

## FEATURES

- ◆ 1.5 WATTS REGULATED OUTPUT POWER
- ◆ LOW OUTPUT RIPPLE & NOISE
- ◆ PI TYPE INPUT FILTER
- ◆ 3000VDC ISOLATION VOLTAGE
- ◆ HIGH EFFICIENCY UP TO 78%
- ◆ STANDARD 24 PIN DIP PACKAGE
- ◆ Input  $\pi$ -Filter
- ◆ 50 mV Ripple&Noise

## MODEL SELECTION

**ME<sup>①</sup>05<sup>②</sup>12<sup>③</sup>-X<sup>④</sup>D<sup>⑤</sup>-1W5<sup>⑥</sup>**

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

## APPLICATIONS

The DC-DC converter ME-XD-1W5 supplies 1.5 W max. 25 different input/output configurations are available with an isolation voltage of 3000VDC. Special features are low ripple&noise and wide temperature range.



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## Technical Data Input

Parameter	Conditions	Data
$U_{in}$	DC Input Voltage	4.5~5.5V 10.8~13.2V 21.6~26.4V 25.2~30.8V 43.2~52.8V
$f_{sw}$	Switching Frequency	20KHZ typ
$\eta$	Efficiency	50%
	Input Filter	$\pi$ -Filter

## Technical Data Output

Parameter	Conditions	Data
$U_{out}$	Output Voltages	See table
$\Delta U_{out}$	Output Voltages Accuracy	$\pm 4\%$ max
$\Delta U_{NF}/\Delta U_{HF}$	Ripple&Noise	20 MHz BW 50mV <sub>p-p</sub> max
	Line Regulation	$U_{in}=\min/\max, I_{out}=\max$ $\pm 0.3\%$
	Load Regulation	$I_{out}=25\sim 100\%$ $\pm 0.5\%$
$P_{over}$	Short Circuit Protection	Short-term
$\epsilon$	Temperature Coefficient	$T_A = -25\sim +71^\circ C$ $\pm 0.02\%/^\circ C$
	Plastic Case	$> 71\sim 95^\circ C$ linear to 0% $I_{out}$
	Metal Case	$> 71\sim 100^\circ C$ linear to 0% $I_{out}$

## Technical Data

Parameter	Conditions	Data
$U_{isol} P/s$	Isolation(prim./sec.)	3.0 KVDC
$R_{isol}$	Isolation Resistance	$10^9\Omega$
$C_k$	Isolation Capacity	30pF
$T_o$	Operating Temperature	$-25\sim +71^\circ C$
	Case Temperature	
	Plastic	95 $^\circ C$ max
	Metal	100 $^\circ C$ max
	Case	$U_{isol}=3KVDC, DIP 24$ Black plastic non-conductive

## Technical Data

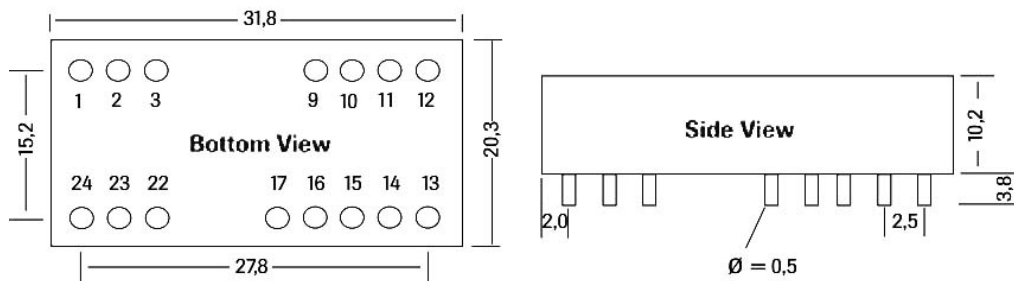
Parameter	Conditions	Data
Cooling		Natural convection
Dimensions	DIP 24	31.8X20.3X10.2 mm
Weight		12,5g

All data measured at nominal nominal input voltage, full load ambient temperature of 20 $^\circ C$  (unless otherwise specified).

Technical data subject to change.

Type	Input	Input Current		Output	Output
	V	NL mA	FL mA	V	mA
ME0512XD-1W5	5	110	550	±12	±60
ME0515XD-1W5	5	110	550	±15	±50
ME1212XD-1W5	12	40	215	±12	±60
ME1215XD-1W5	12	40	215	±15	±50
ME2412XD-1W5	24	20	115	±12	±60
ME2415XD-1W5	24	20	115	±15	±50
ME2812XD-1W5	28	20	100	±12	±60
ME2815XD-1W5	28	20	100	±15	±50
ME4812XD-1W5	48	15	60	±12	±60
ME4815XD-1W5	48	15	60	±15	±50

### DIP24 Case



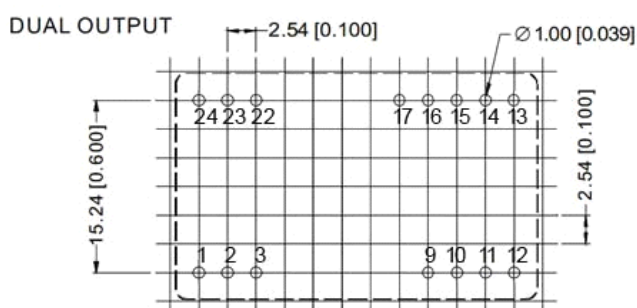
Note:  
 Unit:mm[inch]  
 Pin diameter tolerances: ±0.10mm[±0.004inch]  
 General tolerances: ±0.25mm[±0.010inch]

### Dimensions and Pinning

PIN	Dual
1	+Vin
2	+Vin
3	+Vin
4	No Pin
5	No Pin
9	No Pin
10	Go Out(Ground out)
11	Go Out(Ground out)
12	-Test Point
13	-Vout

PIN	Dual
14	No Pin
15	+Vout
16	+Test Point
17	No Pin
20	No Pin
21	No Pin
22	-Vin
23	-Vin
24	-Vin

### RECOMMENDED FOOTPRINT



### TUBE OUTLINE DIMENSIONS

