



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
<b>SINGLE OUTPUT</b>			
FDC10-12S33	3.3 VDC	2	9-18 VDC
FDC10-24S33		2	18-36 VDC
FDC10-48S33		2	36-72 VDC
FDC10-12S05	5 VDC	2	9-18 VDC
FDC10-24S05		2	18-36 VDC
FDC10-48S05		2	36-72 VDC
FDC10-12S12	12 VDC	0.83	9-18 VDC
FDC10-24S12		0.83	18-36 VDC
FDC10-48S12		0.83	36-72 VDC
FDC10-12S15	15 VDC	0.67	9-18 VDC
FDC10-24S15		0.67	18-36 VDC
FDC10-48S15		0.67	36-72 VDC
<b>DUAL OUTPUT</b>			
FDC10-12D05	+/-5 VDC	+/-1	9-18 VDC
FDC10-24D05		+/-1	18-36 VDC
FDC10-48D05		+/-1	36-72 VDC
FDC10-12D12	+/-12 VDC	+/-0.416	9-18 VDC
FDC10-24D12		+/-0.416	18-36 VDC
FDC10-48D12		+/-0.416	36-72 VDC
FDC10-12D15	+/-15 VDC	+/-0.333	9-18 VDC
FDC10-24D15		+/-0.333	18-36 VDC
FDC10-48D15		+/-0.333	36-72 VDC



Isolated and Regulated 10 WATT Modular DC/DC Converters

**FDC10** series

**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	+/- 2%	
Voltage Balance, Dual	+/-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	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	1.97 MHrs
	MIL-HDBK-217F TA=25C FL

**PHYSICAL SPECIFICATIONS**

Case Material	Nickel-Coated Copper
	Non-Conductive Base
Construction	Fully Encapsulated
Weight	1.1 oz, (30g)

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

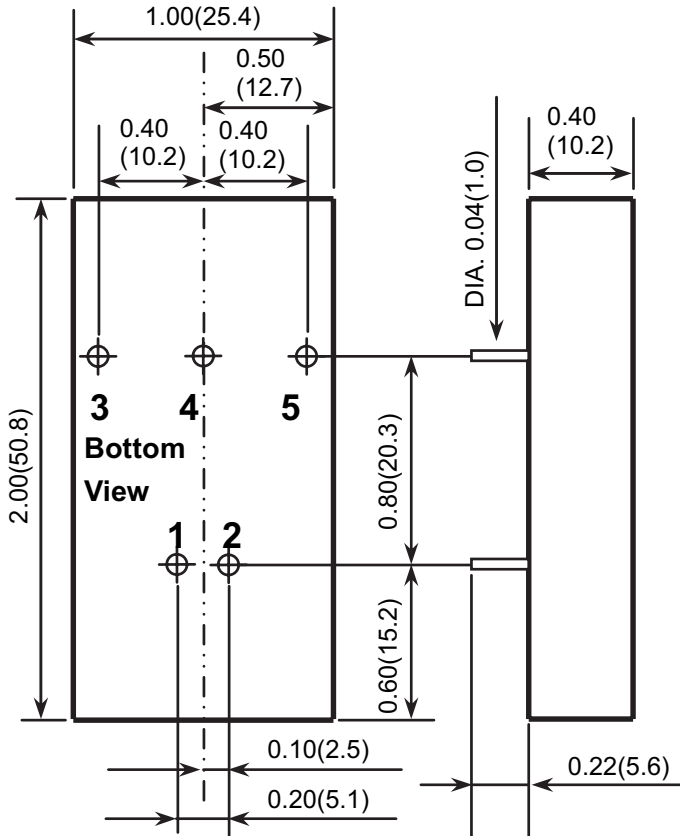
\* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

**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.**

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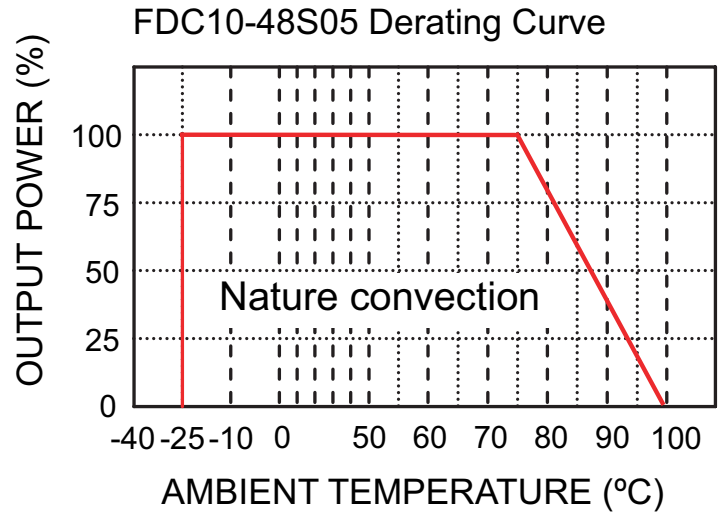
**ASTRODYNE USA: 1-800-823-8082  
ASTRODYNE PACIFIC: 886-2-26983458**

### MECHANICAL DIMENSIONS



- All dimensions in Inches (mm)  
Tolerance  $x.xx \pm 0.02(x.x \pm 0.5)$
- Pin Pitch tolerance  $\pm 0.014(0.35)$

### OUTPUT DERATING CURVE



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