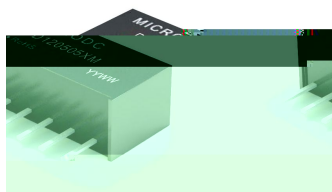


### 1W, FIXED INPUT, 1000V ISOLATED & UNREGULATED TWIN OUTPUT DC-DC CONVERTER



### FEATURES

- ◆ Small footprint
- ◆ Temperature range: -40°C~+85°C
- ◆ 1KVDC isolation
- ◆ No Heat sink required
- ◆ No external component required
- ◆ Internal SMD Construction
- ◆ Industry standard pinout
- ◆ RoHS Compliance

### MODEL SELECTION

**D<sup>①</sup>05<sup>②</sup>05<sup>③</sup>05<sup>④</sup>X<sup>⑤</sup>M<sup>⑥</sup>**

- ① Product Series
- ② Input Voltage
- ③ The 1st Output Voltage
- ④ The 2nd Output Voltage
- ⑤ Fixed Input
- ⑥ Mini SIP Package Style

### APPLICATIONS

### SELECTION GUIDE

Order code	Input Voltage (V)	Output Voltage1 (V)	Output Voltage2 (V)	Output Current1 (mA)	Output Current2 (mA)	Efficiency (%)	MTTF <sup>1</sup> (KHRS)
D050503XM	5	5	3.3	100	152	70	1615
RD050505XM	5	5	5	50	50	70	146
D050505XM	5	5	5	100	100	70	1615
D050509XM	5	5	9	100	56	80	669
D050512XM	5	5	12	100	42	80	339
D050515XM	5	5	15	100	34	80	187
RD120505XM	12	5	5	50	50	84	135
D120505XM	12	5	5	100	100	70	489
D120509XM	12	5	9	100	56	80	343
D120512XM	12	5	12	100	42	80	229
D120515XM	12	5	15	100	34	80	148
RD240505XM	24	5	5	50	50	84	130
D240505XM	24	5	5	100	100	81	395
D240509XM	24	5	9	100	56	82	289
D240512XM	24	5	12	100	42	84	186
D240515XM	24	5	15	100	34	84	150

### COMMON SPECIFICATIONS

Item	Test Conditions	Min.	Typ.	Max.	Units
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	
Short circuit protection*				1	S
Cooling		Free air convection			
Case material		Plastic (UL94-V0)			
MTBF		3500			K hours
Weight			1.4		g



**CE REACH**

**ISOLATION SPECIFICATIONS**

Item	Test Conditions	Min.	Typ.	Max.	Units
Isolation voltage (Vin/Vout)	Tested for 1 minute and 1mA max	1000			VDC
Isolation voltage (Vo1/Vo2)	Tested for 1 minute and 1mA max	1000			VDC
Isolation resistance (Vin/Vout)	Test at 500VDC	1000			M
Isolation resistance (Vo1/Vo2)	Test at 500VDC	1000			M
Isolation capacitance(Vin/Vout)			30		pF
Isolation capacitance(Vo1/Vo2)			30		pF

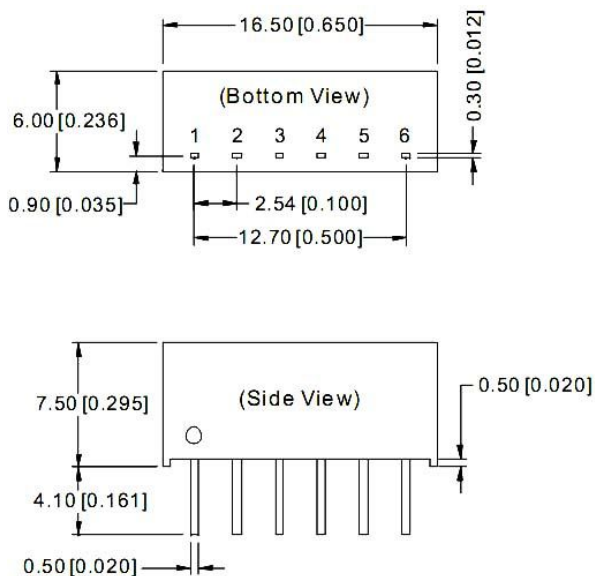
**APPLICATION NOTE**

**Requirement on output load**

To ensure this

**OUTLINE DIMENSIONS & FOOTPRINT DETAILS**

**MECHANICAL DIMENSIONS**



Note:

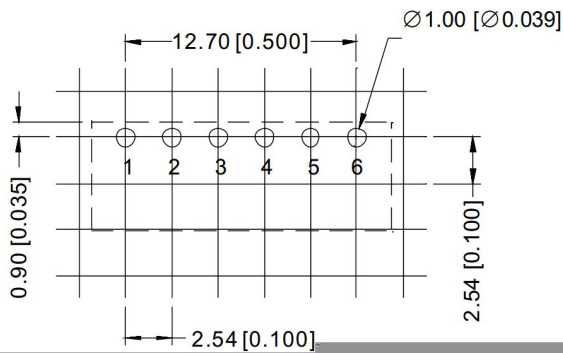
Unit:mm[ inch]

Pin section tolerances:±0.10mm[±0.004inch]

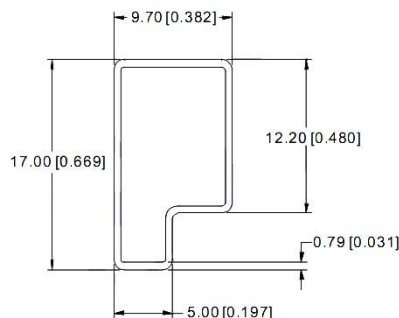
General tolerances:±0.25mm[±0.010inch]

Pin	Function
1	V <sub>IN</sub>
2	GN
3	Vo
4	0V
5	V <sub>CE</sub>

**RECOMMENDED FOOTPRINT**



**TUBE OUTLINE DIMENSIONS**



Note:

Unit :mm[inch]

General tolerances:±0.50mm[±0.020inch]

L=530mm[20.866inch] Tube Quantity: 30pcs

L=220mm[8.661inch] Tube Quantity: 11pcs

**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.