# M2S(D)-J Series 2W Unregulated SMD Package DC-DC Converters

#### Features

- 1:1 input range voltage
- 2W SMD package
- Efficiency up to 85%
- Approved for medical applications
- 1Kvdc and 3Kvdc isolation option
- Operating temperature from -40°C to 85°C

## **Application**

- Industry control application
- Energy battery application
- Telecom/ Datacom application



## **Selection Guide**

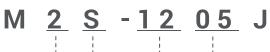
Part number	Input voltage	Output voltage	Output current @ full load	Ripple & Noise	Efficiency (typ.)
M2S-3.33.3J	3.3 VDC	3.3 VDC	606mA	150mVp-p	76.5%
M2S-053.3J		3.3 VDC	606mA	150mVp-p	77%
M2S-0505J	-	5VDC	400mA	150mVp-p	79.5
M2S-0512J	- 5 VDC	12VDC	167mA	150mVp-p	84.5
M2S-0515J	-	15 VDC	133mA	150mVp-p	85%
M2S-1209J	12 VDC	9 VDC	223mA	150mVp-p	86%
M2S-1515J	15,000	15 VDC	133mA	150mVp-p	85%
M2D-1515J	- 15 VDC	±15 VDC	±67mA	±150mVp-p	86%
M2D-2409J		±9 VDC	±112mA	±150mVp-p	87%
M2D-2412J	- 24 VDC	±12 VDC	±84mA	±150mVp-p	84.5%

1. Add suffix "H3" for isolation 3Kvdc/1sec.

2. Add suffix "P" for continuous short circuit protection.

3. Add suffix "R" for tape and reel packing.

## Part Number



Power Single (Dual)

Input voltage Output voltage

CTC is the professional and one among world's leading manufacturers of DC-DC/ AC-DC converters.

The products were used in Computers, Industrial controls, Medical equipment, Transportation, EV, ECO-power, Aero-space application and communication.

#### **Specifications**

	Parameter	Conditions	Min.	Тур.	Max.	Unit
Input	Input voltage range				±10	%
Output	Output voltage accuracy				±5.0	%
	Line voltage regulation	Low line to high line @Max. load		1.2% typ.@	ฏ1% of Vin	
	Load voltage regulation	10%~100% load (3.3/5Vout)			15	%
		10%~100% load (9~24Vout)			10	%
	Ripple & Noise	@ 20MHz BW			150	mVp-p
	Operating frequency	Vin=Nominal input	20	40	80	KHz
Environment	Operating temperature		-40		85	°C
	Storage temperature		-50		125	°C
	Relative Humidity				95	%RH
	MTBF	+25°C			886k	Hours
	(Using MIL-HDBK 217F)	+85°C			128k	Hours
Function	Isolation voltage	60sec. "H3", 1sec.	1000 3000			VDC
	Isolation resistance	Viso=500V	10			GΩ
	Isolation capacitance				115	pF
	Short Circuit Protection	Option	Continuous		nuous	
Physical	Weight	Single		1.4		g
		Dual		1.6		g
EMC	EMI	EN55022		Clas	s A/B	
	ESD	EN61000-4-2	Criteria A			
	Surge	EN61000-4-5, ±0.5kV		Crite	eria A	

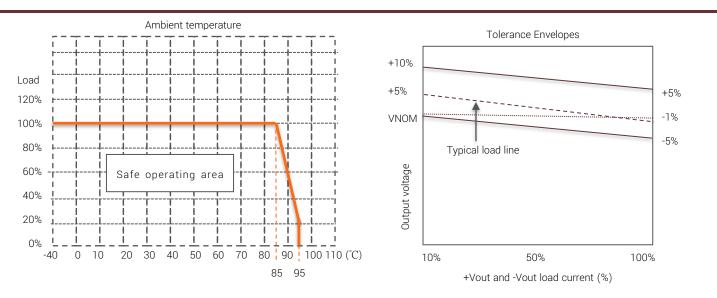
1. All specifications valid at nominal input voltage, full load and 25°C unless otherwise stated.

2. The product information and specifications are subject to change without prior notice.

3. All characteristics are for listed models, and non-standard models may perform differently. Please contact our technical support for more detail.

4. "EMC filtering suggestion" is as following.

#### **Derating Curve**

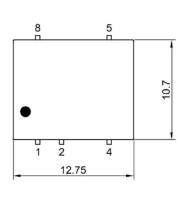


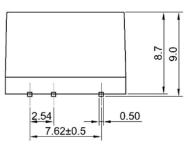
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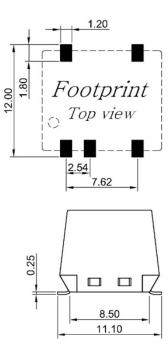
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## **Mechanical Dimension & Pinning**

2S







5

8.50

11.10

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
4	-Vout	Com.
5	+Vout	-Vout
7	No Pin	+Vout
8	NC	No Pin
10	No Pin	NC
NC= No	Connection	

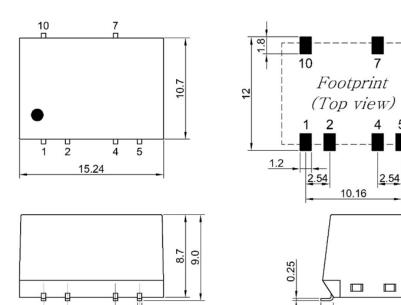
Unit: mm TOL: XX.X ±0.5mm

XX.XX ±0.25mm

M2D

2.54

4\*2.54=10.16±0.5



0.50

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