

# **Data Sheet**

Total Power: 40 Watts Input Voltage: 12 V, 24 V or 48 V # of Outputs: Single, Dual

# **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 protection
- Remote On/Off
- High efficiency 91%
- 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 <sup>2</sup>	90% @ 5 Vo		
Output			
Voltage tolerance	±1.0%		
Line regulation	±0.5%		
Load regulation	Single output: ±0.5% Dual output: ±1.0%		
Noise/ripple	3.3 Vo, 5 Vo: 100 mV Others: 150 mV		
OCP and S/C protection	Hiccup		
Over voltage protection	Latched		
OTP protection	Latched		
Switching frequency	24 Vdc: 286 KHz Others: 320 KHz		
Temperature coefficient	±0.02 /°C		
Isolation			
I/O isolation	1500 Vdc min.		
Insulation resistance	1000 Mohm		
Insulation capacitance	1500 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	328 Khrs	



40 Watts



## **Mechanical Drawings**



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

T: 11.0 mm (0.43 inch) for 24 V Output Models T: 10.2 mm (0.40 inch) for Other Output Models

All dimensions in mm (inches)Tolerance: X.X±0.25 (X.XX±0.01)

V.XX±0.13 (X.XXX±0.005)
Pin diameter Ø 1.0 ±0.05 (0.04±0.002)

Physical Characteristics		
Case Size (24 V Output) 50.8 x 25.4 x 11 mm (2.0 x 1.0 x 0.43 inches)		
Case Size (Other Output)     50.8 x 25.4 x 10.2 mm (2.0 x 1.0 x 0.40 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

Ordening information				
Model Number	Input Voltage	Output 1 Voltage	Output 2 Voltage	Maximum Power
AEE08F18-L	9 - 36 V	3.3 V @ 8 A		26.4 W
AEE08A18-L	9 - 36 V	5 V @ 8 A		40 W
AEE03B18-L	9 - 36 V	12 V @ 3.33 A		40 W
AEE02C18-L	9 - 36 V	15 V @ 2.67 A		40 W
AEE01H18-L	9 - 36 V	24 V @ 1.67 A		40 W
AEE01BB18-L	9 - 36 V	12 V @ 1.67 A	-12 V @ 1.67 A	40 W
AEE01CC18-L	9 - 36 V	15 V @ 1.33 A	-15 V @ 1.33 A	40 W
AEE08F36-L	18 - 75 V	3.3 V @ 8 A		26.4 W
AEE08A36-L	18 - 75 V	5 V @ 8 A		40 W
AEE03B36-L	18 - 75 V	12 V @ 3.33 A		40 W
AEE02C36-L	18 - 75 V	15 V @ 2.67 A		40 W
AEE01H36-L	18 - 75 V	24 V @ 1.67 A		40 W
AEE01BB36-L	18 - 75 V	12 V @ 1.67 A	-12 V @ 1.67 A	40 W
AEE01CC36-L	18 - 75 V	15 V @ 1.33 A	-15 V @ 1.33 A	40 W

To order the converter with heatsink, please add a suffix –HS (e.g. AEE08F18-LHS) to order code.



### **Mechanical Drawings**

#### Heatsink (Option -HS)





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. 2. Warranty: 3 yr

3. Label and logo appearance may vary from what is shown on mechanical drawings.

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