

2-4W Wide AC-DC Input PCB-Mount Power Supplies

Features

- ◆ 90 - 305VAC Input Voltage
- ◆ Class II (No ground needed)
- ◆ Wide Temperature Range (-40 to +80°C)
- ◆ Low off-load Power Draw
- ◆ High Efficiency



Key Market Segments & Applications



Specifications			
Model		KAS2	KAS4
Input Voltage Range	-	90-305VAC 47-63Hz or 120-430VDC*	90-305VAC 47-440Hz or 120-430VDC*
Inrush Current Limiting (115 / 230VAC) (1)	A	30 / 50A	15 / 25A
Input Current (115 / 230VAC)	mA	75 / 55mA	110 / 70mA
Off-load Power Draw	W	<0.3W	
Recommended External Fuse	-	3.15 A slow blow type	
Temperature Coefficient	-	±0.02%/°C	
Voltage Set Accuracy	%	±6%	±2%
Minimum Load	-	None	
Overcurrent Protection	-	Hiccup mode, automatic recovery	
Overvoltage Protection	%	No	
Hold-up Time (115 / 230VAC)	ms	>15ms	
Leakage Current (Touch)	mA	<0.25mA at <240VAC	
Operating Temperature	-	-40°C to +80°C, derate linearly to 40% load from 60°C to 80°C	-40°C to +70°C, derate linearly to 40% load from 50°C to 70°C (2)
Storage Temperature	-	-40°C to +85°C	
Humidity	%RH	10% to 95% RH (non-condensing)	
Cooling	-	Convection	
Withstand Voltage	VAC	Input to output: 3kVAC	
Immunity	-	EN55024 (With external varistor L-N rated at 350Vrms maximum, 920V clamp, 0.6W minimum)	
Safety Agency Certification	-	UL/CSA/IEC/EN 60950-1, IEC/EN60335-1 (Designed to meet), CE Mark	
Conducted and Radiated EMI	-	EN55032 Class B	
Weight	g	19.9g	26g
Size (LxWxH)	in (mm)	1.12 x 1.02 x 0.67" 28.5 x 25.8 x 17.0 mm	1.46 x 1.08 x 0.69" 37.0 x 27.5 x 17.5 mm
Mounting & Case	-	PC board mountable. Resin case (UL 94V-0)	
MTBF (MIL-HDBK-217F)	hrs	>450,000 hours	
Warranty	yrs	3 years	

