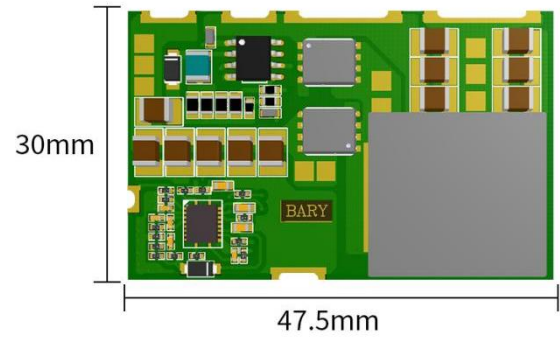


Product characteristics

- ◇ Synchronous Step Down
- ◇ Package outline : SOC
- ◇ Temperature range : -40°C至+85°C
- ◇ Max Efficiency : 97%
- ◇ Input range : 6 - 70VDC
- ◇ 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 (A) Max./Min		
DM21-100W05S	24 (6 - 70)	100	5	20	-40°C to +85°C	15000
DM21-100W12S	24 (22 - 56)	100	12	8.33	-40°C to +85°C	10000
DM21-100W24S	48 (32 - 60)	100	24	4.17	-40°C to +85°C	4700

Input Specifications

Item	Operating Conditions			Min.	Typ.	Max.	Unit
Input current	DM21-100W05S	24V(VIN)	5V(Output)	--	4.375	--	A
	DM21-100W12S	24V(VIN)	12V(Output)	--	4.32	--	A
	DM21-100W24S	48V(VIN)	24V(Output)	--	2.146	--	A

Ripple & Noise	DM21-100W-S	20	--	100	mV
starting voltage	DM21-100W05S	6.5	--	7	VDC
	DM21-100W12S	22	--	22.5	
	DM21-100W24S	32	--	32.5	
Input low voltage protection		Not.			
Input filter Typ		C			
Recommended External Input Fuse		25A/30V, slow-blow, required			

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)	20	--	100	mVp-p
Temperature Coefficient		--	±0.1	--	%/°C
Over voltage protection	DM21-100W05S	Not.			
Over current protection	DM21-100W05S	20.5	22	24	A
	DM21-100W12S	9	10	12	
	DM21-100W24S	4.5	5	7	
Short circuit protection		Continuous, self-recovery			

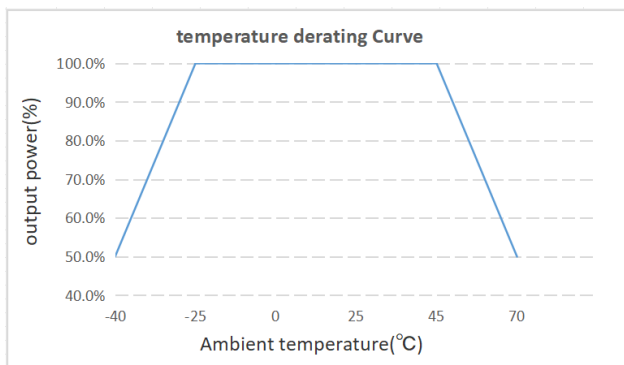
General Specifications

Item	Operating Conditions		Min.	Typ.	Max.
Switching Frequency	DM21-100W-S	--	200	--	KHz
operating Temperature		-40	25	+40	°C
storage Temperature		-40	25	+85	°C
storage Humidity		--	--	95	%RH

Mechanical Specifications

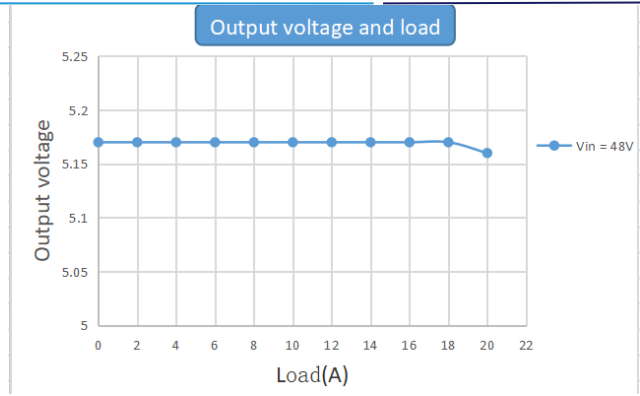
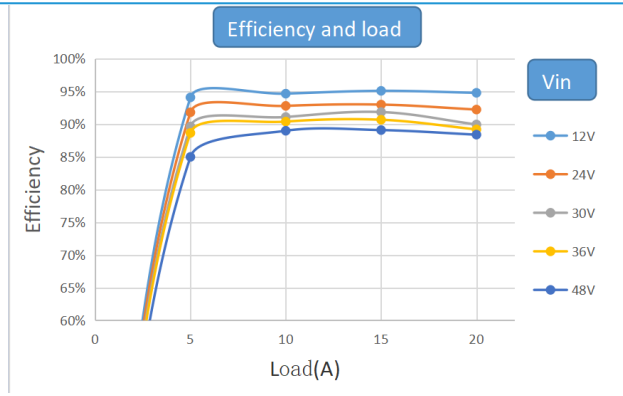
Size	47.5x30x8.8mm ;
Weight	20g
Cooling method	Free air convection

