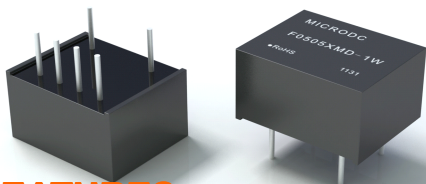


3KV ISOLATED 1 W UNREGULATED SINGLE OUTPUT DIP8 DC/DC Converter



FEATURES

- ◆ Available Inputs: 3, 5, 12 and 24 VDC
- ◆ Available Outputs: 3.3, 5, 7.2, 9, 12, 15, 18, 24 VDC
- ◆ Other specifications please inquire

MODEL SELECTION

F^①05^②05^③X^④MD^⑤-1W^⑥

- ① Product Series
- ② Input Voltage
- ③ Output Voltage
- ④ Fixed Input
- ⑤ DIP8 Package
- ⑥ Rated Power

DESCRIPTION

The F_XMD-1W series are specially designed for applications where a group of polar power supplies are isolated from the input power supply in a distributed power supply system on a circuit board.

These products apply to:

- 1) where the voltage of the input power supply is fixed (voltage variation $\leq \pm 5\%$);
- 2) where isolation is necessary between input and output (isolation voltage $\leq 3000\text{VDC}$);
- 3) where the regulation of the output voltage and the output ripple noise are demanded.

SELECTION GUIDE

Order code	Input	Output		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (% Typ)
	Voltage (VDC)	Voltage (VDC)	Current (max.mA)			
F0303XMD-1W	3.0-3.6	3.3	303	3000	220	72
F0305XMD-1W	3.0-3.6	5	200	3000	220	75
F0309XMD-1W	3.0-3.6	9	111	3000	220	74
F0312XMD-1W	3.0-3.6	12	83	3000	220	76
F0315XMD-1W	3.0-3.6	15	66	3000	220	77
F0503XMD-1W	4.5-5.5	3.3	300	3000	220	72
F0505XMD-1W	4.5-5.5	5	200	3000	220	75
F0507XMD-1W	4.5-5.5	7.2	140	3000	220	76
F0509XMD-1W	4.5-5.5	9	110	3000	220	77
F0512XMD-1W	4.5-5.5	12	83	3000	220	78
F0515XMD-1W	4.5-5.5	15	67	3000	220	78
F0518XMD-1W	4.5-5.5	18	56	3000	220	78
F0524XMD-1W	4.5-5.5	24	42	3000	220	78
F1203XMD-1W	10.8-13.2	3.3	300	3000	220	72
F1205XMD-1W	10.8-13.2	5	200	3000	220	75
F1207XMD-1W	10.8-13.2	7.2	140	3000	220	76
F1209XMD-1W	10.8-13.2	9	110	3000	220	77
F1212XMD-1W	10.8-13.2	12	83	3000	220	78
F1215XMD-1W	10.8-13.2	15	67	3000	220	78
F1218XMD-1W	10.8-13.2	18	56	3000	220	78
F1224XMD-1W	10.8-13.2	24	42	3000	220	78
F2403XMD-1W	21.6-26.4	3.3	300	3000	220	72
F2405XMD-1W	21.6-26.4	5	200	3000	220	75
F2407XMD-1W	21.6-26.4	7.2	140	3000	220	76
F2409XMD-1W	21.6-26.4	9	110	3000	220	77
F2412XMD-1W	21.6-26.4	12	83	3000	220	78
F2415XMD-1W	21.6-26.4	15	67	3000	220	78
F2418XMD-1W	21.6-26.4	18	56	3000	220	78
F2424XMD-1W	21.6-26.4	24	42	3000	220	78

Input Specifications

Parameter	Test conditions
Voltage range	$\pm 10\%$
Filter	Capacitors

Isolation Specifications

Parameter	Test conditions
Rated voltage	3000 VDC
Leakage current	1 mA
Resistance	$10^9\Omega$
Capacitance	60 pF typ.

