

# AA25D, AA25E, and AA13A

## AA25D, AA25E and AA13A Series

Total Power	25 Watts / 12.5 Watts
Input Voltages	5V
# of Outputs	Single



### SPECIAL FEATURES

- Six sided shielding
- Efficiency to 86% typical
- Fixed frequency switching
- 5 year warranty

### ENVIRONMENTAL

Operating ambient temperature range:  
-40°C to +60°C

Baseplate: 95°C max

Storage Temperature: -40°C to +105°C

Humidity (non condensing): 5% to 95%

MTBF: 512,000 hours (MIL HDBK-217)

### SAFETY

UL 1950 Recognition pending

AA13A

AA25D

AA25E

### ELECTRICAL SPECIFICATIONS

#### Input

Input range ..... 4.5 - 5.5 VDC

Input capacitance ..... AA25D/E 300µF; AA13A 200µF

Efficiency F.L. .... 86% (typical)

#### Output

Output voltage ..... 3.3V nominal

Voltage tolerance ..... ±1.0% max

Line regulation (@FL) ..... ±0.5%

Load regulation ..... ±1%; 10% - FL

Trim range ..... ±10% of nominal voltage

Noise/ripple ..... 50mV p-p Bandwidth 20Mhz (see note 3)

Short circuit ..... Continuous Protection

Transient response ..... 500µsec 50% step load change to within  
1% Vout

Temperature coefficient ..... +0.02%/C max

Switching frequency ..... 350KHz (typical)

#### Isolation

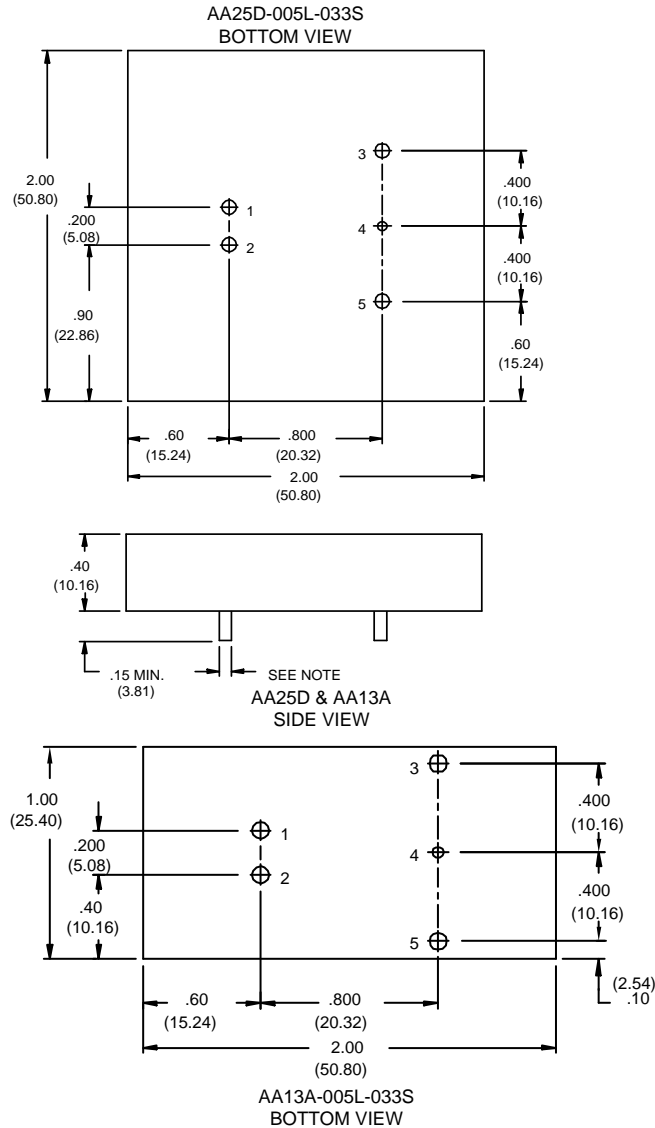
I/O isolation ..... Non-Isolated

## ORDERING INFORMATION

Input Voltage	Output 1 Voltage	Maximum Power	Model Number
4.5 - 5.5 V	3.3V @ 8A	25W	AA25D-005L-033S
4.5 - 5.5V	3.3V @ 8A	25W	AA25E-005L-033S
4.5 - 5.5 V	3.3V @ 4A	13W	AA13A-005L-033S

Please contact Astec for information on other output voltages, power ranges and configurations.

## DIMENSIONS

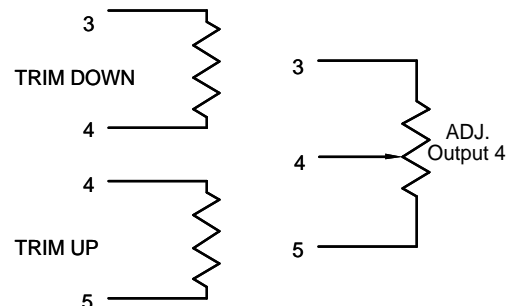


## PIN ASSIGNMENTS

### Output

1. +Vin
2. -Vin
3. +Vout
4. Trim
5. Common

## TRIM METHOD



Note: Pins 0.04" in diameter  
 Case Material: Zinc

## NOTES

1. All specifications are typical at nominal line, full load and 25° C unless otherwise stated.
2. Specifications subject to change without notice.
3. An external 3.3uF Tantalum capacitor is recommended to be placed from +Vout to -Vout..