TDB 15-50W

TDB 15-50W Solar photovoltaic power series
DC-DC Isolated Converters



特性 Features

- 输入电压范围宽 Wide range of input voltage
- 高可靠性,长寿命设计 Design for high reliability,long lifetime
- 输入欠压过压保护 Under-&over-voltage protection for output
- 满负荷效率可达92% Full load efficiency up to 92%
- 快速动态响应 Fast dynamic response
- 功率密度达26W/in^3 UP to 26W/in^3 power density
- 高压输入，大功率输出 High voltage input , high output power
- 功率覆盖范围广，便于升级 Wide range of power ,easy to upgrade

条件：除特殊指定外，所有参数测试条件为：室温25°C,标称输入电压，纯阻性标称负载
Condition: All specifications are tested under the room temperature 25°C, Normal input voltage and pure resistive normal load.

输入特性 Input Characteristic

额定值 (Rated)	电压范围 (Voltage Range)	额定值 (Rated)	电压范围 (Voltage Range)
110 VDC (额定值 Rated)	70-140 VDC	600 VDC (额定值 Rated)	400-800 VDC
300 VDC (额定值 Rated)	200-400 VDC	800 VDC (额定值 Rated)	100-1000 VDC

输出特性 Output Characteristic

电压精度 (Voltage Set-point Accuracy)	±0.2%
电压调整率（主路） (Source effect)	± 0.5%(Typ)
负载调整率（10%~100%） (Load Regulation<main>)	±0.4%
温度变化率 (Temperature Coefficient)	±0.01%/°C
电流限制点 (Output ripple+noise)	120%(Typ)

输出电流 (Output Current)	0-4A 任选（For option）
输出电压 (Output Voltage)	5-24VDC
功率 (Power)	15-50W
响应速度 (Output overcurrent protection)	400μs

一般特性 General Characteristic

工作频率 (Switching Frequency)	65-100KHz		环境特性 (Environmental Characteristics)	工作壳温 (Case Temperature)	（工业品）Industry -25 – +85°C （军I）Military I -40 – +85°C （军II）Military II -55 – +85°C
绝缘电阻 (Isolation Resistance)	200MΩ				
MTBF	> 500000 h				
绝缘强度 (Isolation Voltage)	输入-输出 (Input-Output)	>2000VDC		存储温度 (Storage Temperature)	（工业品）Industry -45 – +105°C （军I）Military I -55 – +105°C
	输入-外壳 (Input-Case)	>2000VDC			
	输出-外壳 (Output-Case)	>500 VDC			

保护特性 General Characteristic

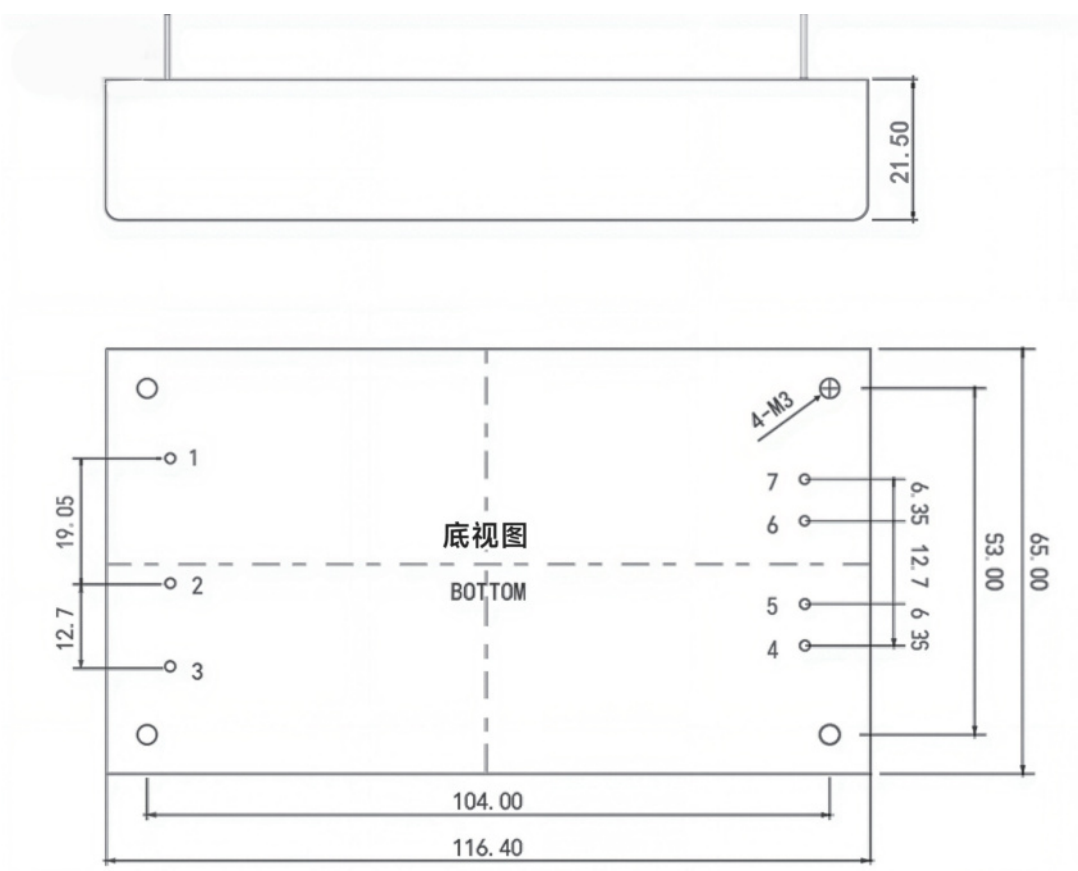
- ★ 输入欠压保护(Input under voltage protection)
- ★ 输入过压保护(Input over voltage protection)
- ★ 过温保护(Over temperature protection)
- ★ 输出过流保护(Output over current protection)
- ★ 输出短路保护(Output short circuit protection)

	输入电压(Vdc) Input voltage	输入电压范围 Input voltage Range	输出电压（Vdc) Output voltage	输出电流 Output current(A)	纹波PK-PK（mv) Ripple and noise	效率(Typ) Efficiency(Typ)	型号 Models
单路 Single Channels Output	110	70-140	05	3	50	70%	TDB15-110S05
	110	70-140	12	1.66	50	75%	TDB20-110S12
	110	70-140	24	1.25	50	78%	TDB30-110S24
	300	200-400	05	3	50	70%	TDB15-300S05
	300	200-400	12	1.25	50	75%	TDB15-300S12
	300	200-400	15	2	50	78%	TDB30-300S15
	300	200-400	24	1.25	50	70%	TDB30-300S24
	600	400-800	05	3	50	75%	TDB15-600S05
	600	400-800	12	1.66	50	78%	TDB20-600S12
	600	400-800	24	1.04	50	70%	TDB25-600S24
	600	400-800	24	2.08	50	70%	TDB50-600S24
	800	100-1000	05	4	50	75%	TDB20-800S05

■说明1：输出纹波噪声（峰值-峰值）采用的是87-88页附录四模块电源测试说明
Output ripple noise (Peak-Peak) is adopted the module power supply test instruction on the page 87-88.

■说明2：仅列出典型型号，其它型号，请确定功率、输入电压及输出电压，致电我公司 400-019-3997
Only typical models listed. If you need other model, please conform the power, input voltage and output voltage, then phone us +86 400-019-3997

外形尺寸以及引脚定义 Mechanical drawing and pin definition



单位(Unit):mm

引脚 PIN	单路 SING
1	+Vin
2	–Vin
3	NC
4	NC
5	–Vo
6	+Vo
7	NC