

Compact AC-DC PCB-Mount Power Supplies

RoHS



- ◆ Small size and lightweight
- ◆ PC Board Mountable
- ◆ -10 to +70 °C Continuous Operation
- ◆ 85 - 265VAC Wide Range Input
- ◆ World-wide Agency Approvals
UL, CSA, TUV and CE Mark
- ◆ Convection Cooled
- ◆ Low Noise Conducted EMI Class B

Features and Benefits

Feature

- ◆ Small size
- ◆ Wide input range
- ◆ No external components needed

Benefit

- ◆ Minimizes pcb space
- ◆ Global use with no manual intervention
- ◆ Easy to use

Specifications

MODEL		5V	12V	15V	±12V	±15V
ITEMS						
AC Input		85-265VAC 47-440Hz				
DC Input	VDC	110-340VDC				
Efficiency (typical)	%	73	76	76	73	73
Inrush Current Limiting (1)	A	5 & 10W: 15/30A, 15W: 20/40A				
Conducted EMI	-	FCC20780 class B, VDE0871 Class B, VCCI-2 (with external cap).				
Output Voltage Accuracy	%	± 5% (fixed)				
Line Regulation	%	0.4%				
Load Regulation	%	0.8%				
Ripple and Noise (pk-pk)	mV	120		150		
Hold-up Time (typical)	ms	17ms				
Overvoltage Protection (typical)	%	~110% (zener clamp)				
Overload Protection	-	~125% (avoid prolonged operation in overload)				
Cooling	-	Convection				
Operating Temperature	-	-10°C to 70°C, derate linearly to 25% load from 50°C to 70°C				
Humidity	%RH	20% to 90% RH (non-condensing)				
Isolation	VAC	Input to output: 3kVAC; Input to Case: 2kVAC; Output to Case: 500VAC				
Mounting	-	PC board mountable				
Safety Agency Approval	-	UL60950-1; CSA 22.2 No. 60950-1-03; EN60950-1 & CE Mark (LVD)				
Weight	g	5W: 75, 10W: 100, 15W: 150				
Warranty	-	1 year				

(1) 100/200VAC @ 25°C

Not recommended for new designs

Output Ratings

Model	Voltage (V)	Power (W)	Current (A)
Single Output			
KWS5-5	5V	5	1.00
KWS10-5	5V	10	2.00
KWS15-5	5V	15	3.00
KWS5-12	12V	5	0.45
KWS10-12	12V	10	0.90
KWS15-12	12V	15	1.30
KWS5-15	15V	5	0.35
KWS10-15	15V	10	0.70
KWS15-15	15V	15	1.00
Dual Output			
KWD5-1212	±12V	5	±0.22
KWD10-1212	±12V	10	±0.45
KWD15-1212	±12V	15	±0.65
KWD5-1515	±15V	5	±0.18
KWD10-1515	±15V	10	±0.36
KWD15-1515	±15V	15	±0.52

PIN Out Table

PIN	Function
FG	Case (Frame Ground)
AC(N)	AC Neutral
AC(L)	AC Line
-V	Negative Voltage Out
+V	Positive Voltage Out
COM	Output common

Other Industrial Products

KPSA	5 to 15W Open frame PCB mount single output
HWS	15 to 1800W Single output
ZWS	5 to 240W Single output, universal input
KM	15 to 40W, Single, dual & triple outputs

KW Outline Drawing

DIMENSIONS:

MODEL	A	B	C	D	E	F
KWS5	.807 (20.5)	1.77 (45.0)	.787 (20.0)	2.16 (55.0)	1.850 (47.0)	.688 (17.5)
KWS10	.807 (20.5)	1.77 (45.0)	.787 (20.0)	2.52 (64.0)	2.125 (54.0)	.688 (17.5)
KWS15	.925 (23.5)	1.889 (48.0)	.905 (23.0)	2.75 (70.0)	2.440 (62.0)	.787 (20.0)
KWD5	.807 (20.5)	1.77 (45.0)	.393 (10.0)	2.16 (55.0)	1.850 (47.0)	.688 (17.5)
KWD10	.807 (20.5)	1.77 (45.0)	.393 (10.0)	2.52 (64.0)	2.125 (54.0)	.688 (17.5)
KWD15	.925 (23.5)	1.889 (48.0)	.453 (11.5)	2.75 (70.0)	2.440 (62.0)	.787 (20.0)

WEIGHT:

MODEL	GRAMS
KWS5	75
KWS10	100
KWS15	150
KWD5	75
KWD10	100
KWD15	150

NOTE:
 1. DIMENSIONS ARE IN INCHES EXCEPT DIMENSIONS () ARE IN MM.
 2. PIN: 5x .039 (1.0).

KWD5/KWD10/KWD15
KWS5/KWS10/KWS15

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

Not recommended for new designs