



Datasheet

RS PRO 1W Embedded Switch Mode Power Supply SMPS

Stock No: 1813233,1813252



ENGLISH

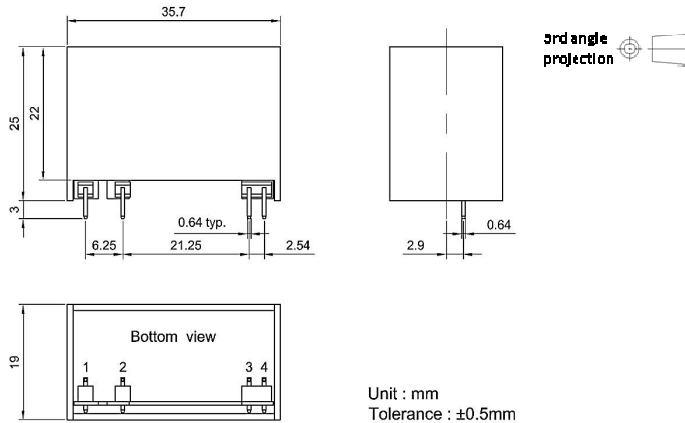
Features :

- Universal Full Input 90-264VAC or 120-370VDC
- 1 Watt Power
- Short Circuit Protect Function
- No Load Power Consumption 30mW typ.
- 3KVAC Isolation
- Operating Temperature Range From -25°C to +85°C

SPECIFICATION

ORDER NO.	A1D-AC3.3	A1D-AC05	A1D-AC09	A1D-AC12	A1D-AC15	A1D-AC24		
OUTPUT	Output Current	300mA	200mA	111mA	83mA	67mA	42mA	
	Output Voltage	3.3Vdc	5Vdc	9Vdc	12Vdc	15Vdc	24Vdc	
	Output Voltage Tolerance (NOTE.2)	±6% Max.						
	Line Regulation	±2% Max.						
	Load Regulation (2~100%Load)	±6% Typ.						
	Leakage Current	0.25mA max.						
	Efficiency	65%	68%	70%	72%	72%	73%	
	Ripple & Noise (NOTE.3) (Max.)	150mVp-p	100mVp-p					
	Switching Frequency	55KHz Typ.						
	Short-Circuit Protection	Hiccup mode, Automatics Recovery						
	Minimum Load	2%						
	Hold-up Time	20ms Min. : 115Vac/ 100% load; 120ms Min. : 230Vac/ 100% load						
	Capacitive Load (NOTE.4)	1500uF	1000uF	180uF	100uF	82uF	47uF	
INPUT	Input Voltage Range	90-264VAC or 120-370VDC						
	Input Frequency	47-440Hz						
	Inrush Current (<0.5ms)	115VAC: 30A / 230VAC: 60A						
	No Load Power Consumption	30mW typ.						
ENVIRONMENT	Operating Temperature	-25 ~ +85°C (Refer to derating curve)						
	Storage Temperature	-40°C ~ +100°C						
	Humidity	95% RH Max.						
GENERAL	Dimensions	35.7 x 19 x 25mm (L*W*H)						
	Case Material	UL94V-0						
	Package Weight	27.5g Typ.						
	Potting Material	Silicone						
	Isolation Voltage	3KV ac/1minute						
	Isolation Resistance	1GΩ Min.						
	MTBF (NOTE.5)	2.0*10 ⁶ Hrs.						
	Isolation Resistance	1GΩ Min.						
	CE Certification	meet EN 55022: 2006+A1: 2007/ Class B / EN55024: 1998+A1: 2001+A2: 2003						
	UL General Safety	meet UL-60950-1, 2nd edition						
EN General Safety	meet EN-60950-1, 2nd edition							
NOTE	<p>1.All specifications in this datasheet are measured at normal input and ambient temperature of 25°C.</p> <p>2.* The "output voltage tolerance" includes initial voltage accuracy, thermal drift, line regulation and load regulation at rated input voltage and load conditions</p> <p>3.Ripple & noise are measured 115/230Vac @ 20MHz limited, please check "Ripple & Noise measure method"</p> <p>4.Capacitive load mearsure @ 115Vac/ 60Hz constant resistant mode full load</p> <p>5.MTBF* are tested base on MIL-HDBK-217F</p> <p>6. Special input and output voltage combinations available by request, please check our sales.</p> <p>7.The product information and specifications are subject to change without prior notice.</p>							

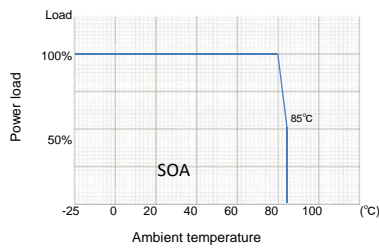
Mechanical Specification



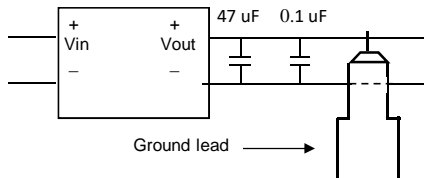
Pin Define

Pin #	
1	AC Vin (L)
2	AC Vin (N)
3	+DC Vout
4	-DC Vout

Derating Curve

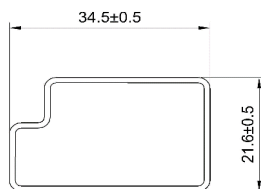


Ripple & Noise measure method



* "Ripple and Noise" is the maximum peak-to-peak voltage value measured at the output with a 20 MHz bandwidth, at rated line voltage at full load; And with a 47uF low-ESR electrolytic capacitor in parallel with a 0.1uF ceramic capacitor across the output.

Package



UNIT:mm
1 Tube = 13 pcs
Length:520±2mm