

FEA

- ◆ Small footprint
- ◆ SIP6 package
- ◆ Temperature range: -40°C +85°C
- ◆ 1KVDC isolation
- ◆ No Heat sink required
- ◆ No external components required
- ◆ Internal SMD Construction
- ◆ Industrial standard pins
- ◆ RoHS Compliance

Parameter	Input		Output			Efficiency (%T _p)
	Voltage(VDC)		Voltage (VDC)	Current (MA)		
	Nominal	Range		Max	Min.	
D030505XNM-1W	3.3	2.97-3.63	5	100	10	70
D050303XNM-1W	5	4.5-5.5	3.3	152	15	62
D050505XNM-1W	5	4.5-5.5	5	100	10	71

Mechanical Specifications					
Storage humidity range				95	%
Operating temperature			-40	85	°C
Storage temperature			-55	125	
Lead temperature	1.5mm from case for 10 seconds			300	
Temp. rise at full load			15	25	°C
Short circuit protection*				1	
Cooling	Free air convection				
Case material	Plastic(UL94-V0)				
MTBF			3500		Hours
Weight				1.4	g



- ① Product Series
- ② Input Voltage
- ③ The 1st Output Voltage
- ④ The 2nd Output Voltage
- ⑤ Field Input
- ⑥ Negative Output
- ⑦ Mini SIP Package
- ⑧ Rated Power

The D-XNM-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 10%);
 - 2) Where isolation is necessary between input and output (isolation voltage 1000VDC);
 - 3) Where the regulation of the output voltage and the output ripple noise are not demanding.
- Such as: peripheral digital circuits, ordinary low frequency analog circuits, and IGBT power device driving circuits.

*Short circuit protection time shall be discontinued at the end of short circuit duration.

Isolation Specifications					
Isolation voltage (Vin/Vo ₁)	Tested for 1 minute and 1mA max	1000			VDC
Isolation voltage (Vo ₁ /Vo ₂)	Tested for 1 minute and 1mA max	1000			VDC
Isolation resistance (Vin/Vo ₁)	Test at 500VDC	1000			M
Isolation resistance (Vo ₁ /Vo ₂)	Test at 500VDC	1000			M
Isolation capacitance (Vin/Vo ₁)				30	pF
Isolation capacitance (Vo ₁ /Vo ₂)				30	pF



APPLICATION

To ensure this module can operate efficiently and reliably during operation, the minimum output load should not be less than 10% of the full load. If the actual output power is very small, please connect a resistor with proper resistance at the output end in parallel to increase the load, or select compatible products with a lower rated output power.

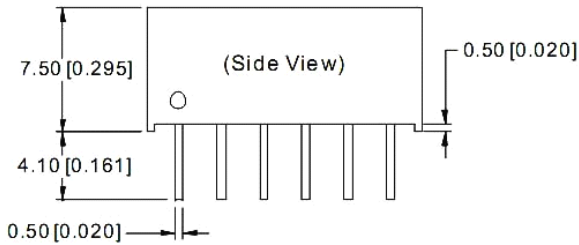
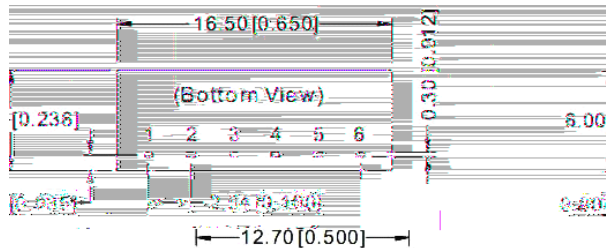
If you want to further decrease the input/output ripple, an "LC" filtering network may be connected to the input and output ends of the DC/DC converter, see (Figure 1).

It should also be noted that the inductance and the frequency of the "LC" filtering network should be staggered with the DC/DC frequency to avoid mutual interference. However, the capacitance of the output filter capacitor must be proper. If the capacitance is too big, a startup problem may arise. For the selection of output, provided the safe and reliable operation is ensured, the recommended capacitance of the filter capacitor is shown in (Table 1).

The simplest design for output voltage

LI E DIME I & F I DE AIL

MECHA ICAL DIME I



No e:

Uni :mm[inch]

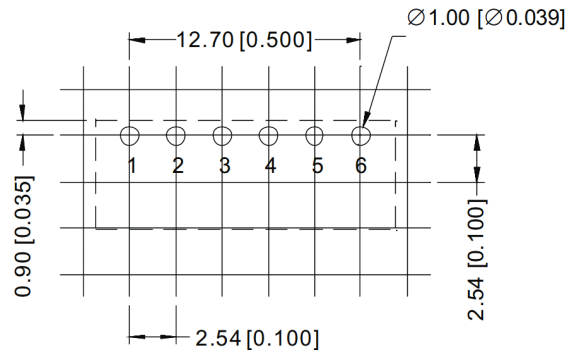
Pin sec ion olerances: 0.10mm[0.004inch]

General olerances: 0.25mm[0.010inch]

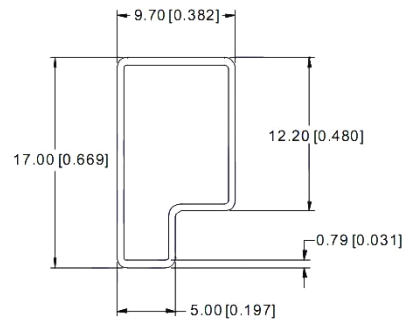
FOOTPRINT DETAILS

Pin	Function
1	Vin
2	GND
3	0V1
4	Vo 1
5	0V2
6	Vo2

EC MME DED F I



BE LI E DIME I



No e:

Uni :mm[inch]

General olerances: 0.50mm[0.020inch]

L=530mm[20.866inch] T be Q an i : 30pcs

L=220mm[8.661inch] T be Q an i : 11pcs