

## FEATURES

- ◆ Available inputs: 5, 12 & 24VDC
- ◆ Available outputs: 3.3 & 5VDC
- ◆ SIP7 package
- ◆ Temperature range: -40°C ~ +85°C
- ◆ 3KVDC isolation
- ◆ No Heat sink required
- ◆ No external component required
- ◆ Industry standard pinout
- ◆ RoHS Compliance

## MODEL SELECTION

ID<sup>①</sup>05<sup>②</sup>05<sup>③</sup>05<sup>④</sup>X<sup>⑤</sup>H30<sup>⑥</sup>M<sup>⑦</sup>-1W<sup>⑧</sup>

- ① Product Series
- ② Input Voltage
- ③ The 1st Output Voltage
- ④ The 2nd Output Voltage
- ⑤ Fixed Input
- ⑥ 3KVDC isolation
- ⑦ Mini SIP7 Package Style
- ⑧ Rated Power

## APPLICATIONS

The ID-XH30M-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  $\leq \pm 10\%$ );
- 2) Where isolation is necessary between input and output (isolation voltage  $\leq 3000\text{VDC}$ );



## PRODUCT PROGRAM

Part Number	Input		Output (Vo1 & Vo2)			Efficiency (%Typ)
	Voltage(VDC)		Voltage (VDC)	Current(MA)		
	Nominal	Range		Max	Min.	
ID050303XH30M-1W	5	4.5-5.5	3.3	100	10	62
ID050505XH30M-1W	5	4.5-5.5	05	152	15	64
ID120303XH30M-1W	12	10.8-13.2	3.3	100	10	62
ID120505XH30M-1W	12	10.8-13.2	05	152	15	65
ID240303XH30M-1W	24	21.6-26.4	3.3	100	10	62
ID240505XH30M-1W	24	21.6-26.4	05	152	15	65

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

## COMMON SPECIFICATIONS

Item	Test Conditions	Min.	Typ.	Max.	Units
Storage humidity range				90	%
Operating temperature		-40		85	°C
Storage temperature		-55		125	
Temp. rise at full load			15	25	
Derating	See graph				
Short circuit protection*				1	S
Cooling		Free air convection			
Case material		Plastic(UL94-V0)			
Weight		2.5			g

\*Supply voltage must be discontinued at the end of short circuit duration.

## ISOLATION SPECIFICATIONS

Item	Test Conditions	Min.	Typ.	Max.	Units
Rated voltage		3000			VDC
Leakage current	Tested for 1 minute and 1mA max				
Isolation resistance (Vin/Vout)	Test at 500VDC	1000			MΩ
Isolation resistance (Vo1/Vo2)	Test at 500VDC	1000			MΩ
Isolation capacitance(Vin/Vout)			80		pF
Isolation capacitance(Vo1/Vo2)			80		pF

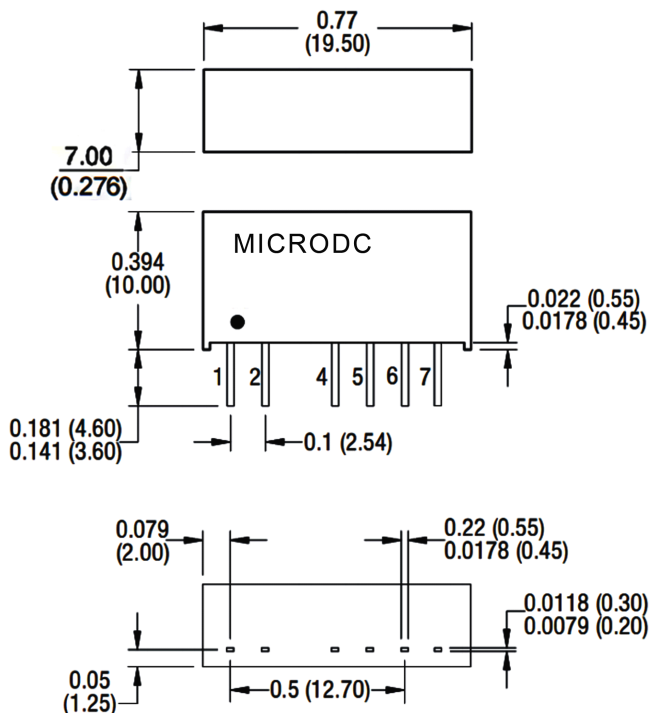
## OUTPUT SPECIFICATIONS

Item	Test Conditions	Min.	Typ.	Max.	Units
Output power		0.1		1	W
Line regulation				$\pm 0.4$	%
Load regulation				$\pm 0.3$	%
Efficiency		60		75	%
Output voltage accuracy				$\pm 1$	%
Temperature drift	100% full load			$\pm 0.02$	%/°C
Ripple & Noise*	20MHz Bandwidth			50	mVp-p
Switching frequency	Full load, nominal input		45		KHz

\*Test ripple and noise by "Parallel cable" method.

### OUTLINE DIMENSIONS & FOOTPRINT DETAILS

#### MECHANICAL DIMENSIONS



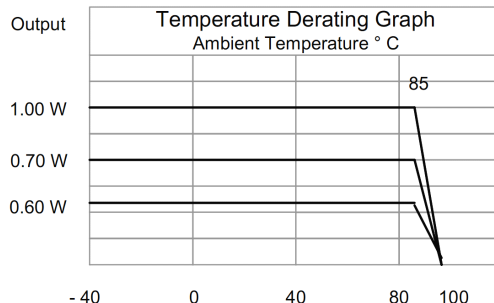
Unit:mm [ inch]  
Pin section tolerances:±0.10mm[±0.004inch]  
General tolerances:±0.25mm[±0.010inch]

#### FOOTPRINT DETAILS

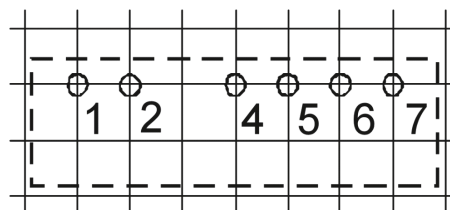
##### 7 PIN SIP

Pin	Function
1	+Vin
2	-Vin
4	+V <sub>OUT1</sub>
5	-V <sub>OUT1</sub>
6	+V <sub>OUT2</sub>
7	-V <sub>OUT2</sub>

#### DERATING GRAPH

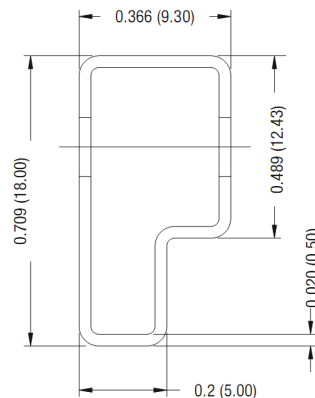


#### RECOMMENDED FOOTPRINT



Top view,grid:2.54mm(0.1inch)  
Diameter:1.00mm(0.039inch)

#### TUBE OUTLINE DIMENSIONS



Unless otherwise stated all dimensions in inches (mm) ±0.5mm.

Tube length (7 Pin SIP) : 20.47 (520mm ±2mm).

Tube Quantity :25

#### 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.