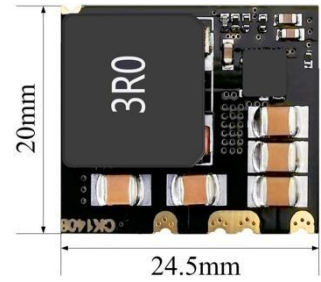


## Product characteristics

- ◇ Synchronous Step Down
- ◇ Package outline: SOC
- ◇ Temperature range: -40°C~ +85°C
- ◇ Max Efficiency: 97%
- ◇ Input range: 6 ~ 15VDC
- ◇ 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		
CK1408	12 ( 6 - 15 )	40	5	8000	-40°C to +85°C	4700

## Input Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
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Input current	CK1408	12V(VIN)	5V(Output)	--	3435	--	mA
Ripple & Noise	CK1408			10	--	30	mV
starting voltage	CK1408			6	--	6.25	VDC
Input low voltage protection				Not.			
Input filter Typ				C			
Recommended External Input Fuse				10A/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)	10	--	30	mVp-p
Temperature Coefficient		--	±0.05	--	%/°C
Over voltage protection	CK1408	Not.			
Over current protection		Not.			
Short circuit protection		Not.			

## General Specifications

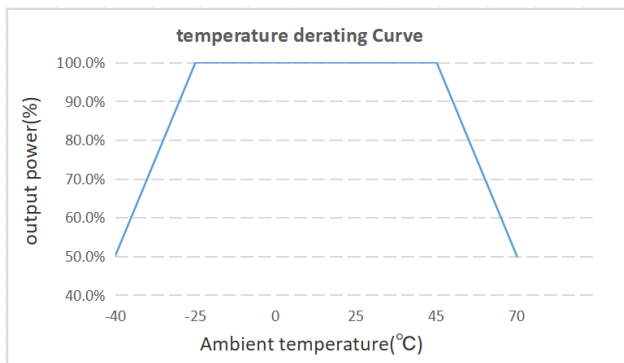
Item	Operating Conditions		Min.	Typ.	Max.
Switching Frequency	CK1408	--	500	--	KHz
operating Temperature		-40	25	+40	°C

storage Temperature		-40	25	+85	°C
storage Humidity		--	--	95	%RH

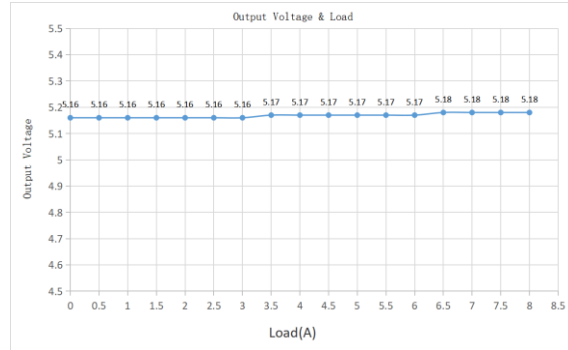
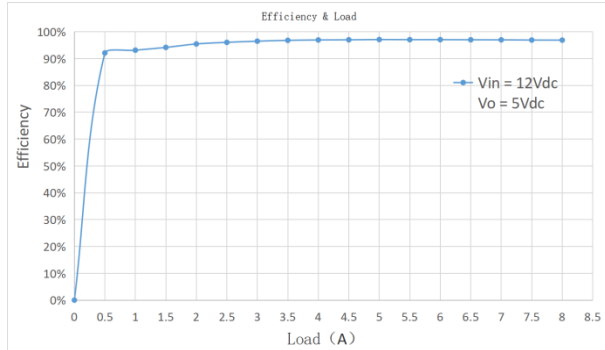
### Mechanical Specifications

Size	24.5*20*7.6mm;
Weight	4.5g
Cooling method	Free air convection

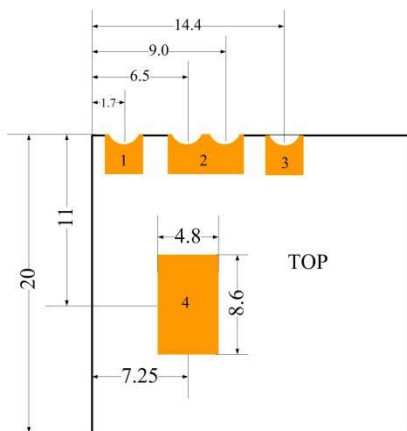
### Product Characteristic Curve



### Product Characteristic Curve



### Dimensions and Recommended Layout



单位: mm

Note:

Pin diameter tolerances:±0.1mm

General tolerances:±0.5mm



Order name	Name	Orientation	Use
1	Vin+	input	The maximum input of power supply is 6V, over 15V will damage module permanently.
2	Vin -/Vo-	Input/output	Input and Output Power Reference Ground.
3	Vo +	output	Output power supply positive.
4	PAD	/	By connect external large area and increase heat dissipation area to reduce

			module temperature.
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## 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 ~ 15Vdc	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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