

5 to 15W AC-DC Board Mount Power Supplies



- ◆ Low profile
- ◆ Smaller footprint
- ◆ PC board Mountable
- ◆ Low Cost
- ◆ UL Class II Approved

RoHS

Key Market Segments & Applications

Factory Automation
Printers and motor drives
Kiosks

Features and Benefits

Feature

- ◆ Smaller footprint
- ◆ Wide input range
- ◆ No external components needed
- ◆ Class II UL approved

Benefit

- ◆ Minimizes pcb space
- ◆ Global use with no manual intervention
- ◆ Easy to use
- ◆ No ground connection needed

Specifications

MODEL		KPSA-5	KPSA-10	KPSA-15
ITEMS				
Input Voltage range		85 - 264VAC (47 - 440Hz) or 110 - 370VDC		
Inrush Current	A	30A at 240VAC, cold start at 25°C		
Input Current (115/230VAC)	A	0.13 / 0.07	0.27 / 0.13	0.4 / 0.2
Leakage Current	mA	0.25mA maximum		
Temperature Coefficient		±0.05%/°C		
Voltage Accuracy		±1%		
Minimum Load	A	None		
Load Regulation		±1% (10% to 100% load)		
Line Regulation		±0.5% (100-240VAC line change)		
Ripple & Noise (1)	mV	1% or 50mV whichever is greater		
Short Circuit Protection	-	Continuous - hiccup mode		
Overvoltage Protection	V	130-150%, Zener clamp		
Efficiency (typical)	%	72%	75%	75%
Hold Up Time (Typ@115VAC input)	ms	8ms at full load		
LED Indicator		Green LED = OK		
Operating Temperature (2)		Convection cooling: 0 to +70°C, derating linearly to 25% load from 40 to 70°C		
Storage Temperature		-20 to +85°C		
Humidity (non condensing)		10 - 95% RH		
Cooling		Convection or forced air		
Withstand Voltage		Input to Output 3kVAC		
Vibration (non operating)		23.52m/s ² (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)		
Shock		< 196.1 m/s ² (20G)		
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, Class II, CE Mark		
Conducted & Radiated EMI		EN55022-B, FCC Class B		
Immunity		EN61000-4 -2, -3, -4, -5, -6		
Weight (Typ)	g(oz)	29g (1oz)	60g (2oz)	80g (2.8oz)
Size (WxLxH; H above pcb)	in.	1.28 x 2.17 x 0.83	1.55 x 2.40 x 0.9	1.77 x 2.75 x 0.79
Warranty		One Year		

Notes:

(1) Measured with 0.1uF ceramic & 10uF electrolytic at 20MHz BW

(2) 20CFM forced air ratings:

KPSA5: 0 - 70°C full load

KPSA10: 0 - 70°C full load (3.3V & 5V models derate linearly to 80% load from 50 to 70°C)

