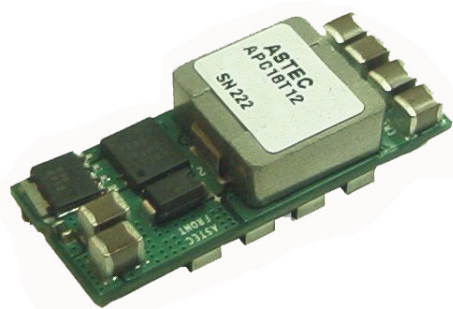


75 Watts

APC18 (18 Amps)



Total Power: 75 Watts
 Input Voltages: 10.0V to 14.0 V
 No. of Outputs: Single

Electrical Specs

Input

Input range 10.0V to 14.0V
 Input Surge 15V
 Efficiency 3.3V @ 92% (Typ)

Control

Enable TTL compatible
 (positive enable)

Output

Regulation (Line, Load, Temp) <3%
 Load Current 18A max
 Ripple and noise¹ 50mV
 Output Adjust Range 0.75V - 5.5V
 Current Slew Rate up to 2.5A/μS
 Transient Response¹ 3% typical deviation (for 5V_O)
 for 50% to 75% step load
 200 μS recovery
 Remote Sense 10% of V_O
 Turn On Input Voltage 10V (Typical)
 UVLO Hysteresis 1V (Typical)
 OCP/OTP Hiccup - auto recovery
 Isolation Non-Isolated module

Specifications subject to change without notice.

Special Features

- Point of load (POL) applications
- High Current slew rate at 2.5A/μs¹
- Open frame SMT
- High efficiency, 3.3V @ 92% (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
 Storage temperature: -40°C to +125°C
 MTBF: >1 million hours

Safety

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

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Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency Full Load (Typ)	Model Number
10.0V - 14.0V	0.75 to 5.50V	18A	92%	APC18T12-9(J)

Note:

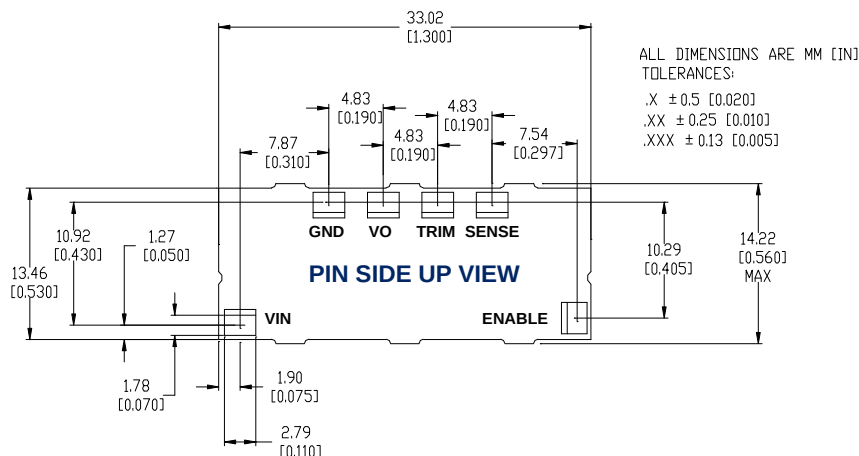
- 18A max output current with total output power limited to 75W - minimal output derating required
- Typical Efficiency for 3.3V output; full load; nominal input voltage; 200LFM at $T_A=25^\circ\text{C}$
- Suffix "J" designates tray packaging, non "J" is T&R

Pin Assignment

Notes:

1. 200uF 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.
3. All specifications subject to change without notice. Mechanical drawings are for reference only
4. Technical Reference Notes should be consulted for detailed information
5. Warranty: 1yr

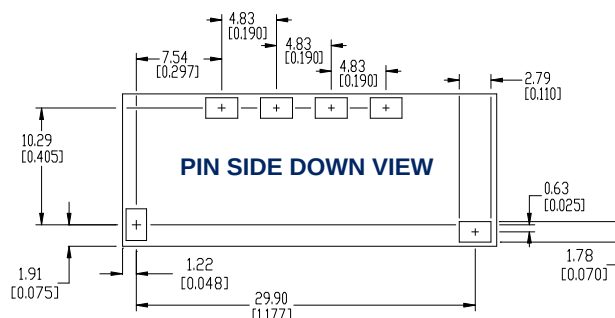
Mechanical Dimensions



Recommended PAD Layout

PAD Size

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]



* 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 C: JUN 2, 2004)