ONE OUTPUT 1W

MAIN FEATURES

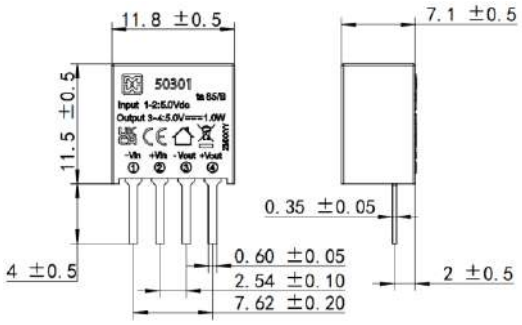
- Small Compact Size - PCB Mount
- Output Range : 3.3VDC - 24VDC
- 1500Vdc I/O Isolation voltage
- Operating Temperature -40℃ To +105℃
- Industry Standard Pinout
- Low Cost/High Reliability
- Safety: Compliance With All Requirements of IEC/EN62368-1, UL62368-1,IEC60601-1, CSA C22.2NO.62368-1-14, CE,UKCA Mark.
- Materials: Uses UL 94-V0 Plastic And Resin
- EMC : Conducted And Radiated Emission conform To EN55032, FCC Part 15, CLASS A, IEC/EN61000-3-2 CLASS A, EN61000-3-3
- Immunity Conform To:EN61000-4-2, IEC/EN61000-4-3, EN61000-4-4,EN61000-4-5,EN61000-4-6, EN61000-4-8 EN61000-4-11

Part Number	Output Power (W)	Output Voltage (VDC)	Output Current (mA)max/min	Input Current Typ.(Full load/No load) (mA)	Max.Operating Ambient (°C)	Efficiency Typical (%)	Input Range (Vdc)
50300	1	3.3	303/30	271/8	105	79	4.5-5.5
50301	1	5	200/2	244/8	105	82	
50302	1	9	111/11	241/12	105	85	
50303	1	12	83/8	241/12	105	82	
50304	1	15	67/7	241/12	105	82	
50305	1	24	42/4	241/18	105	84	

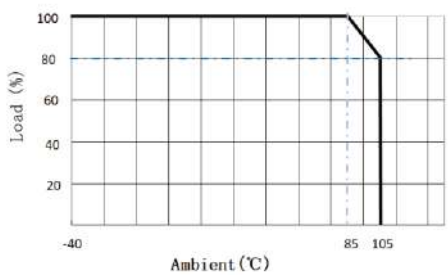
DIMENSIONS and PINOUT

4 pins

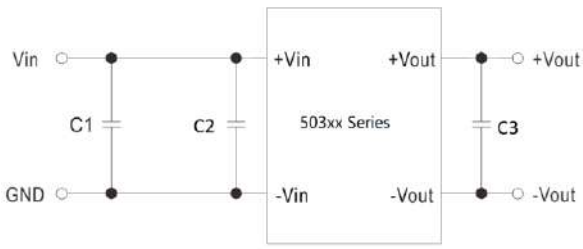
Pin 1: DC Input -Vin
Pin 2: DC Input +Vin
Pin 3 : DC Output -Vout
Pin 4 : DC Output +Vout



DERATING GRAPH

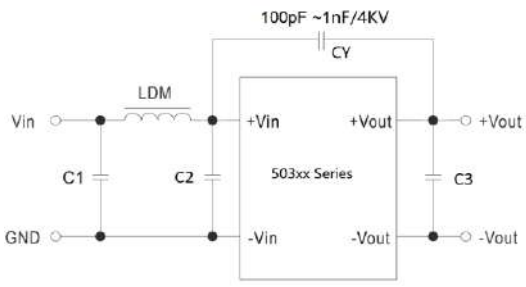


TYPICAL APPLICATION



C1,C2: 4.7uF/25V
C3:
3.3Vdc, 5.0Vdc output types: 10uF/16V;
9.0Vdc,12Vdc output types: 2.2uF/25V;
15Vdc,24Vdc output types: 1uF/50V;

EMC SUGGESTION



C1,C2: 4.7uF/25V
CY: 100pF ~ 1nF/4kv
LDM: 6.8uH
C3: 1uF to 10uF/16V

@ pending certification

Model: 1 Watt		Specification
DC Input Characteristics	Rated input Voltage	5.0VDC
	Input Voltage Range	4.5 - 5.5VDC
	Input Current	See table
	Protection (Fuse recommended)	500mA
	Input Filter	Capacitor type
DC Output Characteristics	Output Voltage Accuracy	Refer to datasheet document
	Output Voltage Line Regulation	Refer to datasheet document
	Output Voltage Load Regulation	Refer to datasheet document
	Ripple & Noise	Max 100mVp-p @Rated DC input (The measuring will be terminated with a 22uF AL E-Cap and a 0.1uF Cer-Cap. An oscilloscope set at 20MHz bandwidth)
	Switching Frequency	270KHz Typ.
Protection Characteristics	Over Current Protection	The DC converter shall automatically protect against over current. The DC converter shall auto-recover normal operation after the fault condition is removed. No excessive heat, odour, or plastic deformation shall occur with no safety hazard during the fault
	Output Short Circuit Protection	The DC converter shall withstand a continuous output short without damage; The DC converter shall resume normal operation after the short is removed, no excessive heat, odour, or plastic deformation shall occur with no safety hazard
Environmental	Operation Temperature	-40°C ~ + 105°C (Refer to "Derating Graph")
	Operation Humidity	10~ 90% RH (No Condensing) @ DC output with full load
	Storage Temperature	-10°C~ +35°C
	Storage Humidity	<75%RH
Safety & EMC Requirement	Dielectric Strength	Primary to Secondary : 1500Vdc 1mA, 3 sec.
	Radiation	Meeting EN55032, FCC part 15, (Class A/B with external components, refer to EMC typical recommended circuit).
	Conduction	Meeting EN55032, FCC part 15, (Class A/B with external components, refer to EMC typical recommended circuit).
	Safety Standards	Compliance With all requirements of : UL62368-1, CSA C22.2NO.62368-1-14 , IEC/EN62368-1, IEC60601-1, CE,UKCA Mark
	Isolation Capacitance	20pF Max. @100KHz/0.1V,
Reliability Requirement	MTBF	>200K Hours @ at 85deg.C and DC output with full load >700K Hours @ at 25deg.C and DC output with full load *Calculated in accordance with MIL-HDBK-217-F2*
	Burn-In Test	The unit shall be burned in for 2~ 5hours under rated input voltage and DC with full load at an ambient temperature of 30~45 degrees C
	Net Weight	Approximately 1.5 grams per product unit.
Guarantee	This product is in accordance with the European RoHS & REACH directives	