ASTRODYNE

Isolated and Regulated 5 WATT Modular DC/DC Converters

FDC05 series

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

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

Model Number	Output Voltage	Output Amps	Input Range
SINGLE OUTPUT			
FDC05-12S33	3.3 VDC	1	9-18 VDC
FDC05-24S33		1	18-36 VDC
FDC05-48S33		1	36-72 VDC
FDC05-12S05	5 VDC	1	9-18 VDC
FDC05-24S05		1	18-36 VDC
FDC05-48S05		1	36-72 VDC
FDC05-12S12	12 VDC	0.47	9-18 VDC
FDC05-24S12		0.47	18-36 VDC
FDC05-48S12		0.47	36-72 VDC
FDC05-12S15	15 VDC	0.4	9-18 VDC
FDC05-24S15		0.4	18-36 VDC
FDC05-48S15		0.4	36-72 VDC
DUAL OUTPUT			
FDC05-12D05	+/-5 VDC	+/-0.5	9-18 VDC
FDC05-24D05		+/-0.5	18-36 VDC
FDC05-48D05		+/-0.5	36-72 VDC
FDC05-12D12	+/-12 VDC	+/-0.23	9-18 VDC
FDC05-24D12		+/-0.23	18-36 VDC
FDC05-48D12		+/-0.23	36-72 VDC
FDC05-12D15	+/-15 VDC	+/-0.19	9-18 VDC
FDC05-24D15		+/-0.19	18-36 VDC
FDC05-48D15		+/-0.19	36-72 VDC

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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: +/- 0.2%
25% - FL	duals: +/-1%
Line Regulation	+/- 0.2%
Temperature Coefficient	+/-0.02%/DegC
Ripple/Noise(Single/Dual)	75mV Pk-Pk, typ
Voltage Stability	+/- 2%
Transient Response Recovery	microSeconds
Single, 25% Load Step Change	200
Dual, FL-50% +/-1% Error	200
Short Circuit Protection	Continuous, self-recovering
Voltage Balance, Dual	+/-1%

GENERAL SPECIFICATIONS

Input-Out Isolation	1600VDC
Isolation Resistance	10000 M Ohms
In/Out Capacitance	1000 pF
Efficiency	80%, typ
Switching Frequency	300Khz

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71 DegC(FL)
Storage Temperature	-55 to +125 DegC *
Maximum Case Temp	110 DegC *
MTBF	3.1 MHrs
	MIL-HDBK-217F TA=25C FL

PHYSICAL SPECIFICATIONS

Case Material	Nickel-Coated Copper
	Non-Conductive Base
Construction	Fully Encapsulated
Weight	0.9 oz, (26g)

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 warranteed nor implied.

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.

WWW.ASTRODYNE.COM

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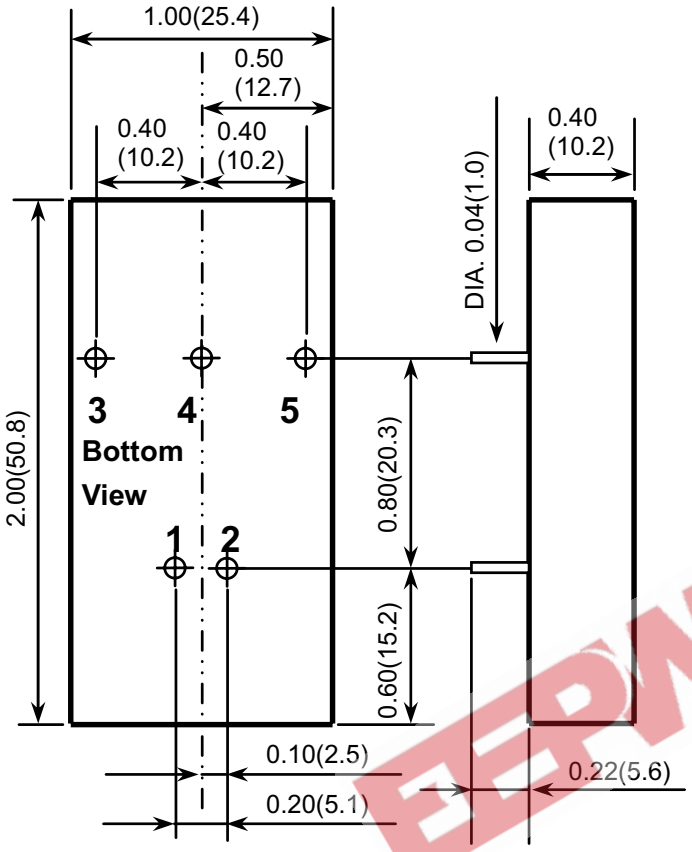
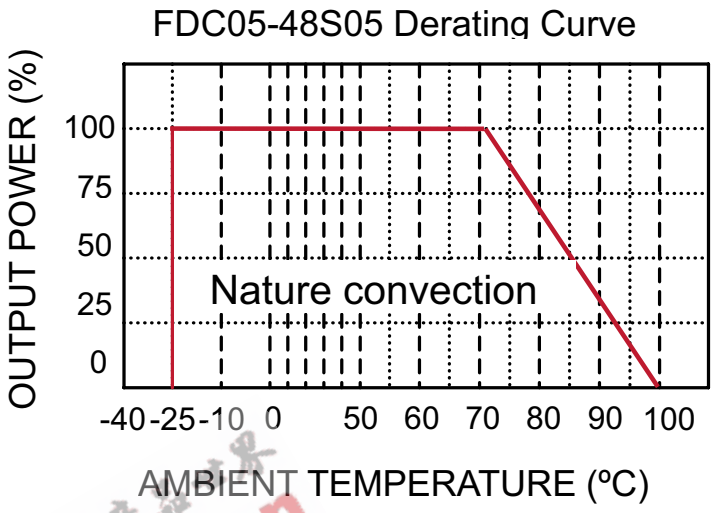
MECHANICAL DIMENSIONS



1. All dimensions in Inches (mm)
   Tolerance x.xx±0.02(x.x±0.5)
2. Pin Pitch tolerance ±0.014(0.35)

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

OUTPUT DERATING CURVE



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