

Typical performance

- ◆ Wide Input voltage range (4:1)
- ◆ Typical Efficiency 82%
- ◆ Switching frequency: 300KHz
- ◆ Over current/Short circuit protection, Self-furbish
- ◆ Input-output isolate
- ◆ Board in-line type installs
- ◆ Metal case, Low Output Ripple



Technology parameter

Test condition: General Nominal Line, Tc=25 °C, Rated resistant load unless other wise specified.

Input	Min(v)	Nom(v)	Max(v)	Notes
Vdc Input voltage	9	18	36	4:1
	18	36	72	4:1
Remote ON/OFF	Non			
Input undervoltage protection	Lower than the low-input voltage protection , Self-furbish			

Output

Voltage accuracy		Vo1,Vo2	± 1.0%, ±3.0%
Line regulation	Nominal Load, full voltage range	Vo1,Vo2	± 0.2%, ±1.5%
Load regulation	20% ~ 100%	Vo1,Vo2	± 0.5%, ±4.0%
Ripple and noise	20MHz BM (Full Load) Vo≤5.0V, ≤50mVp-p; Vo≥48V, ≤180mVp-p; Other, ≤100mVp-p		
Dynamic response	25% Nominal load step change	△Vo1/△t	± 4.0/500μ s%
Voltage adjust		Non	
Turn-on delay time	Typical value		≤200mS

General

Efficiency	Nominal input, Full load	Vo≤5.0V, 80%Typical	Vo>5.0V, 82%Typical
Switching frequency		300KHz Typical	MAX 330KHz
Operating temperature	Free air	Industrial Level	-25°C ~ +55°C

		Military Level	-40℃ ~ +85℃
Storage temperature		Industrial Level	-40℃ ~ +105℃
		Military Level	-55℃ ~ +120℃
Max case temperature		Industrial Level	+100℃
		Military Level	+110℃
Relative humidity			10%~90%
Case material	Metal case		
Isolation Voltage	Input-output 1500 Vdc $\leq$ 0.5mA/1min; Input-case 500Vdc $\leq$ 0.5mA / 1min		
MTBF	2X10 ⁵ Hrs		

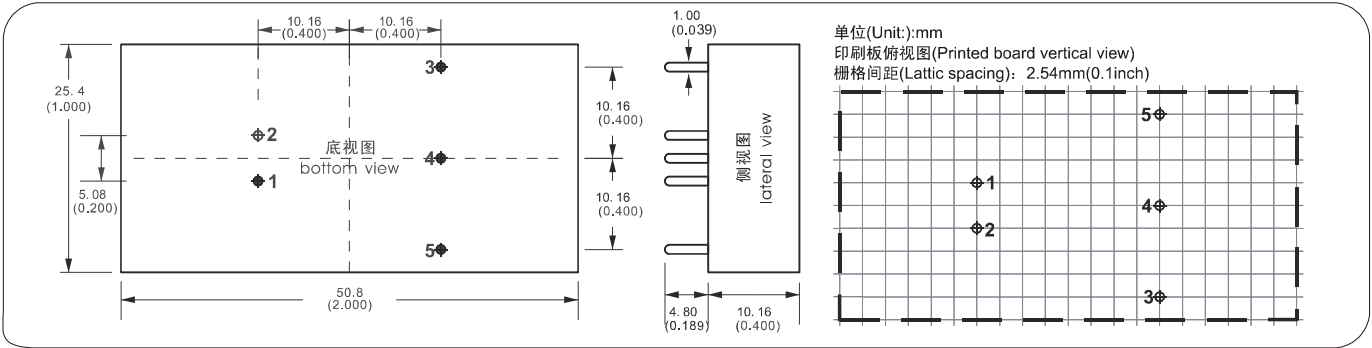
Typical product tabulates

TYPE	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
SD10-□S05B1	18V (9~36V) 36 V (18~72V)	5V	2000mA				
SD10-□S12B1		12V	830mA				
SD10-□S15B1		15V	660mA				
SD10-□S24B1		24V	410mA				
SD12-□S05B1		5V	2400mA				
SD12-□S12B1		12V	1000mA				
SD12-□S15B1		15V	800mA				
SD12-□S24B1		24V	500mA				
SD15-□S05B1		5V	3000mA				
SD15-□S12B1		12V	1200mA				
SD15-□S15B1		15V	1000mA				
SD15-□S24B1		24V	625mA				
SD10-□D05B1		+5V	1000mA	-5V	1000mA		
SD10-□D12B1		+12V	410mA	-12V	410mA		
SD10-□D15B1		+15V	330mA	-15V	330 A		
SD10-□D24B1		+24V	210mA	-24V	210mA		
SD12-□D05B1		+5V	1200mA	-5V	1200mA		
SD12-□D12B1		+12V	500mA	-12V	500mA		

SD12-□D15B1		+15V	400mA	-15V	400mA		
SD12-□D24B1		+24V	250mA	-42V	250mA		
SD15-□D05B1		+5V	1500mA	-5V	1500mA		
SD15-□D12B1		+12V	600mA	-12V	600mA		
SD15-□D15B1		+15V	500mA	-15V	500mA		
SD15-□D24B1		+24V	310mA	-24V	310mA		

☐ Shows the nominal value of input voltage, due to space limitations ,the above list is only for some products, If other than a list of products, please contact the Company's sales department.

Mechanical Data



Mechanical Data

Packing Series No	L x W x H	
B1	50.80 × 25.40 × 10.16mm	2.000× 1.000 × 0.400inch

TYPICAL TEMPERATURE CURVE

The graph plots '输出功率百分比 output power' (Output power percentage) on the y-axis (0% to 100%) against '温度 temperature °C' (Temperature in °C) on the x-axis (-40 to 120). Three curves are shown: Industrial level (green), Military level (red), and another level (blue). The Industrial level curve starts at 100% at -40°C and drops to 0% at 100°C. The Military level curve starts at 100% at -25°C and drops to 0% at 85°C. The blue curve starts at 100% at -10°C and drops to 0% at 65°C.

Pin Assignments

Single	1	2	3	4	5
	-Vin	+Vin	+Vout1	NP	GND
Dual	1	2	3	4	5
	-Vin	+Vin	+Vout1	COM	-Vout2

*Note: The power modules such as the definition of the pin does not match with the hand book, please refer to the actual item.