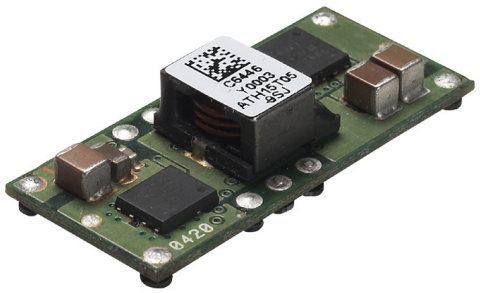
Astec Industry Standard

15Amps
ATH15

Total Power:	66W
Input Voltages:	3.3V, 5V, 12V
No. of Outputs:	Single

POLA Point-of-Load Alliance



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-up[2]
- 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

Demonstrated MTBF: 2.9M Hrs

Safety

UL, cUL 60950 Recognition

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 hysterisis	
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% $I_{O,MAX}$ step change 70us recovery time (Co = 330uF)
Over Current Protection	175% $I_{O,MAX}$ typical (autorecovery)

Control

Inhibit Control	Negative Logic (OPEN = Normal Operation) (GROUND = Function Active)
Output Voltage Adjust	See output range on page 2
Output Margin	±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	15A	93%	ATH15T033 - 9(S)(J)
4.5V to 5.5V	0.8V to 3.6V	15A	95%	ATH15T05 - 9(S)(J)
10.8V to 13.2V	1.2V to 5.5V	12A	94%	ATH12K12 - 9(S)(J)

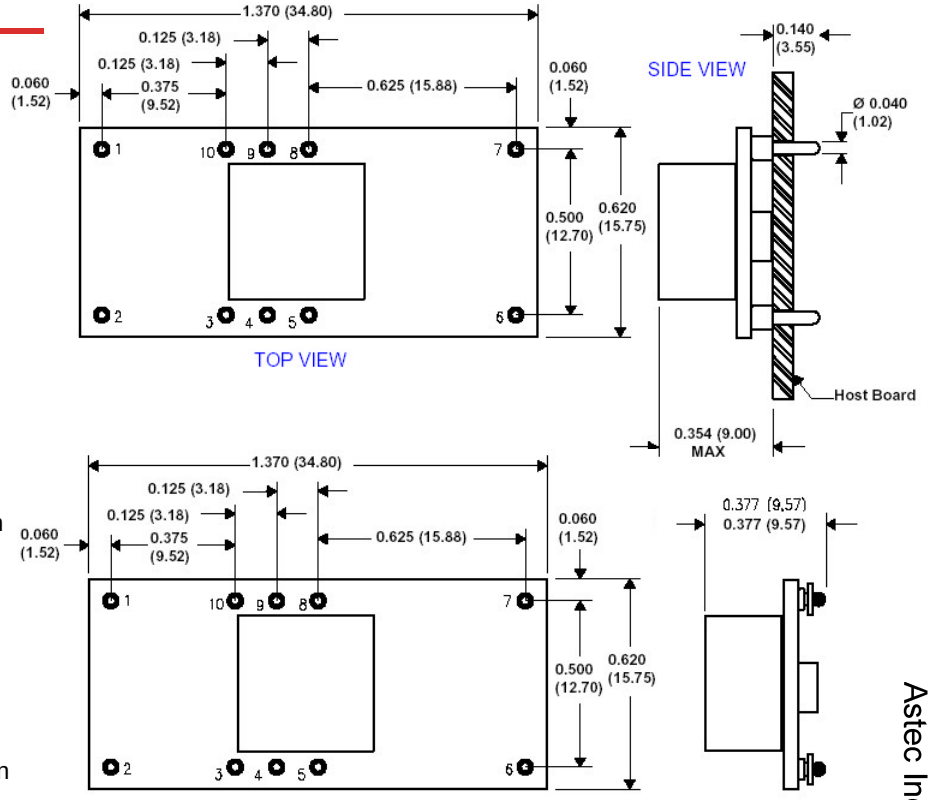
OPTIONS:

"-9J" - Output Trim, TH termination, Tray Packaging
"-9SJ" - Output Trim, SMT termination, Tray Packaging
"-9S" - Output Trim, SMT Ternination, 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



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

Notes:

1. Nominal values apply with sense pins connected to +Vout and Ground Return with other control pins unconnected.
2. Pre-Bias startup capability exists for 3.3Vin and 5Vin devices.
3. Output derating applies at elevated ambient temperature.
4. Typical efficiency taken at 10A load, 2.5V output (3.3Vin device); 10A load, 3.3V output (5Vin device); 8A load, 5V output (12Vin device).
5. Consult the technical reference notes when available.
6. Mechanical Dimensions are nominal values.
7. Auto-Track™ is a trademark of Texas Instruments.
8. Specification subject to change without notice.

* 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. (REV03: OCTOBER 21, 2004)

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