

# 60 Watts

## APA18 (18 Amps)

Total Power: 60 Watts  
 Input Voltages: 3.0V to 5.5V  
 No. of Outputs: Single



### Special Features

- Point of load (POL) applications
- High Current slew rate at 2.5A/us<sup>1</sup>
- Open frame SIP
- High efficiency, 3.3V @ 95% (Typ)
- 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

### Environmental

Operating temperature  
 -40°C to +85°C (Ambient temperature)  
 Storage temperature: -40°C to +125°C  
 MTBF: >1 million hours

### Safety

UL, cUL 609500 Recognized (Pending)  
 TUV EN60950 Licensed (Pending)

### Electrical Specs

#### Input

Input range 3.0V to 5.5V  
 Efficiency 3.3V @ 95% (Typ)

#### Control

Enable TTL compatible (positive enable)

#### Output

Line Regulation <0.5%  
 Load Regulation  
 0.75Vo 10mV  
 0.75 < Vo < 3.3V 15mV  
 3.3V ≤ Vo 30mV  
 Load Current 18A max (Po ≤ 60W)  
 Ripple and noise 50mV<sub>p-p</sub>  
 Output Adjust Range 0.75V - 3.3V  
 Current Slew Rate up to 2.5A/μS  
 Transient Response<sup>1</sup> 300mV typical deviation (3.3V<sub>o</sub>)  
 for 50% to 100% step load  
 100 μS recovery  
 Remote Sense 10% of Vo  
 Turn On Input Voltage 3.0V (Typical)  
 OCP/OTP Hiccup - auto recovery  
 Isolation Non-Isolated module

Specifications subject to change without notice.

Note: 1. with output capacitor of 100uF Tantalum + 1 uF Ceramic cap



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## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency Full Load (Typ)	Model Number
3.0V - 5.5V	0.75 to 3.6V	18A	95%	APA18T04-9
3.0V - 5.5V	0.75 to 3.6V	18A	95%	APA18T04-9H

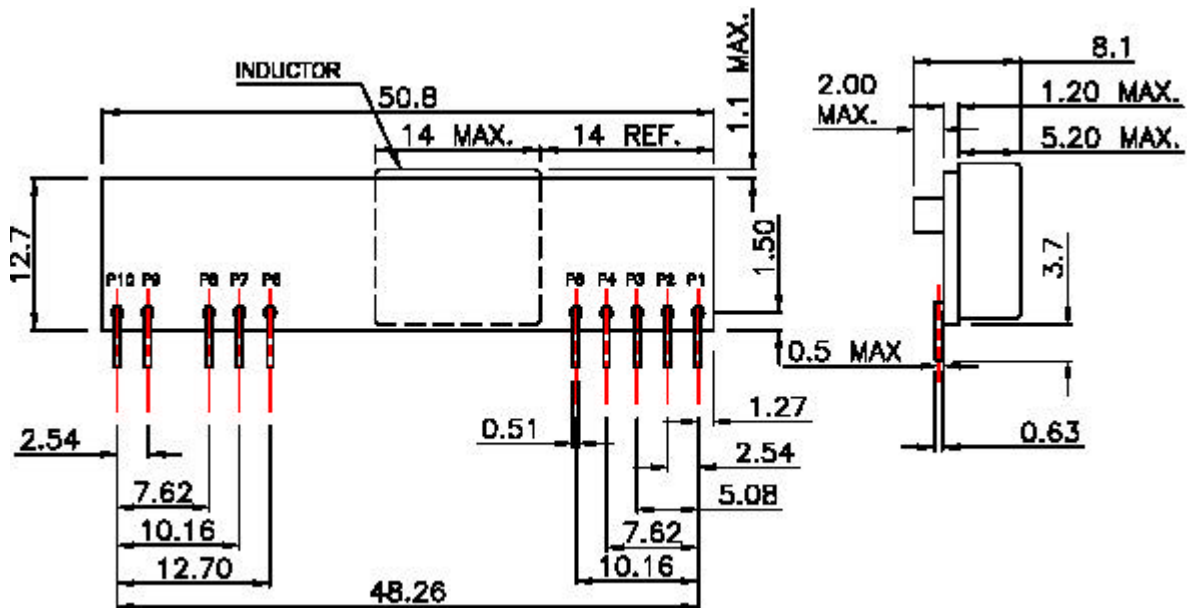
**Note:**

- 18A max output current with total output power limited to 60W - minimal output derating required
- Typical Efficiency for 3.3V output; full load; nominal input voltage; 200LFM at  $T_A=25^\circ\text{C}$
- Suffix "H" for Horizontal pins

## Pin Assignment

**Notes:**

1. All specifications are typical at nominal line, full load and 25°C ambient temperature unless otherwise noted.
2. All specifications subject to change without notice. Mechanical drawings are for reference only
3. Technical Reference Notes should be consulted for detailed information
4. Warranty: 1yr



**Mechanical Dimensions - Vertical type**

\* Astec reserves the right to make changes to the information contained herein without notice and assumes no liability as a result of its use or application. (REV B: August, 2005)

