



Functional Description

The FS2D series of unregulated 2W dual DC/DC converters feature industry standard pinout in a SIP package with a minimum isolation voltage of 3000Vdc, maximum efficiency of 80% and operating temperature range from -40°C to +85°C.

Electrical Specifications: Unregulated

INPUT SPECIFICATIONS

Measured at 25°C with the condition of V_{IN} = Nominal and Full Load. Specifications subject to change without notice.

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Input Voltage Range	V_{IN} Nominal $\pm 10\%$; See Model Selection Guide				
Input Filter	Capacitor				

OUTPUT SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Output Voltage	See Model Selection Guide				
Output Current	See Model Selection Guide				
Output Voltage Accuracy				± 5	%
Ripple & Noise	@20MHz BW			150	mV _{PP}
Line Regulation	Minimum V_{IN} to maximum V_{IN}		1.2%		per 1% of V_{IN}
Load Regulation, 5V _{OUT}	10% FL to FL			15	%
Load Regulation, 9, 12, 15V _{OUT}	10% FL to FL			10	%
Short Circuit Protection			1		sec

GENERAL SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Efficiency @ FL	See Model Selection Guide				
Isolation Voltage, Input to Output		3000			Vdc
Isolation Resistance			10		GΩ
Isolation Capacitance			58		pF

ENVIRONMENTAL SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Operating Temperature Range	Ambient	-40		+85	°C
Storage Temperature Range		-55		+125	°C

PHYSICAL CHARACTERISTICS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Dimensions (LxWxH)	0.77x0.28x0.40 in. (19.65x7.05x10.20mm)				
Weight	0.099 oz. (2.8g)				

MODEL SELECTION GUIDE

MODEL NUMBER	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA)	INPUT VOLTAGE (Vdc)	EFFICIENCY (%)
FS2D3.3/XX	± 3.3	± 303	5, 9, 12, 15, 24	75
FS2D5/XX	± 5	± 200	5, 9, 12, 15, 24	75
FS2D9/XX	± 9	± 111	5, 9, 12, 15, 24	78
FS2D12/XX	± 12	± 83	5, 9, 12, 15, 24	78
FS2D15/XX	± 15	± 66	5, 9, 12, 15, 24	80
FS2D24/XX	± 24	± 42	5, 9, 12, 15, 24	80

Mechanical Specifications

DIMENSIONS ARE IN INCH(mm)
TOLERANCE:
.XX ± 0.02 [0.50]
.XXX ± 0.01 [0.254]

BOTTOM VIEW

Pin	Function
1	+V _{IN}
2	-V _{IN} (GND)
5	-V _{OUT}
6	COM
7	+V _{OUT}