Notes

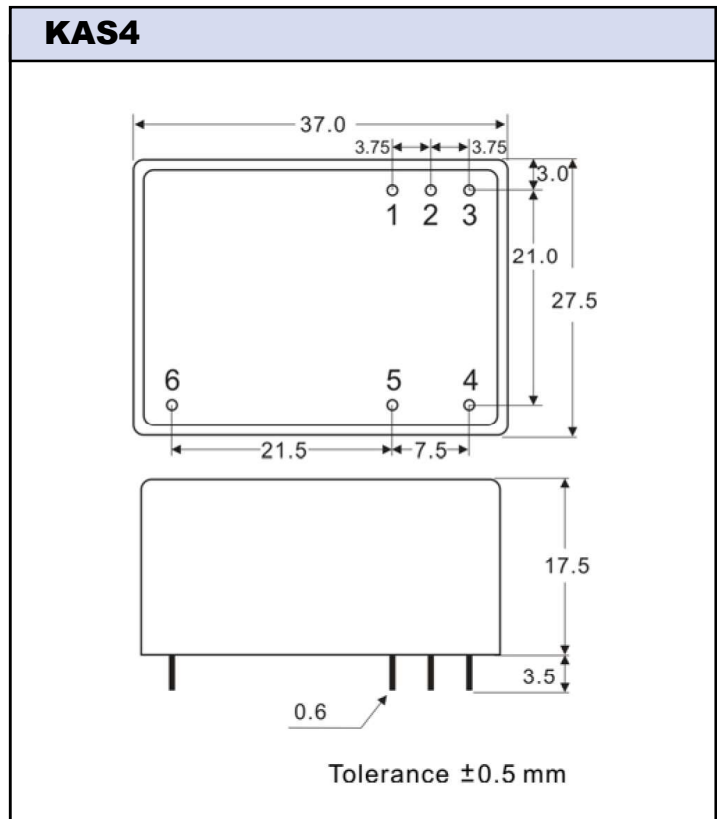
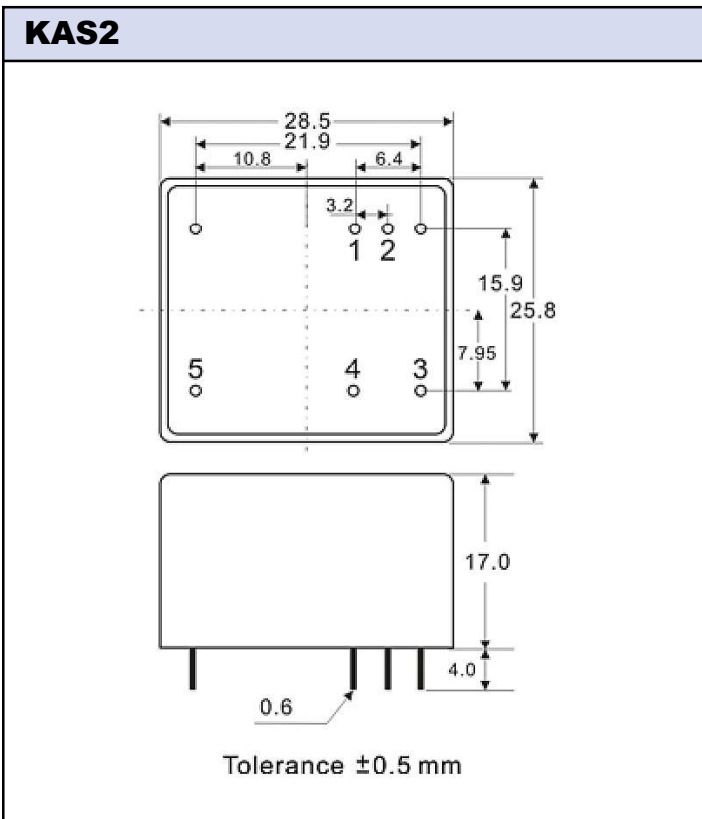
- (1) Cold start, 25°C ambient. Requires 10Ω 5A external NTC thermistor
 (2) Model dependent, see installation manual for details

* Safety certified for AC input, 47-63Hz only

Model Selector

Model	Output Voltage (V)	Maximum Current (A)	Power (W)	Output Ripple & Noise (mV)	Line Regulation (mV)	Load Regulation (typ) (3)	Efficiency (%)	Maximum Capacitive Load (μ F)
KAS2-3P3	V1 3.3V	0.6A	2W	300mV	\pm 165mV	\pm 198mV	66%	7000
KAS4-3P3	V1 3.3V	1.2A	4W	250mV	\pm 16.5mV	\pm 49.5mV	68%	5000
KAS2-5	V1 5V	0.4A	2W	300mV	\pm 250mV	\pm 300mV	70%	4000
KAS4-5	V1 5V	0.8A	4W	250mV	\pm 25mV	\pm 75mV	72%	4200
KAS4-8	V1 8V	0.5A	4W	200mV	\pm 40mV	\pm 120mV	74%	1470
KAS2-9	V1 9V	0.22A	2W	300mV	\pm 450mV	\pm 540mV	73%	1200
KAS4-9	V1 9V	0.444A	4W	200mV	\pm 45mV	\pm 135mV	75%	1330
KAS2-12	V1 12V	0.167A	2W	300mV	\pm 600mV	\pm 720mV	73%	500
KAS4-12	V1 12V	0.333A	4W	150mV	\pm 24mV	\pm 60mV	76%	680
KAS4-14	V1 14V	0.286A	4W	150mV	\pm 28mV	\pm 70mV	76%	470
KAS2-15	V1 15V	0.133A	2W	300mV	\pm 750mV	\pm 900mV	73%	350
KAS4-15	V1 15V	0.267A	4W	100mV	\pm 30mV	\pm 75mV	76%	330
KAS2-24	V1 24V	0.083A	2W	300mV	\pm 1200mV	\pm 1440mV	75%	110
KAS4-24	V1 24V	0.167A	4W	100mV	\pm 48mV	\pm 120mV	77%	120

Notes: (3) KAS2 10-100% load change



Pinout

PIN #	KAS2	KAS4
1	+Vout	+Vout
2	-Vout	-Vout
3	Neutral	Not connected
4	Line	Line
5	Not connected	Neutral
6	-	Not connected

For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

