



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

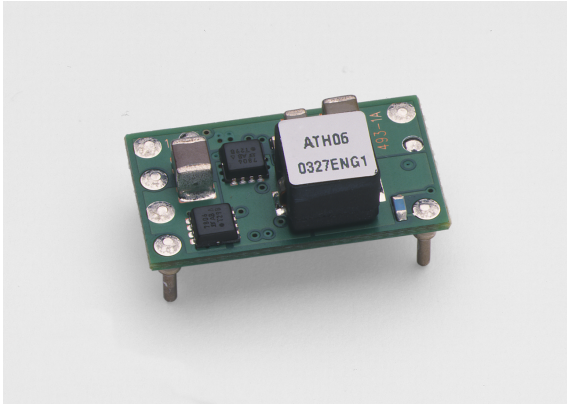


# 6Amps ATH06

Total Power: 33W  
 Input Voltages: 3.3V, 5V, 12V  
 No. of Outputs: Single



PRELIMINARY



## Special Features

- Point-of-Load Alliance product
- Open frame TH or SMT termination
- Auto-Track™ Sequencing
- Output Voltage Adjust (Resistor Programming)
- Under Voltage Lockout
- Pre-Biased start-up<sup>2</sup>
- Output On/Off Inhibit
- -40°C to +85°C Ambient Air Operation
- Non Isolated module

## Environmental

Ambient air operating temperature range:  
 -40°C to +85°C

Storage temperature: -40°C to +125°C

Calculated MTBF: > TBA

## Safety

UL,cUL 60950 Recognition (Pending)

EN 60950 through TUV or VDE (Pending)

## Electrical Specs

### Input

Input Range 3.0 - 3.6V  
 4.5 - 5.5V  
 10.8 - 13.2V

Under Voltage Lockout with hysteresis

Efficiency up to 95%

### Output

Overall Regulation 1% of Vo Typ

Noise/Ripple 30mV Typ (2.5Vo and below)

1% Vo Typ (Vo > 2.5V)

Remote sense Up to 300mV max

Transient Response 100mV typical for 3.3Vo  
 for 50% to 100% I<sub>O,MAX</sub> step change  
 70us recovery time (Co = 330uF)

Over Current Protection 160% I<sub>O,MAX</sub> typical (autorecovery)

### Control

Inhibit On/Off Positive Enable Logic

Output Voltage Adjust See output range on page 2

Output Margin ±5% V<sub>O,NOM</sub>

Output Auto-Track™ (See Note 5)

Specifications subject to change without notice



AMERICAS

5810 Van Allen Way  
 Carlsbad, CA 92008  
 Telephone: 760-930-4600  
 Facsimile: 760-930-0698

EUROPE

Astec House, Waterfront Business Park  
 Merry Hill, Dudley  
 West Midlands, DY5 1LX, UK  
 Telephone: 44 (1384) 842-211  
 Facsimile: 44 (1384) 843-355

ASIA

Units 2111-2116, Level 21  
 Tower 1, Metroplaza  
 223, Hing Fong Road  
 Fwai Fong, New Territories  
 Hong Kong  
 Telephone: 852-2437-9662  
 Facsimile: 852-2402-4426



## Ordering Information

Input Voltage	Output Voltage	Output <sup>3</sup> Current	Efficiency <sup>4</sup>	Model Number
3.0V to 3.6V	0.8V to 2.5V	6A	95%	ATH06T033-9(S)(J)
4.5V to 5.5V	0.8V to 3.6V	6A	95%	ATH06T05-9(S)(J)
10.8V to 13.2V	1.2V to 5.5V	6A	95%	ATH06K12-9(S)(J)

OPTIONS:

- "-9J" - Output Trim, TH termination, Tray Packaging
- "-9SJ" - Output Trim, SMT termination, Tray Packaging
- "-9S" - Output Trim, SMT Termination, T&R packaging

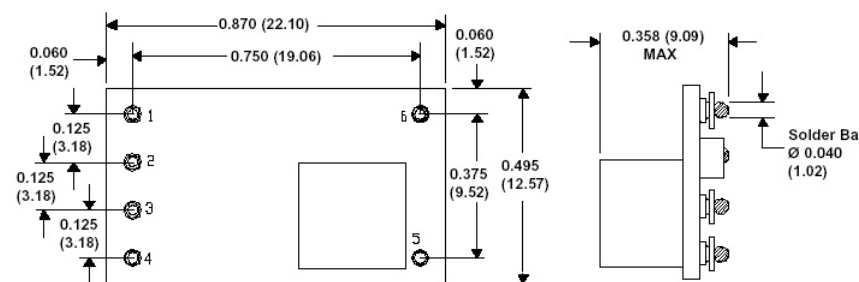
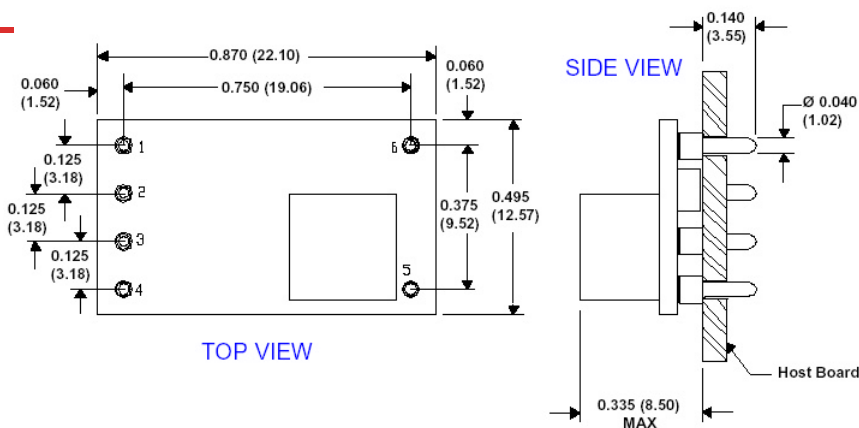
## Pin Assignments

### Single Output

	PINS
GND	: 1
Track	: 2
Vin	: 3
Inhibit	: 4
Vo Adjust	: 5
Vout	: 6

Notes:

- Nominal values apply with sense pins connected to +Vout and Ground Return with other control pins unconnected.
- Pre-Bias startup capability exists for 3.3Vin and 5Vin devices.
- Output derating applies at elevated ambient temperature.
- Typical efficiency taken at (TBA) load, 2.5V output (3.3Vin device); (TBA) load, 3.3V output (5Vin device); (TBA) load, 5V output (12Vin device).
- Consult the technical reference notes when available.
- Mechanical Dimensions are nominal values.
- Auto-Track™ is a trademark of Texas Instruments.
- Specification subject to change without notice.



Through-hole and SMT Outline [in (mm)]

\* This is a Preliminary Data Sheet. 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.  
 (REV01: JULY 31, 2003)