

Low oscillation Anti-interference
DC to DC power module

Product Specification



Catalog

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Note: Revision History

Revision	Date	Comment
V1.0	2020.7	First release

1. Overview:

SW-DC01 is a DC to DC module, it adopts key component from MPS. The oscillation frequency can be as low as 100KHz and it will not interfere with the reception of wireless products. It is very suitable for short communication range caused by power interference. The module supports highest working voltage up to 30V and the max output current up to 2A. It can be widely used in power conversion occasions of wireless products.

2. Features:

- Operating voltage range: 8-30V
- 3.3V/4.2V/5V output voltage for optional
- Max output current 2A
- Built-in reverse connection and overvoltage protection
- Strong anti-interference
- Operating temperature range: -20 ~ +60 °C

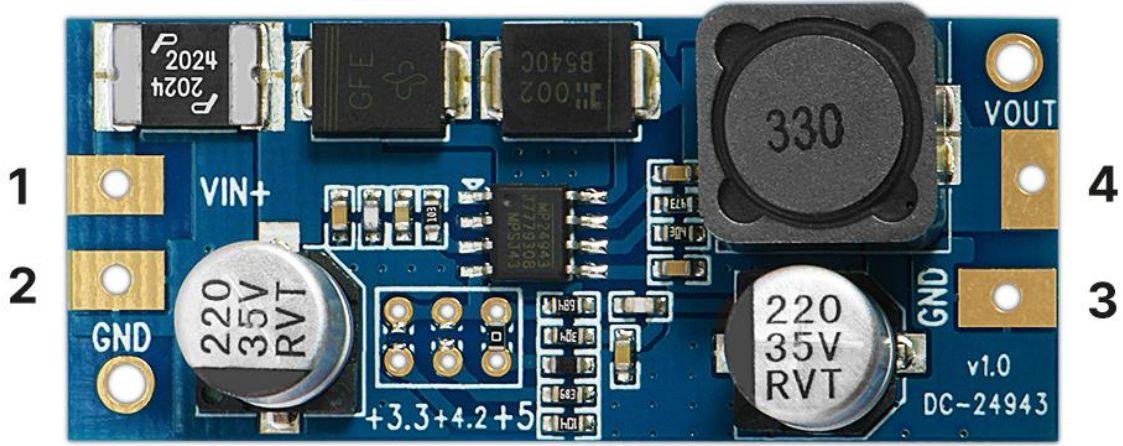
3. Applications:

- Remote controller power supply
- Toy control
- Wireless modules power supply
- 3.3V, 4.2V, 5V output applications

4. Electrical Specifications:

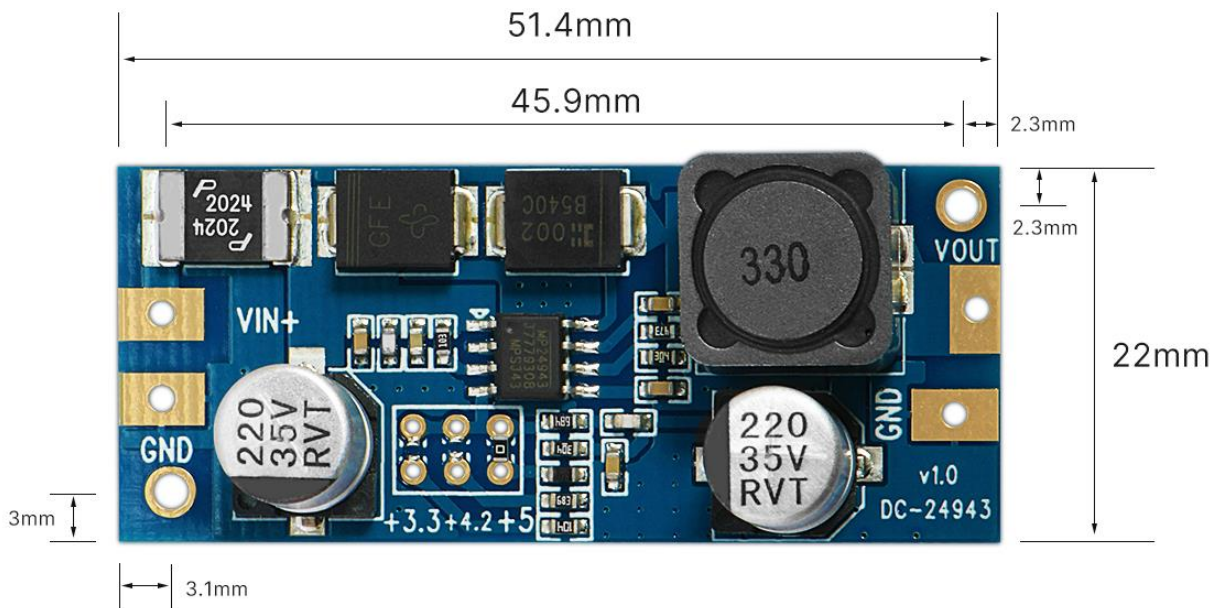
Parameter	Min	Type	Max	Unit	Condition
Operation conditions					
Supply Voltage	8	12	30	V	
Operating Temperature Range	-20		60	°C	
Current consumption					
No-load current		<1		mA	
Oscillation frequency parameters					
Oscillation frequency		100		KHz	

