

ASTRODYNE *CostCutter* Isolated and Regulated 15 WATT Modular DC/DC Converters

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

FEC15 Series



Unit measures 1"W x 2"L x 0.375"H

MODEL SELECTIONS

Output Voltage	Output Amps	Input Range	Model Number	Price 1	Price 25
SINGLE OUTPUT					
3.3 VDC	4	9-18 VDC	FEC15-12S33	\$54	\$49
	4	18-36 VDC	FEC15-24S33	\$54	\$49
	4	36-72 VDC	FEC15-48S33	\$54	\$49
5 VDC	3	9-18 VDC	FEC15-12S05	\$54	\$49
	3	18-36 VDC	FEC15-24S05	\$54	\$49
	3	36-72 VDC	FEC15-48S05	\$54	\$49
12 VDC	1.25	9-18 VDC	FEC15-12S12	\$54	\$49
	1.25	18-36 VDC	FEC15-24S12	\$54	\$49
	1.25	36-72 VDC	FEC15-48S12	\$54	\$49
15 VDC	1	9-18 VDC	FEC15-12S15	\$54	\$49
	1	18-36 VDC	FEC15-24S15	\$54	\$49
	1	36-72 VDC	FEC15-48S15	\$54	\$49
DUAL OUTPUT					
+/-5 VDC	+/-1.5	9-18 VDC	FEC15-12D05	\$57	\$53
	+/-1.5	18-36 VDC	FEC15-24D05	\$57	\$53
	+/-1.5	36-72 VDC	FEC15-48D05	\$57	\$53
+/-12 VDC	+/-0.635	9-18 VDC	FEC15-12D12	\$57	\$53
	+/-0.635	18-36 VDC	FEC15-24D12	\$57	\$53
	+/-0.635	36-72 VDC	FEC15-48D12	\$57	\$53
+/-15 VDC	+/-0.5	9-18 VDC	FEC15-12D15	\$57	\$53
	+/-0.5	18-36 VDC	FEC15-24D15	\$57	\$53
	+/-0.5	36-72 VDC	FEC15-48D15	\$57	\$53

**Contact
Factory
for
High Volume
Pricing**

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: +/-1%
10% - FL	duals: +/-2%
Line Regulation	+/-1%
Temperature Coefficient	+/-0.02%/DegC
Ripple/Noise(Single/Dual)	(50 / 75) mV Pk-Pk, typ
Voltage Stability	+/- 1%
Transient Response Recovery	
25% Load Step Change	500 microSeconds
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

Input-Out Isolation	1600VDC
In/Out Capacitance	1000 pF
Isolation Resistance	10000 M Ohms
Efficiency	84%, typ
Switching Frequency	500Khz, Single typ 300Khz, Dual typ

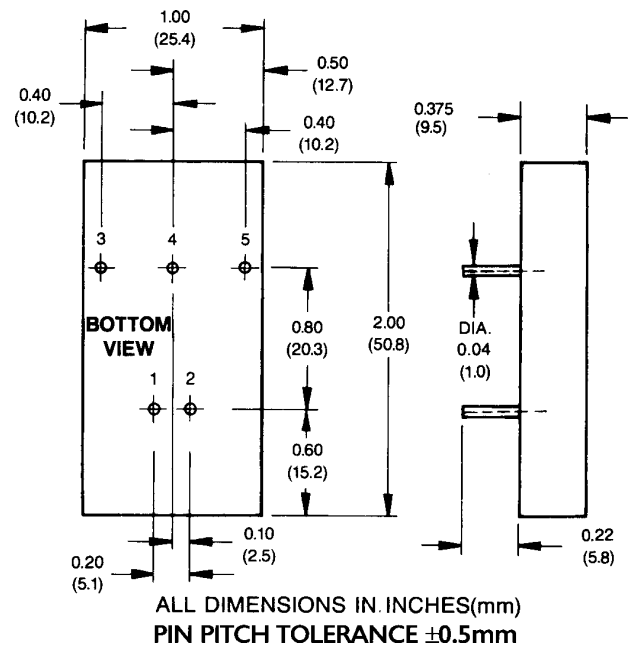
ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71 DegC(FL)
Storage Temperature	-55 to +125 DegC *
Maximum Case Temp	110 DegC *
MTBF	565.1 kHrs MIL-HDBK-217F TA=25C FL

PHYSICAL SPECIFICATIONS

Case Material	Nickel-Coated Copper
	Non-Conductive Base
Construction	Fully Encapsulated
Weight	1.14 oz, (32g)

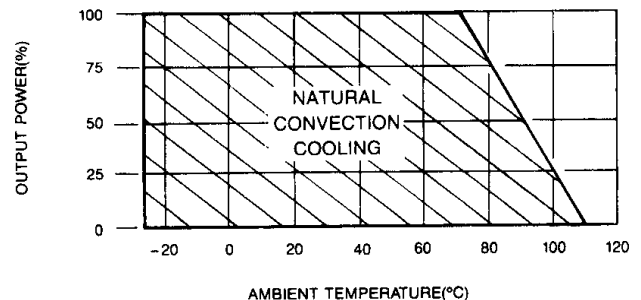
MECHANICAL DIMENSIONS



Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
3	+ Output	+ Output
4	No Pin	Common
5	- Output	- Output

OUTPUT DERATING CURVE

OPERATING TEMPERATURE LIMITS AND OUTPUT POWER RANGE



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.

* 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.