Output Voltage	Output Amps	Input Range	Model Number	Price 1	Price 10
SINGLE OUTPUT					
3.3 VDC	10	9-18 VDC	FDC40-12S33	$104	$99
	10	18-36 VDC	FDC40-24S33	$104	$99
	10	36-72 VDC	FDC40-48S33	$104	$99
5 VDC	8	9-18 VDC	FDC40-12S05	$104	$99
	8	18-36 VDC	FDC40-24S05	$104	$99
	8	36-72 VDC	FDC40-48S05	$104	$99
12 VDC	3.4	9-18 VDC	FDC40-12S12	$104	$99
	3.4	18-36 VDC	FDC40-24S12	$104	$99
	3.4	36-72 VDC	FDC40-48S12	$104	$99
15 VDC	2.7	9-18 VDC	FDC40-12S15	$104	$99
	2.7	18-36 VDC	FDC40-24S15	$104	$99
	2.7	36-72 VDC	FDC40-48S15	$104	$99
DUAL OUTPUT					
3.3 / 5 VDC	4 / 4	9-18 VDC	FDC40-12D3305	$109	$104
	4 / 4	18-36 VDC	FDC40-24D3305	$109	$104
	4 / 4	36-72 VDC	FDC40-48D3305	$109	$104
+/-5 VDC	+7 / -1	9-18 VDC	FDC40-12D05	$109	$104
	+7 / -1	18-36 VDC	FDC40-24D05	$109	$104
	+7 / -1	36-72 VDC	FDC40-48D05	$109	$104
+/-12 VDC	+/-1.8	9-18 VDC	FDC40-12D12	$109	$104
	+/-1.8	18-36 VDC	FDC40-24D12	$109	$104
	+/-1.8	36-72 VDC	FDC40-48D12	$109	$104
+/-15 VDC	+/-1.4	9-18 VDC	FDC40-12D15	$109	$104
	+/-1.4	18-36 VDC	FDC40-24D15	$109	$104
	+/-1.4	36-72 VDC	FDC40-48D15	$109	$104

Contact Factory for High Volume Pricing

300 Myles Standish Blvd., Taunton, MA 02780
Ph: 1-800-823-8082 Fax: 508-823-8181

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FDC40 Series Continued

MODEL SELECTIONS

Output Voltage	Output Amps	Input Range	Model Number	Price 1	Price 10
TRIPLE OUTPUT					
5, +/-12 VDC	4, +/-0.85	9-18 VDC	FDC40-12T0512	$114	$109
	4, +/-0.85	18-36 VDC	FDC40-24T0512	$114	$109
	4, +/-0.85	36-72 VDC	FDC40-48T0512	$114	$109
5, +/-15 VDC	4, +/-0.68	9-18 VDC	FDC40-12T0515	$114	$109
	4, +/-0.68	18-36 VDC	FDC40-24T0515	$114	$109
	4, +/-0.68	36-72 VDC	FDC40-48T0515	$114	$109

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

INPUT SPECIFICATIONS

Input Voltage Ranges:	
12 VDC Nominal	9-18 VDC
24 VDC Nominal	18-36 VDC
48 VDC Nominal	36-72 VDC
Input Filter	Pi Type

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Load Regulation	singles: +/-0.5% duals: +/-1% triples: 5 V:+/-2%, Aux: +/-5%
Line Regulation	singles: +/-0.5% duals: +/-1% triples: 5V:+/-2%, Aux:+/-5%
Temperature Coefficient	+/-0.02%/DegC
Ripple/Noise	1% Pk-Pk of Vout, typ
Voltage Stability (singles/duals)	+/- 2%
(triples)	5 V:+/-2%, Aux: +/-5%
Short Circuit Protection	Continuous, self-recovering
Overvoltage Protection Threshold:	
3.3V Output	3.9Volts
5V Output	6.2Volts
12V Output	15Volts
15V Output	18Volts

GENERAL SPECIFICATIONS

On/Off Control	(Ref to - Input pin) Logic "1"/Open=ON Logic "0"/GND=OFF
Input-Out Isolation	1600VDC
Isolation Resistance	10000 M Ohms
Efficiency	82%, typ
Switching Frequency	185Khz, typ

ENVIRONMENTAL SPECIFICATIONS

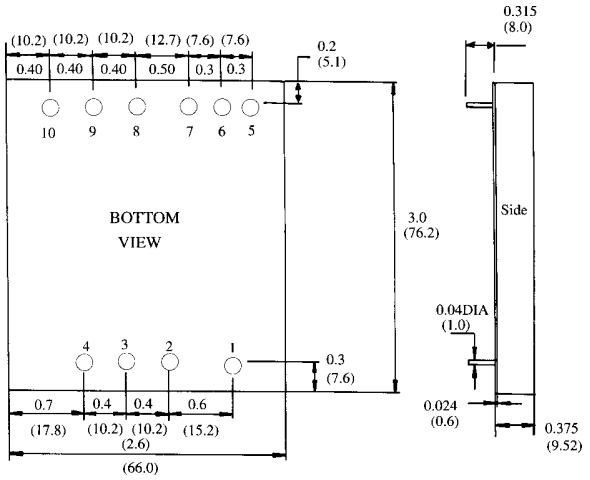
Oper. Temperature	-25 to +85 DegC(see derate)
Storage Temperature	-55 to +125 DegC *
Maximum Case Temp	100 DegC *
MTBF	229.4 kHrs MIL-HDBK-217F TA=25C FL

PHYSICAL SPECIFICATIONS

Case Material	Nickel-Coated Copper Non-Conductive Base
Construction	Fully Encapsulated
Weight	4.5 oz, (126g)

* 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 warranteed nor implied.

MECHANICAL DIMENSIONS

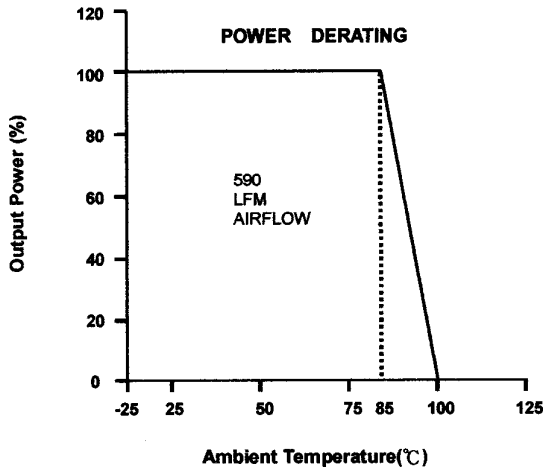


Notes: 1.All dimensions are typical in inches(mm).

PIN PITCH TOLERANCE ±0.5mm

Pin #	Single	Dual	Triple
1	Ctrl	Ctrl	Ctrl
2	+ Vin	+ Vin	+ Vin
3	- Vin	- Vin	- Vin
4	Sync	Sync	Sync
5	+ OutS	+ Vout or 3.3 out	+ Vout
6	Trim	Com	Com
7	- OutS	- Vout or 5 out	- Vout
8	+ Vout	Trim	+5 Out
9	- Vout	No Pin	-5 Out
10	No Pin	No Pin	Trim

OUTPUT DERATING CURVE



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

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