

Power modules

PRELIMINARY

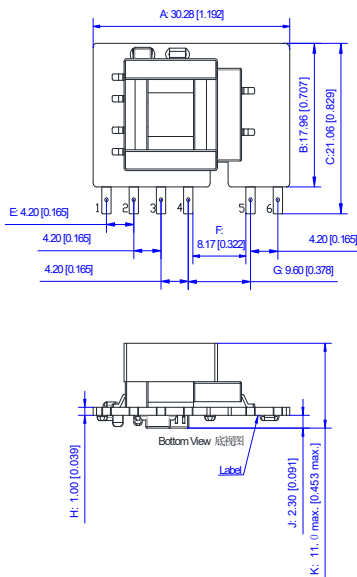
PCBA SIP application: APX05SXX00WP-300

FEATURES

- Input voltage range: 85VAC~305VAC/100VDC~430VDC;
- Compact size, SIP footprint;
- Comply with the EU RoHS Directive; CQC, TUV Approved;
- Operating temperature range: -40°C~+85°C;
- Low standby power: 0.15W max @230VAC;
- Primary/Secondary Insulation: ≥ 3600 VAC;
- Conforms to EN/IEC/UL62368-1;
- Conforms to IEC/EN61558-2-16;



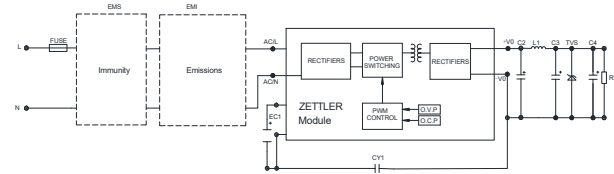
OUTLINE DRAWING



Pin-Out	
Pin	Function
1	AQ(L)
2	AQ(N)
3	+V(cap)
4	-V(cap)
5	-Vo
6	+Vo

Note:
1. Unit: mm (inch)
2. Tolerance: ± 0.1 mm (± 0.039)

TYPICAL APPLICATION SCHEMATIC

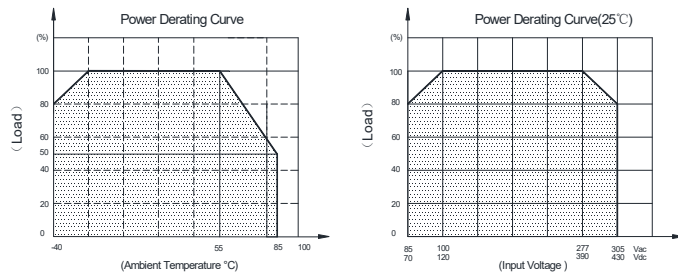


APX05SXX00WP-300 Series additional component selection guide(no EMC devices)							
Part no.	EC1 ¹	C2 (required)	L1 (required)	C3 ² (required)	C4	CY1 (required)	TVS ³
APX05S0300WP-300	22 μ F/450V (-40°C to 85°C with 10 μ F/450V)	820 μ F/3V (solid-state capacitor)	4.7 μ H max 60mD/ 2A	100 μ F/ 16V	0.1 μ F/ 50V (ceramic capacitor)	1.0nF/ 400Vac	SMBJ5.0A
APX05S0500WP-300	85-305 Vac input	470 μ F/16V (solid-state capacitor)		SMBJ7.0A			
APX05S0900WP-300	105-305 Vac input	270 μ F/16V (solid-state capacitor)		SMBJ12A			
APX05S1200WP-300	125-305 Vac input			SMBJ20A			
APX05S1500WP-300	145-305 Vac input	220 μ F/10V		47 μ F/ 35V			SMBJ20A
APX05S2400WP-300	165-305 Vac input						SMBJ30A

Note:

1. Recommended to use a capacitor with ripple current >200 mA at 100 kHz.
2. Recommended to use a high frequency, low ESR, electrolytic capacitor ($\leq 1.1Q$ at -40°C) with at least 20% margin on voltage rating.
3. A suppressor diode (TVS) is recommended to protect the downstream application in case of converter failure and should be rated for a minimum of 1.2 times the converter's output voltage.
4. The FUSE component is required, recommended to use a slow break fuse with 1A/300V SPEC.

PRODUCT CHARACTERISTIC CURVE



MODEL LIST

Model No.	Output voltage	Rated current
APX05S0300WP-300	3.3Vdc	1000mA
APX05S0500WP-300	5Vdc	1000mA
APX05S0900WP-300	9Vdc	560mA
APX05S1200WP-300	12Vdc	420mA
APX05S1500WP-300	15Vdc	340mA
APX05S2400WP-300	24Vdc	210mA

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DISCLAIMER

This product specification is to be used in conjunction with the application notes which can be downloaded from the regional ZETTLER magnetics websites. The specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.

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