

AYA Series

2 Watts

Data Sheet

Total Power: 2 W
Input Voltage: 5, 12, 24, 48 V
of Outputs: Single and Dual

SPECIAL FEATURES

- Ultra compact DIP package (14 x 14 x 8.0 mm; 0.55 x 0.55 x 0.31 inches)
- Efficiency up to 87%
- I/O-isolation 1500 Vdc
- Wide 2:1 input range
- Operating temperature range -40 °C to +85 °C (with derating)
- Three year product warranty
- UL/cUL/IEC/EN 60950-1 Safety Approval, CE Mark

SAFETY

- cUL/UL 60950-1 recognition
- CE Mark



Electrical Specifications

Input	
Input range	4.5 - 10 Vdc; 9 - 18 Vdc; 18 - 36 Vdc; 36 - 75 Vdc
Efficiency	87% @ 12 Vo
Output	
Voltage tolerance	±1.5%
Line regulation	±0.2%
Load regulation	1.0%
Noise/ripple	70 mV
Overload protection	170% typ of Io max, foldback
Short circuit protection	Continuous, automatic recovery
Switching frequency	100 kHz
Isolation	
I/O isolation	I/O: 1500 Vdc
Insulation resistance	1000 Mohm
Insulation capacitance	100 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
MTBF	3.5 Mhrs calculated

Ordering Information

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency	Power
AYA00F05-L	4.5-10 Vdc	3.3 Vdc	0.4 A	79%	1.3 W
AYA00F12-L	9-18 Vdc	3.3 Vdc	0.4 A	80%	1.3 W
AYA00F24-L	18-36 Vdc	3.3 Vdc	0.4 A	80%	1.3 W
AYA00F48-L	36-75 Vdc	3.3 Vdc	0.4 A	79%	1.3 W
AYA00A05-L	4.5-10 Vdc	5 Vdc	0.4 A	81%	2 W
AYA00A12-L	9-18 Vdc	5 Vdc	0.4 A	83%	2 W
AYA00A24-L	18-36 Vdc	5 Vdc	0.4 A	83%	2 W
AYA00A48-L	36-75 Vdc	5 Vdc	0.4 A	82%	2 W
AYA00AA05-L	4.5-10 Vdc	± 5 Vdc	0.2 A	82%	2 W
AYA00AA12-L	9-18 Vdc	± 5 Vdc	0.2 A	84%	2 W
AYA00AA24-L	18-36 Vdc	± 5 Vdc	0.2 A	84%	2 W
AYA00AA48-L	36-75 Vdc	± 5 Vdc	0.2 A	82%	2 W
AYA00B05-L	4.5-10 Vdc	12 Vdc	0.167 A	85%	2 W
AYA00B12-L	9-18 Vdc	12 Vdc	0.167 A	87%	2 W
AYA00B24-L	18-36 Vdc	12 Vdc	0.167 A	87%	2 W
AYA00B48-L	36-75 Vdc	12 Vdc	0.167 A	86%	2 W
AYA00BB05-L	4.5-10 Vdc	± 12 Vdc	0.083 A	84%	2 W
AYA00BB12-L	9-18 Vdc	± 12 Vdc	0.083 A	86%	2 W
AYA00BB24-L	18-36 Vdc	± 12 Vdc	0.083 A	86%	2 W
AYA00BB48-L	36-75 Vdc	± 12 Vdc	0.083 A	85%	2 W
AYA00C05-L	4.5-10 Vdc	15 Vdc	0.134 A	85%	2 W
AYA00C12-L	9-18 Vdc	15 Vdc	0.134 A	87%	2 W
AYA00C24-L	18-36 Vdc	15 Vdc	0.134 A	87%	2 W
AYA00C48-L	36-75 Vdc	15 Vdc	0.134 A	86%	2 W
AYA00CC05-L	4.5-10 Vdc	± 15 Vdc	0.067 A	85%	2 W
AYA00CC12-L	9-18 Vdc	± 15 Vdc	0.067 A	87%	2 W
AYA00CC24-L	18-36 Vdc	± 15 Vdc	0.067 A	87%	2 W
AYA00CC48-L	36-75 Vdc	± 15 Vdc	0.067 A	85%	2 W

Mechanical Dimensions



- All dimensions in mm (inches)
- Tolerance: X.X \pm 0.5 (X.XX \pm 0.02)
X.XX \pm 0.25 (X.XXX \pm 0.01)
- Pin diameter $\varnothing 0.5 \pm 0.05$ (0.02 \pm 0.002)

Pin Connections		
Pin	Single Output	Dual Output
1	-Vin	-Vin
4	+Vin	+Vin
5	+Vout	+Vout
6	No pin	Common
7	-Vout	-Vout

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