KPSA15: 0 - 70°C derate linearly to 80% load from 50 to 70°C

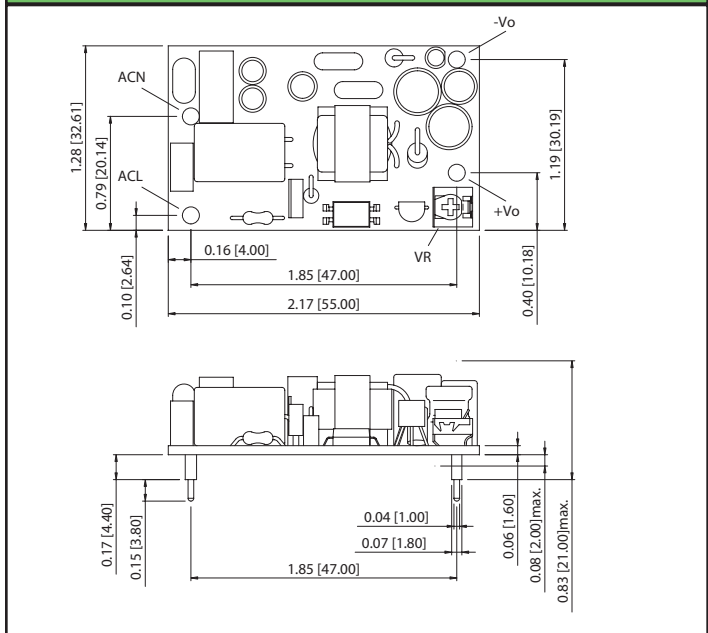
Model Selector

Model	Output Voltage (V)	Maximum Output (A)	Peak Load (A)(3)	Output Pwr (W)
KPSA5-3R3	3.3	1.25	-	4.1
KPSA5-5	5	1.0	-	5.0
KPSA5-12	12	0.42	-	5.0
KPSA5-15	15	0.33	-	5.0
KPSA5-24	24	0.23	-	5.5
KPSA10-3R3	3.3	2.5	3.8	8.3
KPSA10-5	5	2.0	2.8	10.0
KPSA10-12	12	0.84	1.2	10.1
KPSA10-15	15	0.67	1.0	10.1
KPSA10-24	24	0.42	0.65	10.1
KPSA15-3R3	3.3	3.0	4.5	9.9
KPSA15-5	5	3.0	4.5	15.0
KPSA15-12	12	1.25	1.8	15.0
KPSA15-15	15	1.0	1.5	15.0
KPSA15-24	24	0.63	0.95	15.1

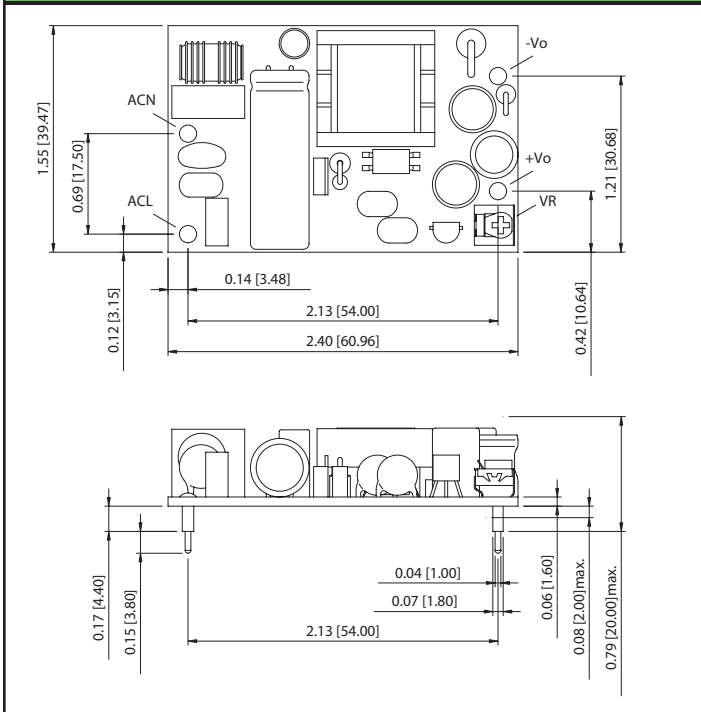
Notes

(3) Average not to exceed max power, <30s, 10% duty cycle

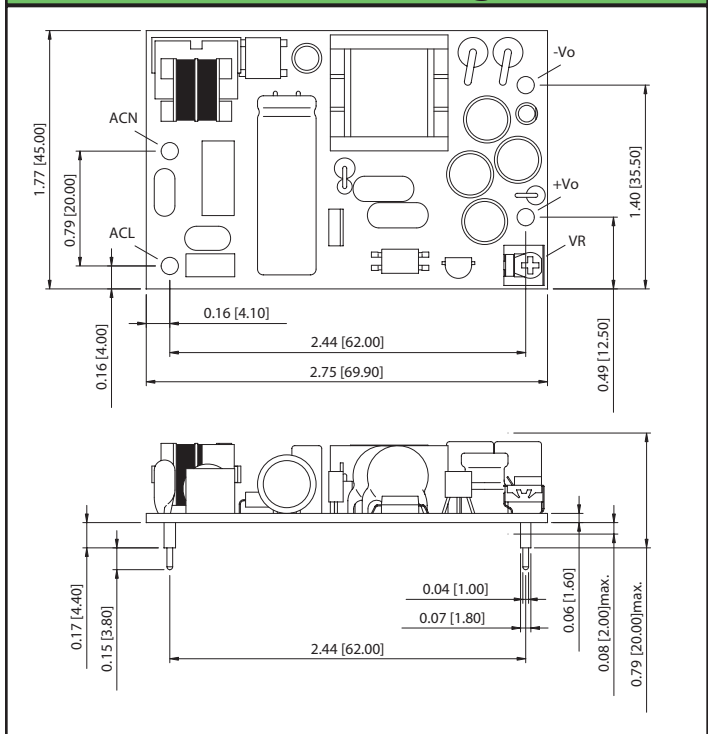
KPSA5 Outline Drawing



KPSA10 Outline Drawing



KPSA15 Outline Drawing



Other Industrial Products

ZPSA	20W to 60W
KM	15 to 40W pcb mount medical
ZWS	5 to 240W, single output

For Additional Information, please visit us.tdk-lambda.com/products/kps-series.htm