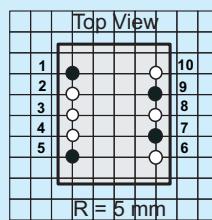
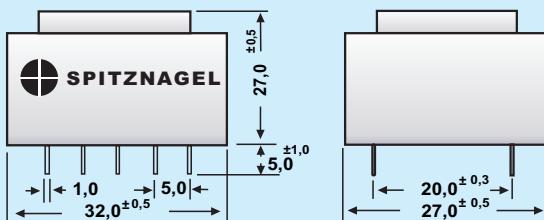


Schaltnetzteil SPN 002.....

Nennleistung 2 W

- AC/DC-Printmodul
- Universaleingang
85 - 265 VAC(47 - 440 Hz) oder 115 - 375 VDC
- Wirkungsgrad bis 80 %
- Leerlaufverluste <160 mW
- konform IEC62301 und EuP 2005/32/EC
- Kurzschluss-, Überlast-, Temperaturschutz
- Arbeits-/Lagertemperatur: -25°C bis +85°C
- Arbeits-/Lagerfeuchtigkeit: 95% o. Kond.

- AC/DC-module for PCB-mounting
- Universal input
85 - 265 VAC(47 - 440 Hz) oder 115 - 375 VDC
- Efficiency up to 80 %
- No load power consumption <160 mW
- compliant IEC62301 and EuP 2005/32/EC
- Shortcircuit-, overload-, temperature-protection
- Working-/Storage Temperature: -25°C bis +85°C
- Working-/Storage- Humidity: 95% non condensing



Pin	Description
1	Input AC (L) / DC
5	Input AC (N) / DC
7	Output V-
9	Output V+

Part No:	SPN00203	SPN00205	SPN00209	SPN00212	SPN00215	SPN00224
Output	Dc Voltage	3,3 V	5 V	9 V	12 V	15 V
	Current Range	0-650 mA	0-400 mA	0-250 mA	0-200 mA	0-150 mA
	Peak Current	750 mA	600 mA	450 mA	300 mA	250 mA
	Rated Power	2,1 W	2,0 W	2,3 W	2,4 W	2,3 W
	Ripple & Noise	90 mV	90 mV	80 mV	80 mV	100 mV
	Voltage Tolerance	+/- 2%				
	Load Regulation	+/- 1%				
	Setup, Rise Time	10 ms	10 ms	10 ms	15 ms	20 ms
Input	Hold Up Time	10 ms	15 ms	20 ms	25 ms	30 ms
	Voltage Range	85 - 265 VAC / 115 - 375 VDC				
	Frequency	47 - 440 Hz				
	Efficiency (Typ)	58%	67%	76%	76%	77%
	Ac Current (Typ)	<40 mA / 230V				
	No Load Power	<110 mW	<156 mW	<95 mW	<96 mW	<110 mW
Protection	Inrush Current (Typ)	COLD START <15 A / 230 VAC				
	Over Current	<800 mA	<650 mA	<500 mA	<350 mA	<280 mA
	Over Temperature	Thermal shutdown 142°C				
Environment	Temperature	Working and storage: -25°C To +85°C				
	Humidity	Working and storage 95% rel humidity without condensation				
Safety & Emc	Safety Standards	EN60950, EN60335, EN61558-2-16				
	Withstand Voltage	Input / Output 4 kV/AC				
	Insulation Res.	Input / Output 100 mOhm /500 VDC				
	EMC / EMI	EN55014-1, EN55014-2,EN55022 CLASS B (CISPR22)				
	Harmonic Current	EN61000-3-2,3				
	EMS Immunity	EN61000-4-2,3,4,5,6,8,11				
Note	1. Parameters not specially mentioned are measured at 230 VAC input, rated load and 25°C of ambient temperature. 2. The SPN can NOT deliver permanent over current, it would cause damages to the SPN. 3. Ripple and noise are measured with 1uF electrolytic and 0,1 uF ceramic capacitor.					

