15 Watts
AK42A Dual

Total Power: 15 Watts
Input Voltages: 48V, 24 VDC
No. of Outputs: Dual



Special Features

- Surface mount
- High power density 15W/Cu. in.
- Full power capability without external heat sink
- Input differential and common mode filtering
- Hot insertable with inrush current limit
- Ability to limit inrush current in an external input capacitor
- Input undervoltage lockout with hysteresis
- Output overvoltage protection
- Remote shutdown
- Loadsharing on dual outputs

Environmental

Operating ambient temperature range:
-40 to +75° C (no derating)

Cooling method: Convection

MTBF: 7.5 MHrs

Storage temperature: -55 to +125 C

Safety

UL	1950
IEC	950
CSA	C22.2-9.50
CB	52719-106

Electrical Specs

Input

Input Range:	36 to 75 VDC for 48V 18 to 36 VDC for 24V
Maximum Inrush Current Limit:	1.0 A Max.
Maximum External Capacitor to Limit Inrush Current to 1.0 A:	4.0mF
Low Input Shutdown:	34.0 +/- 2.0 V for 48V 17.0V +/- 1.0V for 24 V
Auto Recovery:	37.0V +/- 2.0 V for 48V 18.5V +/- 1.0 V for 24V
Hysteresis:	3 V +/- 1 V for 48V 1.5V +/- 0.5V for 24V
Efficiency:	85%
Enable:	Open Circuit or up to 0.5V max.
Disable:	4V min., 75V max.

Output

Voltage Tolerance:	± 3% for single output ± 5% for dual output
Noise/Ripple:	75mV rms max.
Output Voltage Adjust Range:	±10% for single output dual output non adjustable
Output Voltage Protection	Self-limiting Clamp, 140% max.
Short Circuit Protection	Continuous Auto Start
Switching Frequency:	200kHz nominal

AMERICAS

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ASIA

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Telephone: 852-2437-9662
Facsimile: 852-2402-4426

Ordering Information

Input Voltage	Output 1 Voltage	Output 2 Voltage	Maximum Power	Model Number
Dual Output- 15 Watts Total Output Power				
18-36	3.3V	2.5V	13.2W/10W	AK42A-024L-033D025SM
18-36	5V	3.3V	15W/13.2W	AK42A-024L-050D033SM
36-75	3.3V	2.5V	13.2W/10W	AK42A-048L-033D025SM
36-75	5V	3.3V	15W/13.2W	AK42A-048L-050D033SM

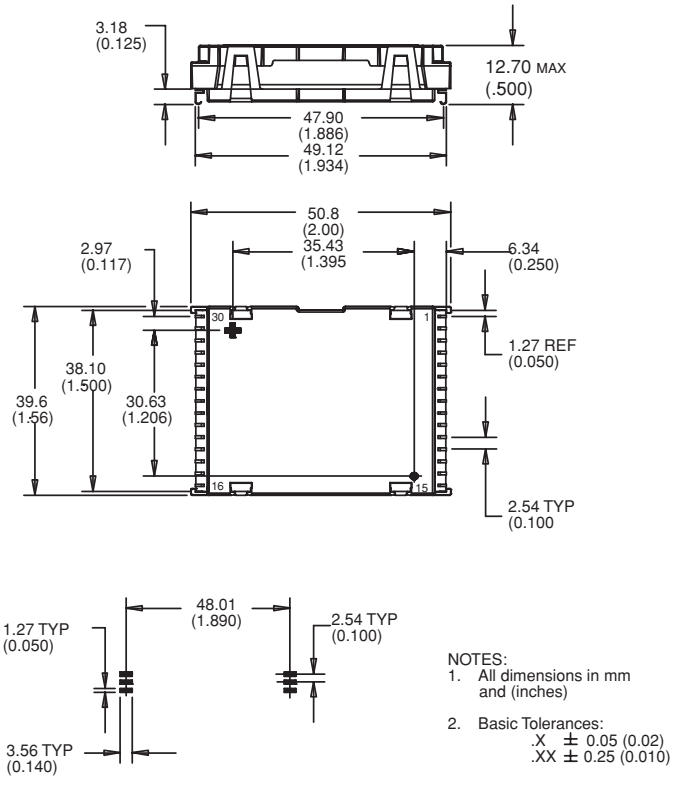
Pin Assignments

Dual Output

1. NC
2. V out 1
3. V out 1
4. V out 1
5. V out 1
6. V out 2
7. V out 2
8. V out 2
9. V out 2
10. GND
11. GND
12. GND
13. GND
14. GND
15. Reserved
16. +V in
17. +V in
18. CAP
19. CAP Inrush - consult TRN
20. CAP Inrush - consult TRN
21. CAP Inrush - consult TRN
22. CAP Inrush - consult TRN
23. CAP Inrush - consult TRN
24. CAP Inrush - consult TRN
25. CAP Inrush - consult TRN
26. Reserved / NC
27. Shutdown
28. -V in
29. -V in
30. -V in

Notes:

1. All specifications are typical at nominal input and full load unless otherwise noted.
2. Specification subject to change without notice.
3. Mechanical drawings for reference only.
4. Minimum Load: 0.2 A (min 15%).
5. Max. Capacitive Load: 330 m.
6. Warranty: 1 yr



NOTES:
1. All dimensions in mm and (inches)
2. Basic Tolerances:
   .X ± 0.05 (0.02)
   .XX ± 0.25 (0.010)

Maximum Weight: Dual Output: 30 grams

