



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!



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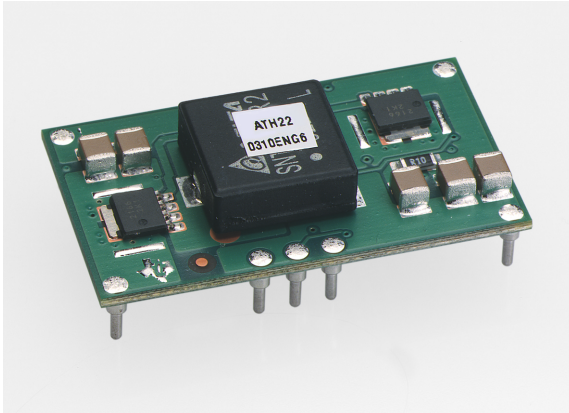
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



22Amps ATH22

PRELIMINARY

Total Power: 99W
 Input Voltages: 3.3V, 5V, 12V
 No. of Outputs: Single



Special Features

- Point-of-Load Alliance product
- Open frame TH or SMT termination
- Auto-Track™ Sequencing
- Margin Up/Down Controls
- Remote sense compensation
- Output Voltage Adjust (Resistor Programming)
- Under Voltage Lockout
- Pre-Biased start-up²
- 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: > 4.9M hours

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 96%

Output

Overall Regulation 1% of V_o Typ

Noise/Ripple 32mV Typ (2.5 V_o and below)

1% V_o Typ ($V_o > 2.5V$)

Remote sense Up to 300mV max

Transient Response 130mV typical for 3.3 V_o
 for 50% to 100% $I_{O,MAX}$ step change

70us recovery time ($C_o = 330\mu F$)

Over Current Protection 175% $I_{O,MAX}$ typical (autorecovery)

Control

Inhibit On/Off Positive Enable Logic

Output Voltage Adjust See output range on page 2

Output Margin $\pm 5\% V_{O,NOM}$

Output Auto-Track™ (See Note 5)

Specifications subject to change without notice

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Ordering Information

Input Voltage	Output Voltage	Output ³ Current	Efficiency ⁴	Model Number
3.0V to 3.6V	0.8V to 2.5V	22A	95%	ATH22T033-9(S)(J)
4.5V to 5.5V	0.8V to 3.6V	22A	96%	ATH22T05-9(S)(J)
10.8V to 13.2V	1.2V to 5.5V	18A	95%	ATH18K12-9(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

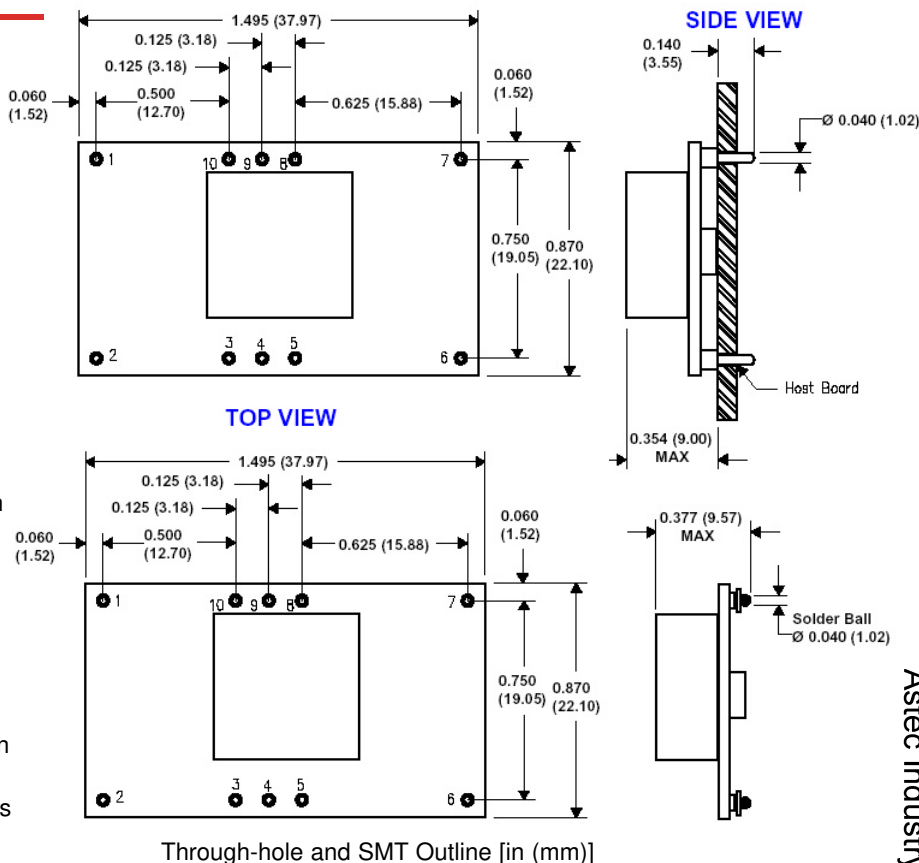
Pin Assignments

Single Output

	PINS
GND	: 1
Vin	: 2
Inhibit	: 3
Vo Adjust	: 4
Vo Sense	: 5
Vout	: 6
GND	: 7
Track	: 8
Margin Down	: 9
Margin Up	: 10

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 10A load, 2.5V output (3.3Vin device); 10A load, 3.3V output (5Vin device); 10A 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.



* 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)