

### 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 watts max . 25 different input / output configurations are available with an isolation voltage of 3000V<sub>DC</sub> Special features are low ripple&noise and wide temperature range.

### Technical Data Input

Parameter	Conditions	Data
U <sub>in</sub>	DC Input Voltage	4.5~5.5V 10.8~13.2V 21.6~26.4V 25.2~30.8V 43.2~52.8V
f <sub>sw</sub>	Switching Frequency	20KHZ typ
$\eta$	Efficiency	50%
	Input Filter	$\pi$ -Filter

### Technical Data Output

Parameter	Conditions	Data
U <sub>out</sub>	Output Voltages	See table
$\Delta$ U <sub>out</sub>	Output Voltages Accuracy	$\pm$ 4% max
$\Delta$ U <sub>NF</sub> / $\Delta$ U <sub>HF</sub>	Ripple&Noise	20 MHz BW 50mV <sub>pp</sub> max
	Line Regulation	U <sub>in</sub> =min/max.I <sub>out</sub> =max $\pm$ 0.3%
	Load Regulation	I <sub>out</sub> =25~100% $\pm$ 0.5%
P <sub>over</sub>	Short Circuit Protection	Short-term
$\epsilon$	Temperature Coefficient	T <sub>A</sub> = -25~+71°C $\pm$ 0.02%/°C
	Plastic Case	> 71~95°C linear to 0% I <sub>out</sub>
	Metal Case	> 71~100°C linear to 0% I <sub>out</sub>

### Technical Data Output

Parameter	Conditions	Data
U <sub>isol p / s</sub>	Isolation(prim./sec.)	3.0 KV <sub>DC</sub>
R <sub>isol</sub>	Isolation Resistance	10 <sup>9</sup> $\Omega$
C <sub>k</sub>	Isolation Capacity	30pF
T <sub>o</sub>	Operating Temperature	-25~+71°C
	Case Temperature	
	Plastic	95°C max
	Metal	100°C max
	Case	U <sub>isol</sub> =3KV <sub>DC</sub> , DIP 24 Black plastic non-conductive

### Technical Data Output

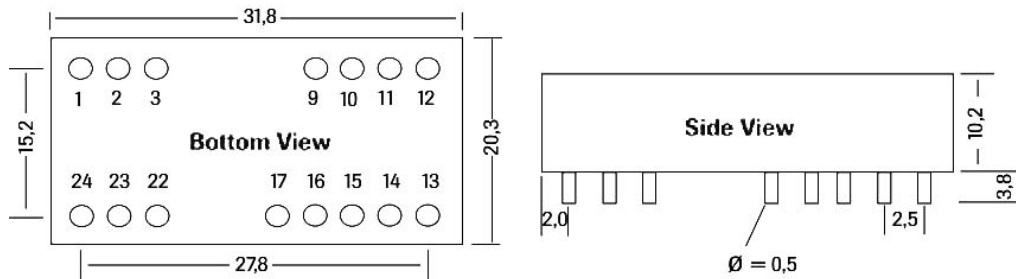
Parameter	Conditions	Data
Cooling		Natural convection
Dimensions	DIP 24	31.8X20.3X10.2 mm
Weight		12,5g

All data measured at nominal nominal input voltage,full load ambient temperature of 20°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



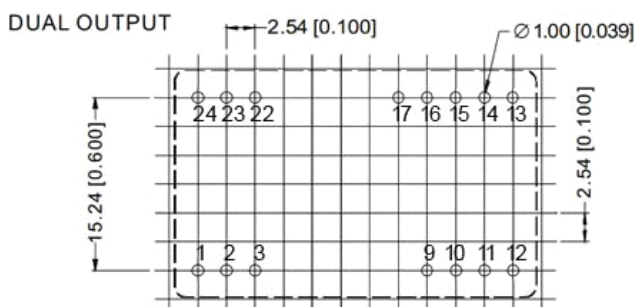
Note:  
 Unit:mm[inch]  
 Pin diameter tolerances: ±0.10mm[±0.004inch]  
 General tolerances: ±0.25mm[±0.010inch]

### 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

