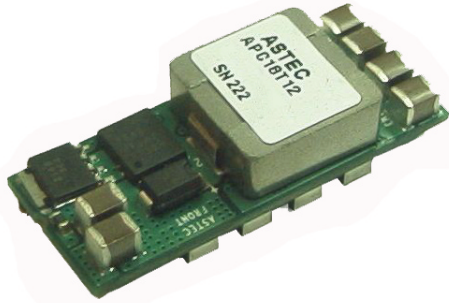


75 Watts

APC18 (18 Amps)

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



Special Features

- Point of load (POL) applications
- High Current slew rate at 2.5A/us¹
- 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)

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.

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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:

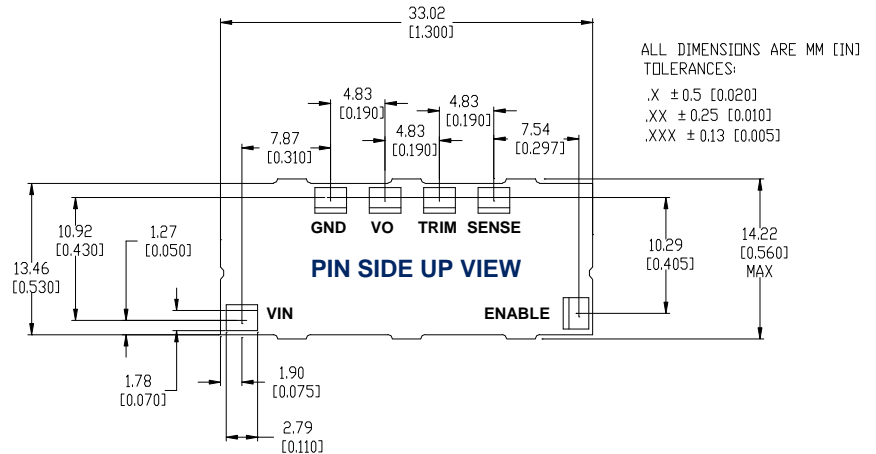
- 18A max output current with total output power limited to 75W - minimal output derating required
- Typical Efficiency for 3.3V output; full load; nominal input voltage; 200LFM at T_A=25 °C
- Suffix "J" designates tray packaging, non "J" is T&R

Pin Assignment

Notes:

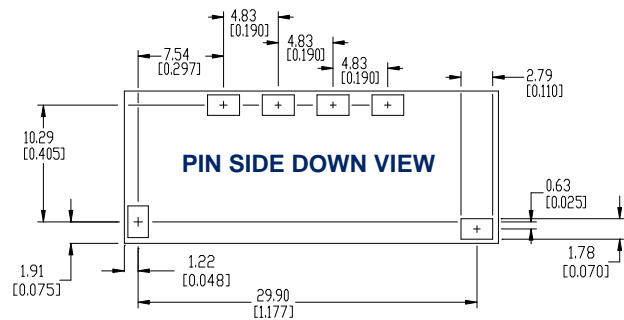
- 200uF and 2x 150uF input and output capacitance required.
- All specifications are typical at nominal line, full load and 25°C ambient temperature unless otherwise noted.
- All specifications subject to change without notice. Mechanical drawings are for reference only
- Technical Reference Notes should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