

Power modules

PRELIMINARY

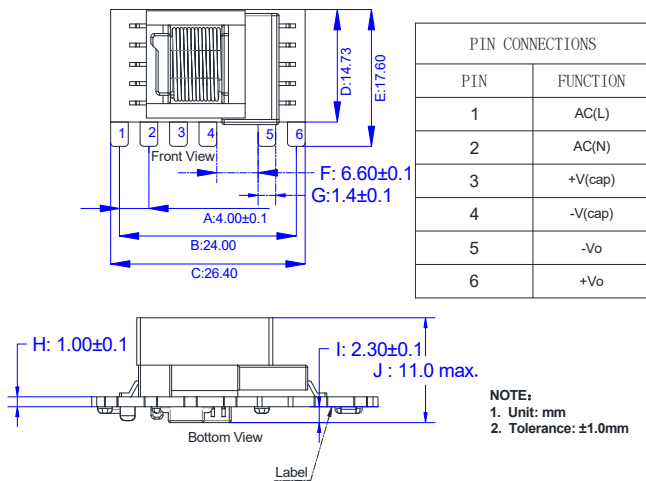
PCBA SIP application: APX05SXX00WP-100

FEATURES

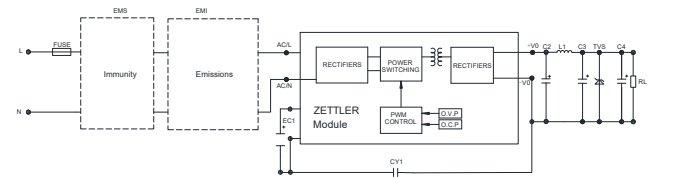
- Input voltage range: 85VAC~305VAC/100VDC-430VDC;
- Compact size, SIP footprint;
- Comply with the EU RoHS Directive; UL, TUV, CQC Approved;
- Operating temperature range: -40°C~+85°C;
- Low standby power: 0.15W max @230VAC;
- Primary/Secondary Insulation: ≥ 3600 VAC;
- Conforms to EN/IEC/UL62368-1;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



OUTLINE DRAWING



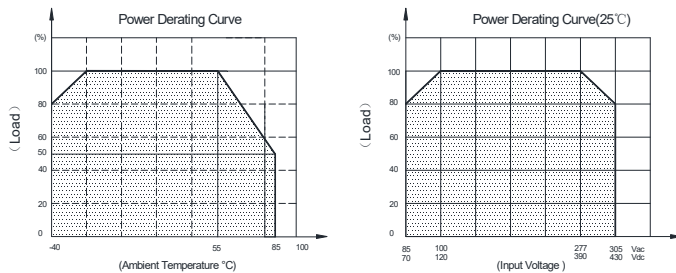
TYPICAL APPLICATION SCHEMATIC



APX05SXX00WP-100 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-100	22 μ F/450V (-40°C to 85°C with 10 μ F/450V)	820 μ F/16.3V (solid-state capacitor)	4.7 μ H max 60mΩ/2A	100 μ F/16V	0.1 μ F/50V (ceramic capacitor)	1.0nF/400Vac	SMBJ5.0A
APX05S0500WP-100	85-305 Vac input	470 μ F/16V (solid-state capacitor)					SMBJ7.0A
APX05S0900WP-100	-25°C to 85°C with 270 μ F/16V (solid-state capacitor)	270 μ F/16V (solid-state capacitor)	220 μ F/35V	47 μ F/35V			SMBJ12A
APX05S1200WP-100	85-305 Vac input, or						SMBJ20A
APX05S1500WP-100	-40°C to 85°C with						SMBJ20A
APX05S2400WP-100	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 ($\leq 1.1\Omega$ 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-100	3.3Vdc	1000mA
APX05S0500WP-100	5Vdc	1000mA
APX05S0900WP-100	9Vdc	560mA
APX05S1200WP-100	12Vdc	420mA
APX05S1500WP-100	15Vdc	340mA
APX05S2400WP-100	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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Building on a foundation of more than a century of expertise in German precision engineering, ZETTLER Group is a world-class enterprise, engaged in the design, manufacturing, sales and distribution of electronic components. Our industry leadership is based on a unique combination of engineering competence and global scale.

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Zettler Magnetics, Inc.
www.zettlermagnetics.com

CHINA

Zettler Group, China
www.zettlercn.com

EUROPE

Zettler Electronics, GmbH
www.zettlerelectronics.com
office@zettlerelectronics.com

ASIA PACIFIC

Zettler Electronics (HK) Ltd.
www.zettlerhk.com
sales@zettlerhk.com

Zettler Electronics, Poland
www.zettlerelectronics.pl
office@zettlerelectronics.pl



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