

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

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

DESCRIPTION

The F_XMD 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 $\pm 5\%$);
- 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	3.0-3.6	3.3	303	3000	220	72
F0305XMD	3.0-3.6	5	200	3000	220	75
F0309XMD	3.0-3.6	9	111	3000	220	74
F0312XMD	3.0-3.6	12	83	3000	220	76
F0315XMD	3.0-3.6	15	66	3000	220	77
F0503XMD	4.5-5.5	3.3	300	3000	220	72
F0505XMD	4.5-5.5	5	200	3000	220	75
F0507XMD	4.5-5.5	7.2	140	3000	220	76
F0509XMD	4.5-5.5	9	110	3000	220	77
F0512XMD	4.5-5.5	12	83	3000	220	78
F0515XMD	4.5-5.5	15	67	3000	220	78
F0518XMD	4.5-5.5	18	56	3000	220	78
F0524XMD	4.5-5.5	24	42	3000	220	78
F1203XMD	10.8-13.2	3.3	300	3000	220	72
F1205XMD	10.8-13.2	5	200	3000	220	75
F1207XMD	10.8-13.2	7.2	140	3000	220	76
F1209XMD	10.8-13.2	9	110	3000	220	77
F1212XMD	10.8-13.2	12	83	3000	220	78
F1215XMD	10.8-13.2	15	67	3000	220	78
F1218XMD	10.8-13.2	18	56	3000	220	78
F1224XMD	10.8-13.2	24	42	3000	220	78
F2403XMD	21.6-26.4	3.3	300	3000	220	72
F2405XMD	21.6-26.4	5	200	3000	220	75
F2407XMD	21.6-26.4	7.2	140	3000	220	76
F2409XMD	21.6-26.4	9	110	3000	220	77
F2412XMD	21.6-26.4	12	83	3000	220	78
F2415XMD	21.6-26.4	15	67	3000	220	78
F2418XMD	21.6-26.4	18	56	3000	220	78
F2424XMD	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.

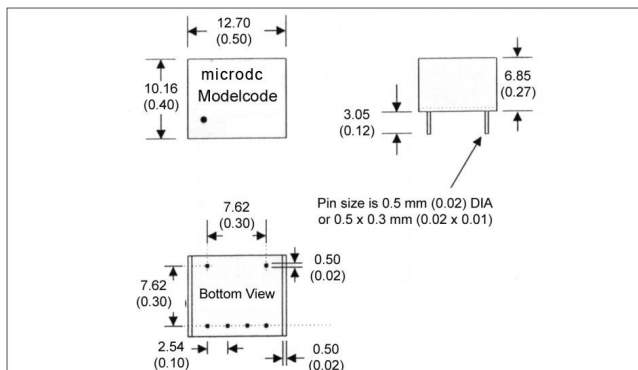
Output Specifications

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	$\pm 0.02\%$ / $^{\circ}\text{C}$



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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

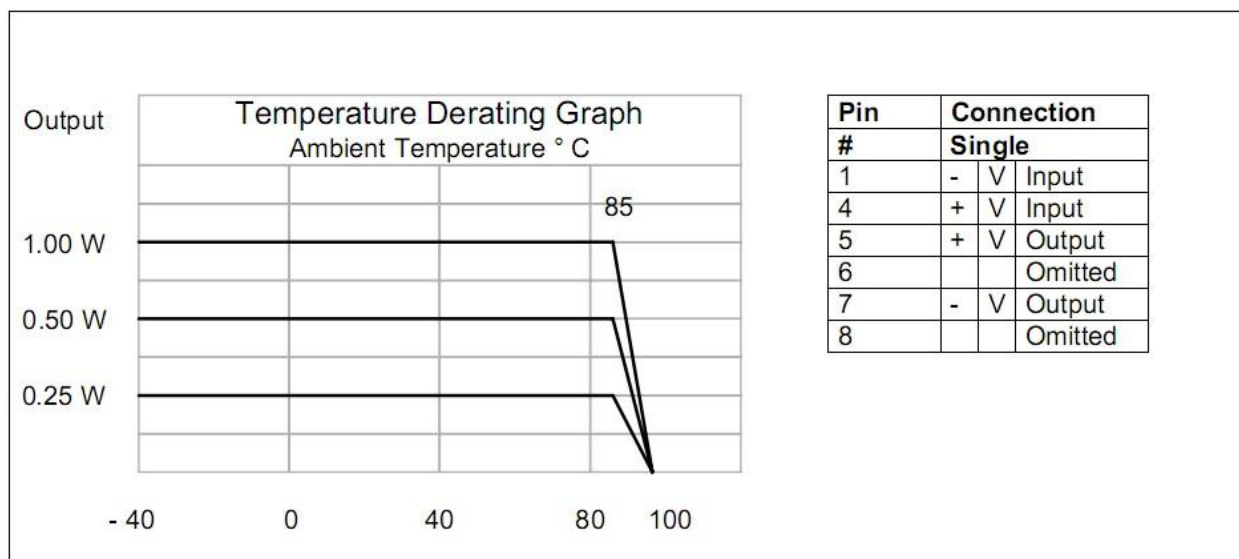
General Specifications

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.

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