

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.)
MH0505XD-2W	5	50	615	5	400	65
MH0509XD-2W	5	47	545	9	200	66
MH1205XD-2W	12	40	252	5	400	66
MH1209XD-2W	12	38	220	9	200	68
MH1212XD-2W	12	35	245	12	167	68
MH2405XD-2W	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

MH^①05^②05^③-X^④D^⑤-2W(400)^⑥

- ① Product Series
- ② Input Voltage
- ③ Output Voltage
- ④ Fixed Input
- ⑤ DIP24 Package Style
- ⑥ Rated Power(Output current)

APPLICATIONS

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

Technical Data Input

Parameter	Conditions	Data
U _{in}	DC Input Voltage	5VDC 12VDC 24VDC
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 ⁹ Ohm
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 % /°C

General Specifications

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

Environmental Specifications

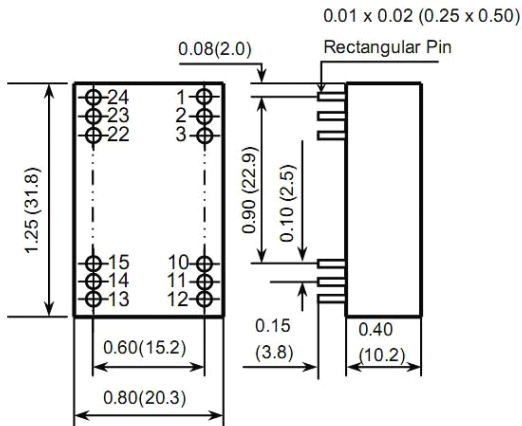
Operating temperature (ambient)	-40°C to +85°C
Storage temperature	-55°C to + 125°C
Derating	See graph
Humidity	Up to 90 %, non condensing
Cooling	Free air convection

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



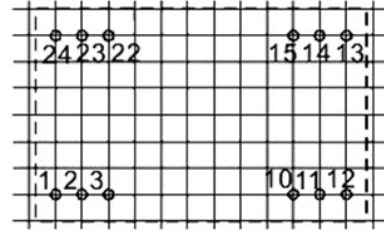
MECHANICAL DIMENSIONS



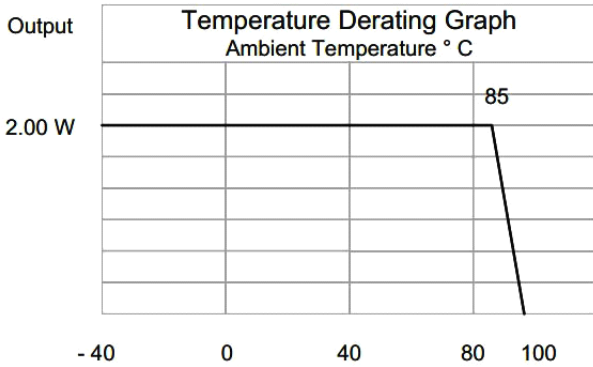
Note:
Unit:mm(inch)
Pin diameter:0.50mm (0.020inch)
Pin diameter tolerances:±0.10mm(±0.004inch)
General tolerances:±0.25mm(±0.010inch)

RECOMMENDED FOOTPRINT

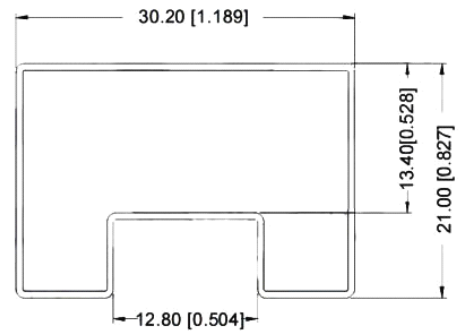
RECOMMENDED FOOTPRINT
Top view, grid:2.54mm(0.1inch)
diameter:1.00mm(0.039inch)



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