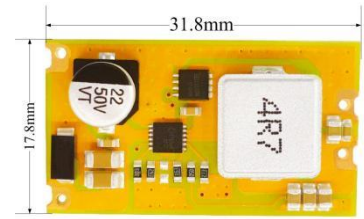


## Product characteristics

- ◇ Synchronous Step Down
- ◇ Package outline: SOC
- ◇ Temperature range: -40°C至+85°C
- ◇ Max Efficiency: 94%
- ◇ Input range: 8 - 36VDC
- ◇ application area: industry、Instrumentation、RF communication、track、traffic、Smart Street Lamp、Smart Home、Intelligent switch、Smart Home.



## Selection Guide

Product model	Input Voltage (VDC)	Output			Temperature range ( °C )	Max capacitive load (μF)
	Nominal value ( Range value )	Power (W)	Voltage (VDC)	current (mA) Max./Min		
DM21-25W050S	12 ( 8 - 36 )	25	5	5000	-40°C to +85°C	2200

## Input Specifications

Item	Operating Conditions			Min.	Typ.	Max.	Unit
Input current	DM21-25W050S	12V(VIN)	5V(Output)	--	2235	--	mA
Ripple & Noise	DM21-25W050S			16	--	30	mV
starting voltage	DM21-25W050S			7.5	--	8	VDC
Input low voltage protection				Not.			
Input filter Typ				C			
Recommended				3A/60V, slow-blow, required			

External Input Fuse	
---------------------	--

## Output Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Output Voltage Accuracy	0%-100% load	--	±1	±3	%
Line Regulation	Full load	--	±0.3	±0.5	
Load Regulation	5%~100% Load(balanced load)	--	±1	±2	
Ripple & Noise	20MHz bandwidth (peak-to-peak value)	16	--	30	mVp-p
Temperature Coefficient		--	±0.1	--	%/°C
Over voltage protection	DM21-25W050S	Not.			
Over current protection		Not.			
Short circuit protection		Not.			

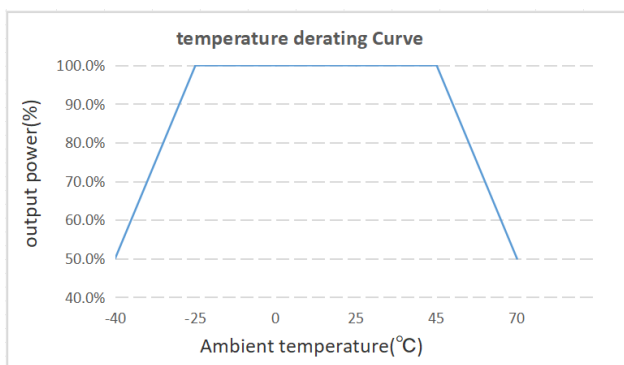
## General Specifications

Item	Operating Conditions		Min.	Typ.	Max.
Switching Frequency	DM21-25W050S	--	500	--	KHz
operating Temperature		-40	25	+40	°C
storage Temperature		-40	25	+85	°C
storage Humidity		--	--	95	%RH

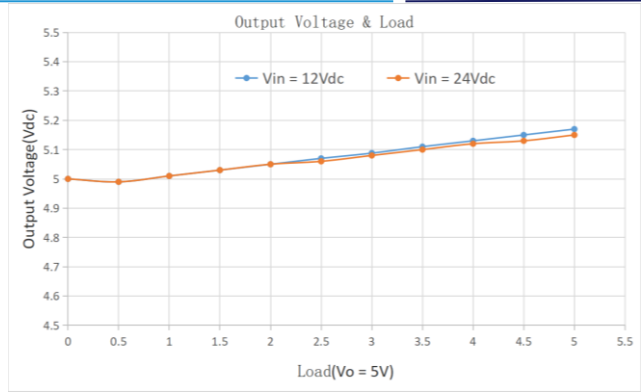
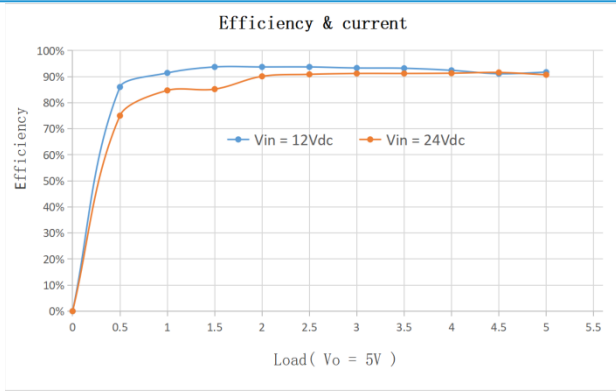
### Mechanical Specifications

Size	31.8*17.8*5.5mm;
Weight	5g
Cooling method	Free air convection

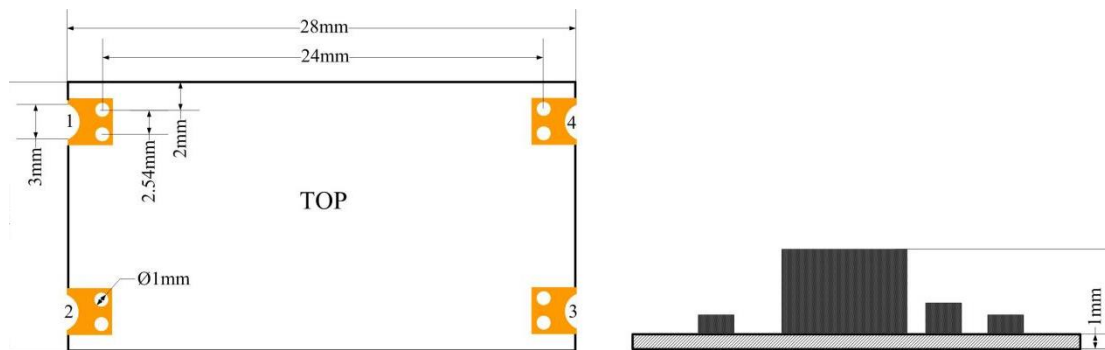
### Product Characteristic Curve



### Product Characteristic Curve



### Dimensions and Recommended Layout



Note:  
 Pin diameter tolerances:  $\pm 0.1\text{mm}$   
 General tolerances:  $\pm 0.5\text{mm}$

Order name	Name	Orientation	Use
1	Vo +	output	Output power supply positive.
2	Vo -	output	Earth wire, output port power reference ground.
3	Vin -	input	Earth wire, link to power reference ground.
4	Vin+	input	The maximum input of power supply is 26V, over 26V will damage module permanently.

**More product recommendations**

Product model	input voltag (VDC)	Output voltage	Output current	efficiency	Installation mode
DM21-36W12S	8.0 ~ 36Vdc	5Vdc	5A	93%	SOC
CK1408	6.0 ~ 18Vdc	5Vdc	8A	96%	SOC
DM21-100W05S	7.0 ~ 70Vdc	5Vdc	20A	95%	SOC
DM21-100W12S	22 ~ 56Vdc	12Vdc	8.33A	96.5%	SOC
DM21-100W24S	32 ~ 60Vdc	24Vdc	4.17A	97%	SOC

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