

# Power modules

PRELIMINARY

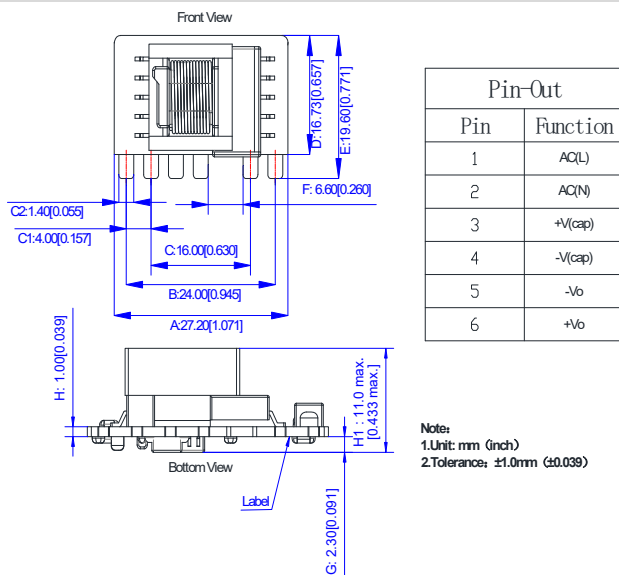
## PCBA SIP application: APX05SXX00WP-200

### FEATURES

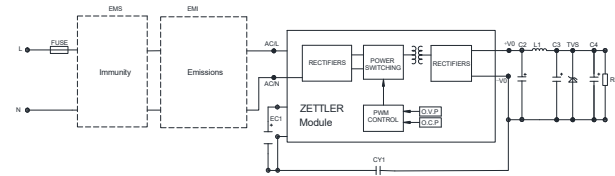
- Input voltage range: 85VAC~305VAC/100VDC~430VDC;
- Compact size, SIP footprint;
- Comply with the EU RoHS Directive; UL, TUV, CQC Approved;
- Operating temperature range: -40°C~+85°C;
- Low standby power: 0.15W max @230VAC;
- Primary/Secondary Insulation:  $\geq 3600$ VAC;
- Conforms to EN/IEC/UL62368-1;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



### OUTLINE DRAWING



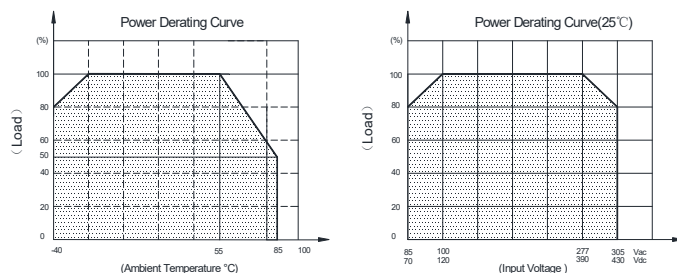
### TYPICAL APPLICATION SCHEMATIC



APX05SXX00WP-200 Series additional component selection guide(no EMC devices)							
Part no.	EC <sup>1</sup>	C2 (required)	L1 (required)	C <sup>3</sup> (required)	C4	CY1 (required)	TVS <sup>5</sup>
APX05S0300WP-200	22 $\mu$ F/450V (-40°C to 85°C with 10 $\mu$ F/450V)	470 $\mu$ F/3V (solid-state capacitor)	4.7 $\mu$ H max 60mQ/ 2A	100 $\mu$ F/ 16V	0.1 $\mu$ F/ 50V (ceramic capacitor)	1.0nF/ 400Vac	SMBJ5.0A
APX05S0500WP-200	85-305 Vac input	470 $\mu$ F/16V (solid-state capacitor)		SMBJ7.0A			
APX05S0900WP-200	-25°C to 85°C with 10 $\mu$ F/450V	270 $\mu$ F/16V (solid-state capacitor)		SMBJ12A			
APX05S1200WP-200	85-305 Vac input, or -40°C to 85°C with 165-305 Vac input			SMBJ20A			
APX05S1500WP-200		220 $\mu$ F/35V		47 $\mu$ F/ 35V			SMBJ20A
APX05S2400WP-200							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-200	3.3Vdc	1000mA
APX05S0500WP-200	5Vdc	1000mA
APX05S0900WP-200	9Vdc	560mA
APX05S1200WP-200	12Vdc	420mA
APX05S1500WP-200	15Vdc	340mA
APX05S2400WP-200	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.

## ZETTLER GROUP

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