

AEE Series

50 Watts

Data Sheet

Total Power: 50 Watts

Input Voltage: 12 V, 24 V or 48 V

of Outputs: Single

SPECIAL FEATURES

- Encapsulated
- Wide 4:1 input range
- 1" x 2" DIP package
- 1500 Vdc I/O isolation
- Single and dual output
- OCP, OVP, OTP PProtection
- Remote On/Off
- High efficiency OF 92%
- Operating temp. range
 -40 °C to +85 °C (with derating)

SAFETY

- UL/cUL 60950-1 (CSA)
- IEC/EN 60950-1

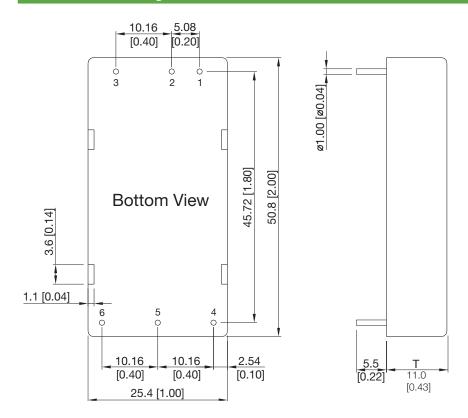


Electrical Specifications			
Input			
Input range	9 to 36 Vdc; 18 to 75 Vdc		
Efficiency	92% @ 12 Vo		
Output			
Voltage tolerance	±1.0%		
Line regulation	±0.5%		
Load regulation	Single output: ±0.5%		
Noise/ripple	3.3 Vo, 5 Vo: 100 mV Others: 150 mV		
OCP and S/C protection	Hiccup		
Overvoltage protection	Latched		
OTP protection	Latched		
Switching frequency	285 KHz		
Temperature coefficient	±0.02 /°C		
Isolation			
I/O isolation	1500 Vdc min.		
Insulation resistance	1000 Mohm		
Insulation capacitance	2200 pF		

Environmental Specifications		
Operating ambient temperature range -40 °C to +85 °C		
Storage temperature -50 °C to +125 °C		
Humidity	5% to 95% (non-condensing)	
Calculated MTBF	233 Khrs	



Mechanical Drawings



tp tp tp

Pin Connectors		
Pin No.	Single Output	
1	+Vin	
2	-Vin	
3	Remote On/Off	
4	+Vout	
5	-Vout	
6	Trim	

- All dimensions in mm (inches)
 Tolerance: X.X±0.25 (X.XX±0.01) X.XX±0.13 (X.XXX±0.005)
- Pin diameter Ø 1.0 ±0.05 (0.04±0.002)

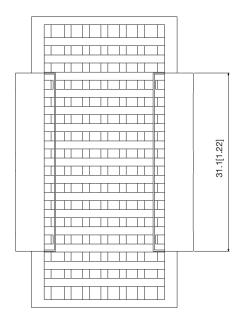
Physical Characteristics		
Case Size	50.8 x 25.4 x 11 mm (2.0 x 1.0 x 0.43 inches)	
Case Material	Aluminium Alloy, Black Anodized Coating	
Base Material	FR4 PCB (flammability to UL 94V-0 rated)	
Pin Material	Copper Alloy with Gold Plate Over Nickel Subplate	
Weight	30 g	

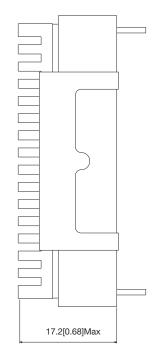
Ordering Information				
Model Number	Input Voltage	Output 1 Voltage	Maximum Power	
AEE10F18-L	9 - 36 V	3.3 V @ 10 A	33 W	
AEE10A18-L	9 - 36 V	5 V @ 10 A	50 W	
AEE04B18-L	9 - 36 V	12 V @ 4.17 A	50 W	
AEE03C18-L	9 - 36 V	15 V @ 3.33 A	50 W	
AEE02H18-L	9 - 36 V	24 V @ 2.08 A	50 W	
AEE10F36-L	18 - 75 V	3.3 V @ 10 A	33 W	
AEE10A36-L	18 - 75 V	5 V @ 10 A	50 W	
AEE04B36-L	18 - 75 V	12 V @ 4.17 A	50 W	
AEE03C36-L	18 - 75 V	15 V @ 3.33 A	50 W	
AEE02H36-L	18 - 75 V	24 V @ 2.08 A	50 W	

To order the converter with heatsink, please add a suffix –HS (e.g., AEE10F18-LHS) to order code.

Mechanical Drawings

Heatsink (Option -HS)

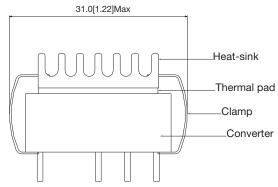




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The advantages of adding a heatsink are:

- 1. To help heat dissipation and increase the stability and reliability of DC/DC converters at high operating temperature atmosphere.
- 2. To upgrade the operating temperature of DC/DC converters, please refer to Derating Curve.



Physical Characteristics		
Heatsink Material	Aluminum	
Finish	Black Anodized Coating	
Weight	9 g	

Notes:

- 1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
- 3. Label and logo appearance may vary from what is shown on mechanical drawings.

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