

- Efficiency up to 76%
- Universal Input Range 85-264 VAC
- Single and Dual Output
- 3000VAC Isolation
- Short Circuit Protection
- MTBF > 500,000 Hours
- UL60950 Approved
- RoHS Compliant



## 2 Watt PK2 AC/DC Module Single & Dual Output Series

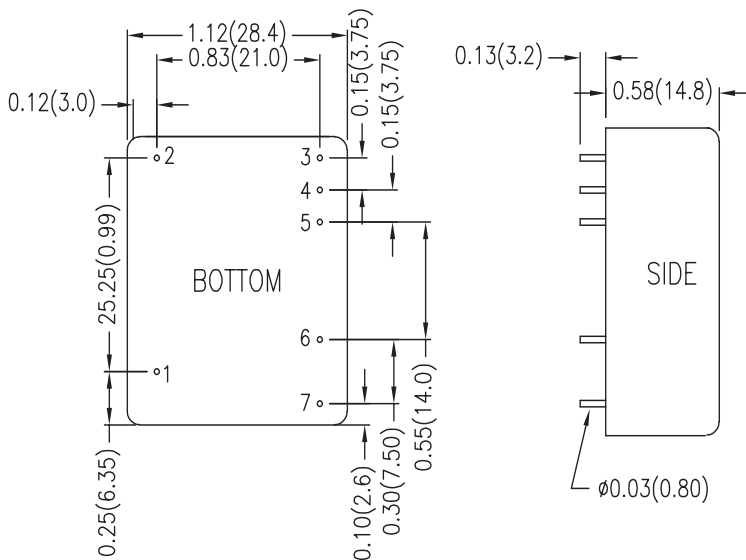


Model Number	Input Current @ Max Load mA (Typ)	Output 1		Output 2		Efficiency
		Voltage VDC	Current Max (mA)	Voltage VDC	Current Max (mA)	
PK2J85S8	42	8	250			72
PK2J85S14	40	14	143			74
PK2J85S24	39	24	83			76
PK2J85D83*	43	8	$I_{O1} + I_{O2} \leq 250\text{mA}$	3.3	160	69
PK2J85D85*	43	8	$I_{O1} + I_{O2} \leq 250\text{mA}$	5	250	69
PK2J85D143*	43	14	$I_{O1} + I_{O2} \leq 143\text{mA}$	3.3	70	70
PK2J85D145*	43	14	$I_{O1} + I_{O2} \leq 143\text{mA}$	5	83	70

\* Output Power (Po) for dual-output modules:  $P_o = V_{O1} \times (I_{O1} + I_{O2})$

Dimensions are inches (mm) unless noted

Tolerance: Inches	Millimeters
±0.01	±0.5
Pin ±0.004	±0.1



Pin Connections (NC) Not Connected		
Pin	Single	Dual
1		NC
2		NC
3	+Vout	+Vout1
4	-Vout	Common
5	NP	+Vout2
6	AC(N) - AC Neutral	
7	AC(L) - AC LINE	

# 2 Watt PK2

See Model Selection Table for Model Specific Parameters

Input Parameters	Min	Typ	Max	Units
Input Voltage Range	85		264	VAC
	120		370	VDC
Input Frequency	47		440	Hz
Switching Frequency		45		kHz
No Load Power Consumption		30		mW
Input Surge Voltage			308	VAC
Conducted EMI	Meets EN5502, Class B, FCC part 15, Class B. and EN55014-1			
Output Parameters	Min	Typ	Max	Units
Output Voltage Accuracy Vin 115 VAC, Full Load			±5.0	%
	Output 1		±2.0	
Load Regulation Io = 10% to 100%		±1.0		%
	Output 2	±0.5		
Line Regulation Vin=85-264VAC.		±1.0		%
	Output 2	±0.3		
Ripple & Noise (20MHz)		1		VP-P
	Output 2	0.1		
Short Circuit Protection	Continuous			
General Specifications	Min	Typ	Max	Units
Isolation Voltage, 60 seconds	3000			VAC
Operating Temperature (Ambient)	-30		+70	°C
Storage Temperature	-40		+85	°C
Humidity			95	%
MTBF MIL-HDBK-217F @25°C, Ground Benign	500			K Hours
Cooling	Free-Air Convection			
Case Size	1.35 x 1.12 x 0.58inches 34.2 x 28.4 x 14.8 mm			
Case Material	Plastic Resin + Fiberglass (UL94V-0)			
Weight	24g			
Agency Approvals	UL60950 Approved			

Notes:

- Specifications typical at Ta=+25°C, 115VAC, 60Hz input voltage, rated output current unless otherwise noted.
- ConTech power converters require a minimum output loading (10% full rated load) to maintain specified regulation. Operation under no-load conditions will not damage these modules; however, they may not meet all specifications listed.
- The series has a limitation of a maximum connected capacitance at the output. The power module may be operated in current limiting mode during start-up, affecting the ramp-up and the startup time.
- Ripple & Noise measurement bandwidth is 0-20MHz.
- Recommended to protect the converter with a slow-blow fuse on the input supply line
- Long term short circuit operation may cause damage to the unit.
- Water washability - ConTech AC/DC converters are designed to withstand most solder/wash processes. Careful attention should be used when assessing the applicability in your specific manufacturing process. Converters are not hermetically sealed.
- See ConTech website for Definition of Terms, Application Notes, and Test Setups and Parameters. [www.ConTech-us.com/appnotes.html](http://www.ConTech-us.com/appnotes.html).
- Specifications subject to change without notice.
- See ConTech website [www.ConTech-us.com/pdf/rohs.pdf](http://www.ConTech-us.com/pdf/rohs.pdf) for RoHS Statement.

## Constant Power Curve