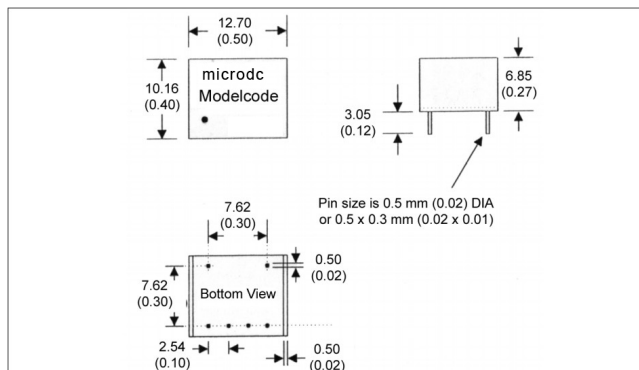
Output Specifications

Parameter	Test conditions
Voltage accuracy	$\pm 5\%$, max.
Ripple and noise (at 20 MHz BW)	100 mV p-p, max.
Short circuit protection	Momentary
Line voltage regulation	$\pm 1.2\%$ / 1.0% of V_{in}
Load voltage regulation	$\pm 8\%$, load = 20 ~ 100%
Temperature coefficient	$\pm 0.02\%$ / $^{\circ}\text{C}$



CE REACH
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Dimensions



Environmental Specifications

Parameter	Test conditions
Operating temperature (ambient)	-40°C ~ +85°C
Storage temperature	-55°C ~ +125°C
Derating	See graph
Humidity	Up to 90 %, non condensing
Cooling	Free air convection

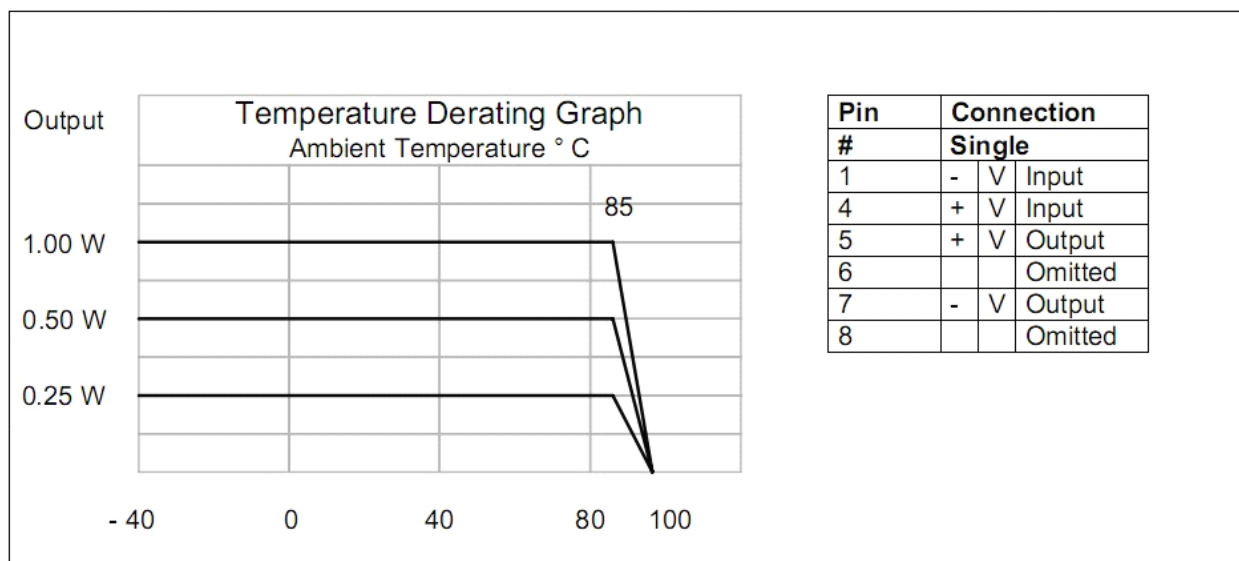
General Specifications

Parameter	Test conditions
Dimensions DIP8	12.7 X 10.16 x 6.85 mm/0.5 x 0.4 x 0.24 inches
Weight	1.8g
Case material	Non conductive black plastic

General Specifications

Parameter	Test conditions
Efficiency	75 % to 85 %
Switching frequency	80 KHz, typ.

Derating Graph and Pinning



Pin #	Connection
1	- V Input
4	+ V Input
5	+ V Output
6	Omitted
7	- V Output
8	Omitted

Specification can be changed without notice.

REV:2 / 09.2010

RoHS COMPLIANT INFORMATION

This series is compatible with RoHS soldering systems with a peak wave solder temperature of 300° C for 10 seconds.

The pin termination finish on the SIP package type is Tin Plate, Hot Dipped over Matte Tin with Nickel Preplate. The DIP types are Matte Tin over Nickel Preplate. Both types in this series are backward compatible with Sn/Pb soldering systems.

REACH COMPLIANT INFORMATION

This series has proven that this product does not contain harmful chemicals, it also has harmful chemical substances through the registration, inspection and approval.