Product Characteristic Curve

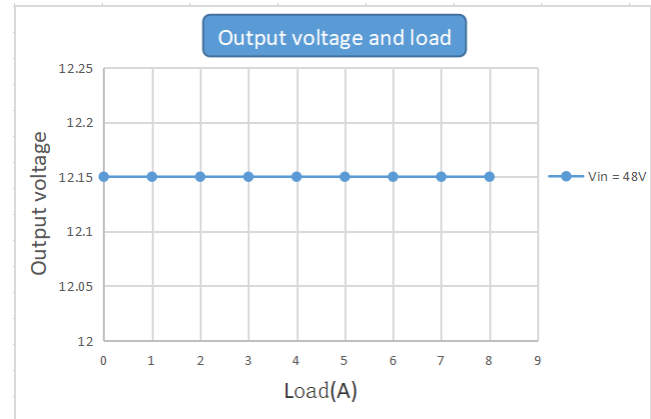
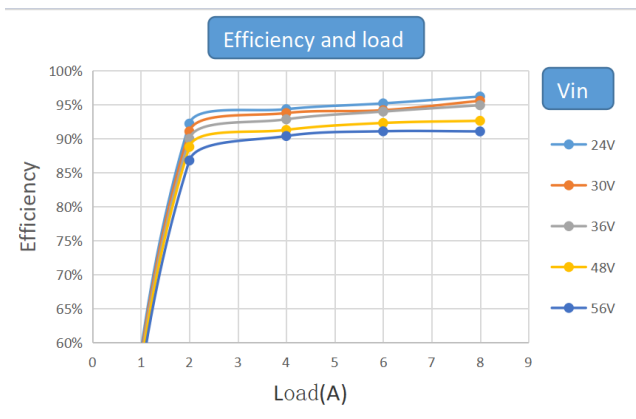


Product Characteristic Curve

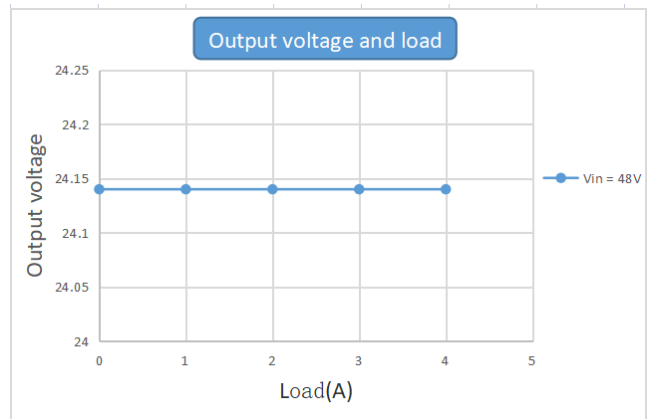
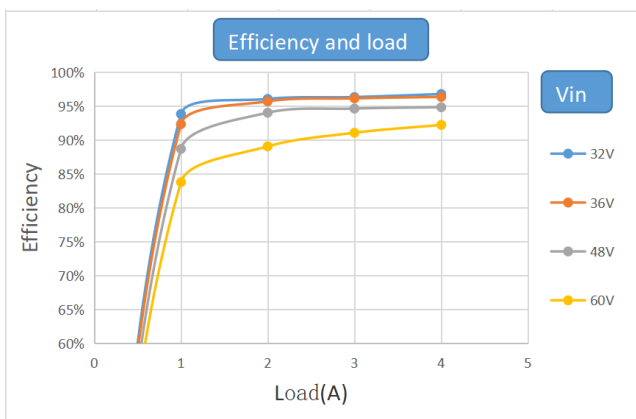
DM21-100W05S



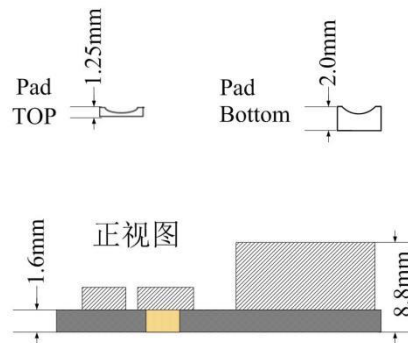
DM21-100W12S



DM21-100W24S



Dimensions and Recommended Layout

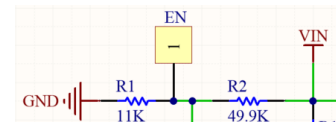


Note:

Pin diameter tolerances: ±0.1mm

General tolerances: ±0.5mm

Order name	Name	Orientation	Use
1	Vin+	input	Supply Input Voltage.
2	Vin -	input	Ground pin.
3	Vo -	output	Ground pin.
4	Vo +	output	Output power supply positive.
5	NC	--	Not connected to a circuit.
6	EN	input	Output voltage enabling pin, high level enable, Low Levelisable; High = 1.2V~3.6V , Low = <0.4V; Floating = enabling Output; This pin is internally pulled up to the VIN;



More product recommendations

Product model	input voltag (VDC)	Output voltage	Output current	efficiency	Installation mode
DM21-25W050S	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

Chengdu Bairui Technology Co., Ltd.

No.6nd floor,building 17# TIAN-CHEN road,high-techdistrict(west),chengdu

Marketing Department : Miss Hu : TEL/WeChat : +86-18782919117

Mailbox : bary_sales01@163.com

Online mall : <https://www.aliexpress.com/store>