MICRODC
Industry Power Family

2MH-XD Series

5.2 KV ISOLATED 2W REGULATED SINGLE OUTPUT DIP24 Converters



SELECTION GUIDE

Order code	INPUT VOLTAGE (VDC) Nominal	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (max. mA)	EFFICIENCY FULL LOAD (% TYP.)
2MH0505XD	5	50	615	5	400	65
2MH0509XD	5	47	545	9	200	66
2MH1205XD	12	40	252	5	400	66
2MH1209XD	12	38	220	9	200	68
2MH1212XD	12	35	245	12	167	68
2MH2405XD	24	16	128	5	400	65

FEATURES

- INPUT 5, 12 and 24 VDC
- LOW OUTPUT RIPPLE & NOISE
- PI TYPE INPUT FILTER
- OUTPUT 5, 9,12VDC
- HIGH EFFICIENCY UP TO 78%
- STANDARD 24 PIN DIP PACKAGE
- Other specifications please inquire

MODEL SELECTION

2MH①05②05③X④D⑤

①Product Series ②Input Voltage
③Output Voltage ④Fixed Input
⑤DIP24 Package Style

APPLICATIONS

The 2MH-XD series offer 2 watts of output power from a package in an IC compatible 24 pin DIP configuration without derating to 71℃ ambient temperature. MH-XD features 5200VDC of isolation voltage.

Technical Data Input

Parameter		Conditions	Data
U_{in}	DC Input Voltage	5VDC 12VDC 24VDC	4.5~5.5V 10.8~13.2V 21.6~26.4V
f_{sw}	Switching Frequency		20KHZ typ
η	Efficiency		50%
	Input Filter		Π-Filter

Electrical Specifications

Typical at + 25° C, nominal input voltage, rated output current unless otherwise specified

Input Specifications

Voltage range	±10 %
Filter	Pi Network

Isolation Specifications

Rated voltage	5200 VDC
Leakage current	1 mA
Resistance	10^9Ohm
Capacitance	60 pF typ.

Output Specifications

Voltage accuracy	±2%, max.
Ripple and noise (at 20 MHz BW)	75 mV p-p, max.
Short circuit protection	Continuous , restart automatic
Line voltage regulation	±0.5% max.
Load voltage regulation	±0.5% max.
Temperature coefficient	±0.02 % /℃

General Specifications

Efficiency	65% to 85%
Switching frequency	125 KHz, typ.

Environmental Specifications

Operating temperature (ambient)	-40℃ to +85℃
Storage temperature	- 55℃ to + 125℃
Derating	See graph
Humidity	Up to 90 %, non condensing
Cooling	Free air convection

Physical Characteristics

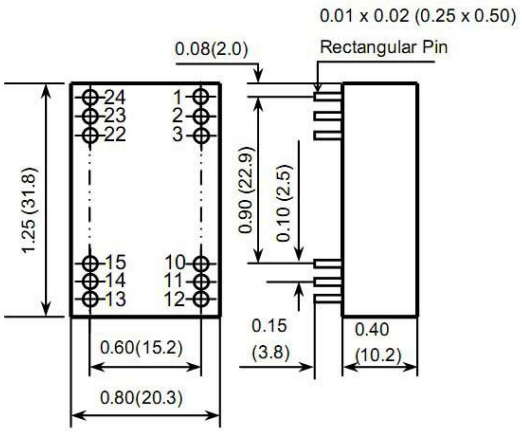
Dimensions	31.8 x 20.3x 10.2 mm 1.25 x 0.80 x 0.40 inches
Weight	12.2 g
Case material	Non conductive black plastic

RoHS MICRODC Green Technology

CE REACH

MICRODC RESERVES THE COPYRIGHT

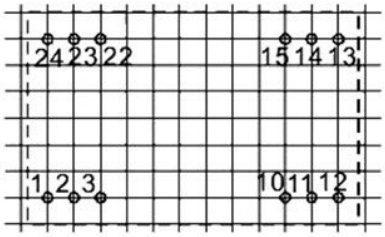
MECHANICAL DIMENSIONS



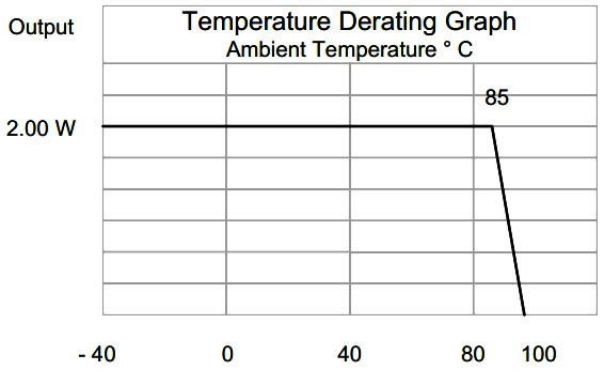
Note:
Unit:mm(inch)
Pin diameter:0.50mm (0.020inch)
Pin diameter tolerances:±0.10mm(±0.004inch)
General tolerances:±0.25mm(±0.010inch)

RECOMMENDED FOOTPRINT

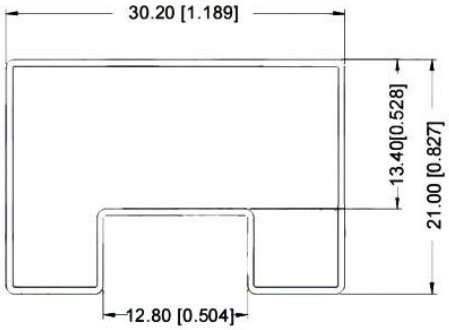
RECOMMENDED FOOTPRINT
Top view,grid:2.54mm(0.1inch)
diameter:1.00mm(0.039inch)



Temperature derating curve



TUBE OUTLINE DIMENSIONS



Note:
Unit :mm[inch]
General tolerances: ±0.50mm[±0.020inch]
L=530mm[20.866inch] Tube Quantity: 19pcs
L=220mm[8.661inch] Tube Quantity: 7pcs

FOOTPRINT DETAILS	
Pin	**Connection Single**
1、2	+V Input
3、10、11	Omitted
12	-V Output
13	+V Output
14、15、22	Omitted
23、24	-V Input