

# APC18

75 Watts

## **Data Sheet**

**Total Power:** 75 Watts **Input Voltages:** 10.0 - 14.0 V **# of Outputs:** Single

## **SPECIAL FEATURES**

- Point-of-load (POL) applications)
- High current slew rate at 2.5 A / μS¹
- Open frame SMT
- High efficiency, 3.3 V @ 92% typical
- Adjustable output through external resistor programming
- -40 °C to +85 °C ambient operating temperature
- UVLO protection
- Positive Enable function
- Low output ripple and noise
- Regulation to zero load

## **SAFETY**

- UL/cUL 60950 Recognized
- TÜV EN60950 Licensed



Electrical Specifications					
Input					
Input voltage range	10.0 = 14.0 V				
Input surge	15 V				
Efficiency	3.3 V @ 92% typical				
Control					
Enable	TTL compatible (positive enable				
Output					
Regulation (line, Load, Temp)	<3%				
Load current	18 A max				
Ripple and noise <sup>1</sup>	50 mV				
Output adjust range	0.75 V - 5.5 V				
Current slew rate	up to 2.5 A / µS				
Transient response <sup>1</sup>	3% typical deviation (for 5 Vo) for 50% to 75% step load 200 µS recovery				
Remote sense	10% of Vo				
Turn on input voltage	10 V (typical)				
UVLO hysteresis	1 V (typical)				
OCP/OTP	Hiccup - auto recovery				
Isolation	Non-isolated module				



Environmental Specifications		
Operating temperature	-40 °C to +85 °C	
Storage temperature	-40 °C to +125 °C	
MTBF	1 million hours	

In the Line Spin

Ordering Information						
Model Number	Input Voltage	Output Voltage	Output Current	Efficiency (Typical)		
APC18T12-9(J)L	10.0 - 14.0 V	0.75 - 5.50 Vdc	18 A	92%		

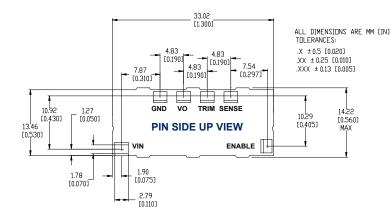
Note:

18 A max output current with total output power limited to 75 W - minimal output derating required

Typical efficiency for  $3.3\,\mathrm{V}$  output; full load; noiminal inut voltage;  $200\,\mathrm{LFM}$  at  $\mathrm{Ta} = 25\,\mathrm{^{\circ}C}$ 

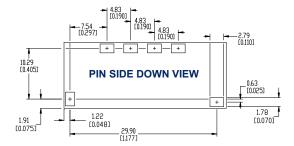
Suffix "J" designates tray packaging, non "J" is tape and reel

# **Mechanical Drawings**



### **Recommended PAD Layout**

MIN: 1.6 x 2.8 mm [0.065 x 0.110 inches] REC: 1.8 x 2.8 mm [0.070 x 0.110 inches] MAX: 2.0 x 3.0 mm [0.080 x 0.130 inches]



# Notes:

- 1. 200 uF and 2x 150uF input and output capacitance required.
- 2. All specifications are typical at nominal line, full load and 25°C ambient temperature unless otherwise noted.
- All specifications subject to change without notice. Mechanical drawings are for 3 reference only.
- 4. Technical Reference Notes should be consulted for detailed information
- 5. Warranty: One year

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