5. Pin definition:

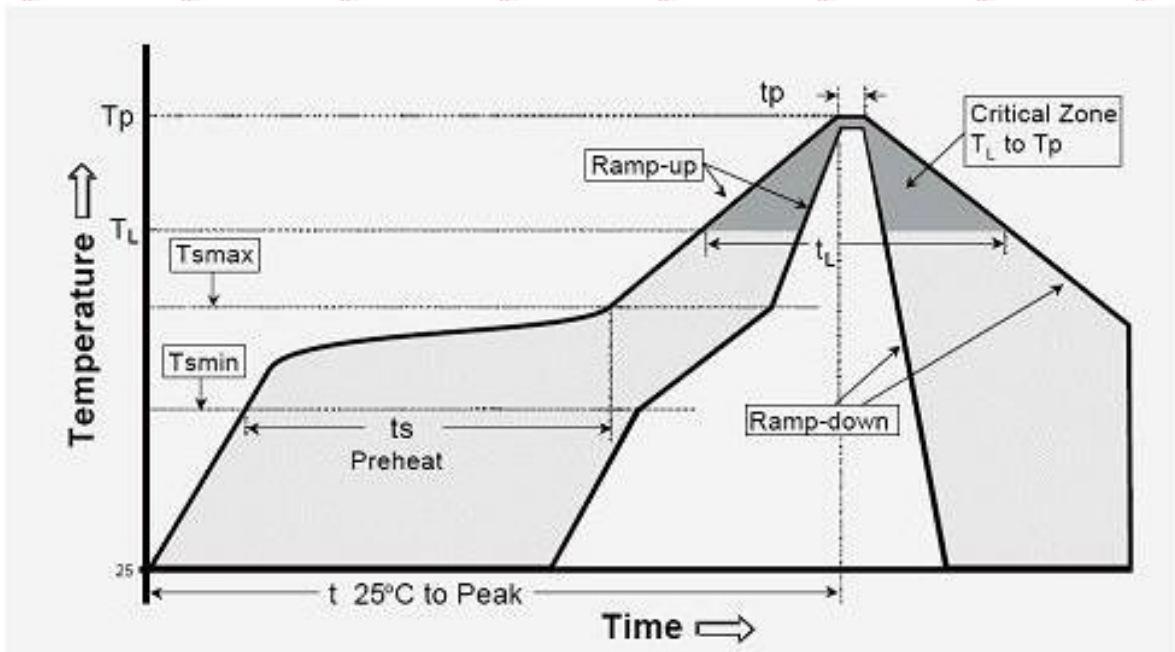


Pin NO.	Pin definition	Description
1	VIN+	Connect to positive power supply (+8~+30v)
2、3	GND	Connect to ground
4	VOUT	Select voltage output (+3.3v, +4.2v, +5v) by the jumper

6. Mechanical Dimensions (unit: mm)



Appendix: SMD Reflow Chart:



IPC/JEDEC J-STD-020B the condition for lead-free reflow soldering	big size components (thickness $\geq 2.5\text{mm}$)
The ramp-up rate (T _L to T _p)	3°C/s (max.)
preheat temperature	
- Temperature minimum (T _{smin})	150°C
- Temperature maximum (T _{smax})	200°C
- preheat time (t _s)	60~180s
Average ramp-up rate(T _{smax} to T _p)	3°C/s (Max.)
- Liquidous temperature(T _L)	217°C
- Time at liquidous(t _L)	60~150 second
peak temperature(T _p)	245+/-5°C