



200FS series

Single & Dual Output DC/DC Converter

DESCRIPTIONS

The 200FS series is a family of miniature 2W DC/DC converters specifically designed for board mount power distribution applications where space is critical, but performance and power cannot be sacrificed. Standard features include efficiency as high as 80%. Nine models operate from input voltage ranges of 4.75 to 5.25 VDC or 11.4 to 12.6 VDC and provide tightly regulated outputs of 5, 9, 12, 15, ± 5 , ± 12 or ± 15 VDC. All models are packaged in a compact, low profile 1.25" X 0.34" X 0.57" case.

OUTPUT CHARACTERISTICS

	Min	Typ	Max	Unit/Comments
Output Voltage Accuracy			± 2	% ¹
Voltage Balance (Dual)			± 1	%; Equal Output Loads
Line Regulation			± 1.2	% ²
Load Regulation			± 10	% ³
Ripple/Noise			1	%; p-p, Nom.Line FL, 20 Mhz B.W.
Short Circuit Protection				Momentary
Temperature Coefficient			± 0.02	% per °C @ FL

¹ = Output voltage at nominal line & FL

² = Output voltage measured from minimum input line to maximum

³ = Output voltage measured from FL to No Load

FEATURES

- Compact, low profile 1.25" X 0.34" X 0.57" case
- -25°C to +71°C Operating Temperature Range
- Efficiency to 80%
- 500 VDC Input/Output Isolation

INPUT CHARACTERISTICS

	Min	Typ	Max	Unit/Comments
Input Voltage				
5 VDC Input Models	4.75	5.0	5.25	VDC
12 VDC Input Models	11.4	12.0	12.6	VDC
Input Filter				Internal Capacitor

GENERAL CHARACTERISTICS

	Min	Typ	Max	Unit/Comments
Isolation Voltage	500			VDC, 1 minute
Isolation Resistance	1000			Mohm, 500VDC
Isolation Capacitance			60	pF, 100kHz, 1Volt



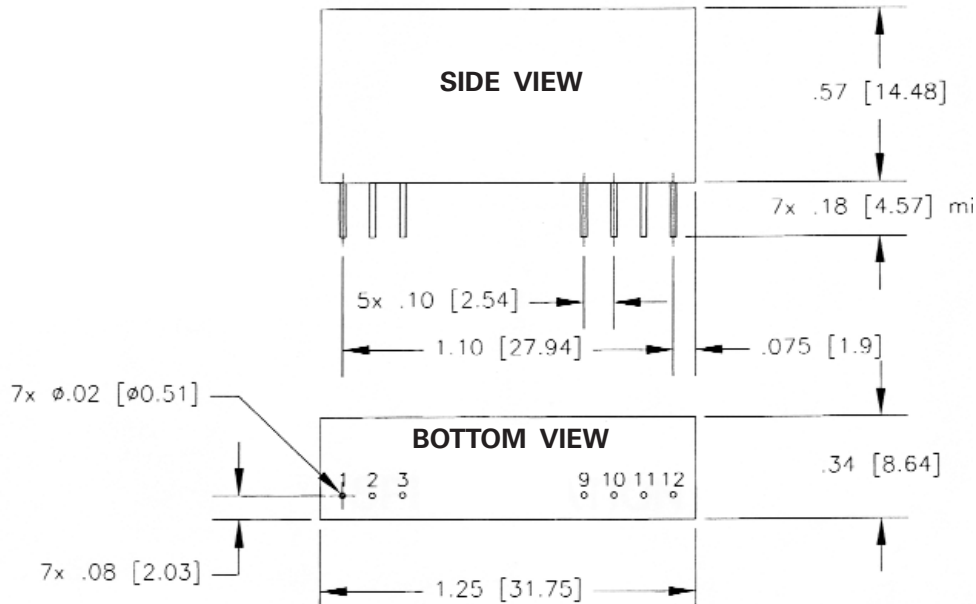
ENVIRONMENTAL SPECIFICATIONS

	Min	Typ	Max	Unit/Comments
Operating Temp. Range	-25		+71	°C; Ambient
Storage Temp. Range	-55		+125	°C
Relative Humidity			+95	% Humidity; non-condensing
Cooling				Free-Air Convection

PHYSICAL CHARACTERISTICS

	Unit/Comments
Case Size	1.25 X 0.34X 0.57 inches (31.8 X 8.6 X 14.5 mm)
Case Material	Non-Conductive Plastic
Weight	0.1 oz

OUTLINE DRAWING



PIN OUT CHART

Pins	Single	Dual
1	+ Vin	+ Vin
2	NC	- Vout
3	- V out	Common
9	NC	NC
10	- Vout	Common
11	+ Vout	+ Vout
12	- Vin	- Vin

Notes:

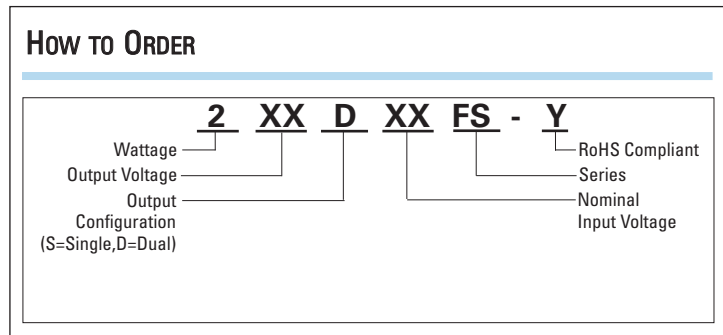
1. Unless otherwise specified dimensions are in inches (mm).

Tolerances	Inches	mm
	X.XX = ±0.02	X.X = ±0.5
	X.XXX = ±0.010	X.XX = ±0.25

NC = No Connection



HOW TO ORDER



MODEL SELECTION CHART

Model	Nominal Input Voltage (VDC)	No Load Input Current (mA)	Full Load Output Current (mA)	Output Voltage (VDC)	Full Load Output Current (mA)	Efficiency @ FL (%)
205FS12	5	55	610	5	400	64
209S5FS	5	55	600	9	222	67
212S5FS	5	40	560	12	166	71
215S5FS	5	70	560	15	133	71
205S12FS	12	25	250	5	400	67
212S12FS	12	25	220	12	166	76
205D5FS	5	50	514	±5	±200	78
212D5FS	5	60	500	±12	±83	80
215D5FS	5	65	800	±15	±66	67
212D12FS	12	25	240	±12	±83	69
215D12FS	12	25	240	±15	±66	69