



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

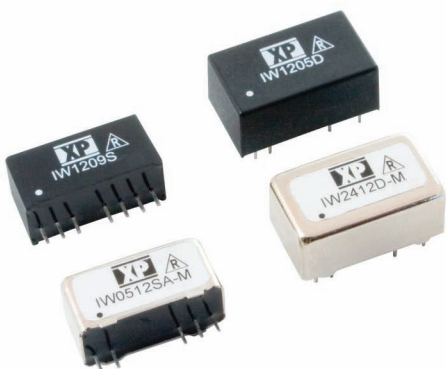
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



1 Watt 1W Series



- Regulated Single & Dual Output
- Wide 2:1 Input Range
- SIP or DIP Package
- 1000 VDC Isolation (Optional 3000 VDC)
- Continuous Short Circuit Protection
- Optional Metal Case
- 3 Year Warranty

Specification

Input

- Input Voltage Range • See table
- Input Reflected Ripple Current • 35 mA pk-pk through 12 μ H inductor, 5 Hz to 20 MHz
- Input Reverse Voltage Protection • None
- Input Filter • Capacitor
- Input Surge • 5 V models: 12 VDC for 100 ms
12 V models: 24 VDC for 100 ms
24 V models: 40 VDC for 100 ms
48 V models: 80 VDC for 100 ms

Output

- Output Voltage • See table
- Minimum Load • None⁽⁶⁾
- Line Regulation • $\pm 0.5\%$ max
- Load Regulation • $\pm 1.0\%$ max from 25-100% load⁽⁷⁾
- Setpoint Accuracy • $\pm 2\%$ max
- Ripple & Noise • 80 mV pk-pk max, 20 MHz bandwidth⁽⁸⁾
- Short Circuit Protection • Continuous with auto recovery (foldback)
- Cross Regulation • $\pm 5\%$ on dual output models
- Remote On/Off • Optional on SIP package model⁽⁴⁾
- Temperature Coefficient • $0.02\%/^{\circ}\text{C}$

General

- Efficiency • See table
- Isolation Voltage • 1000 VDC (optional 3000 VDC)
- Isolation Resistance • $10^9 \Omega$
- Isolation Capacitance • 60 pF
- Switching Frequency • 100-650 kHz
- MTBF • >1.66 Mhrs to MIL-HDBK-217F at 25 $^{\circ}\text{C}$, GB

Environmental

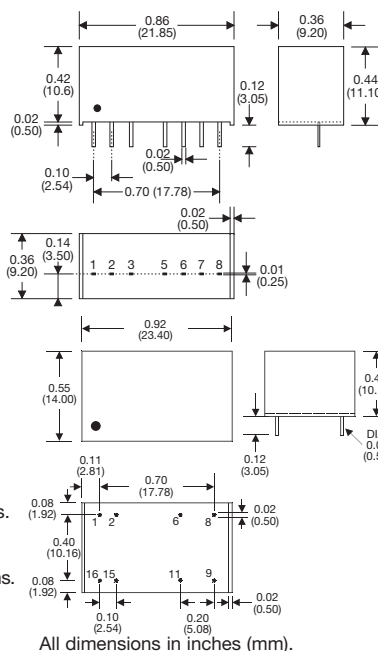
- Operating Temperature • -40°C to $+100^{\circ}\text{C}$, derate from 100% load at 85°C to 0% load at 100°C
- Storage Temperature • -40°C to $+125^{\circ}\text{C}$
- Case Temperature • 100°C max
- Cooling • Convection cooled

Notes

- For dual inline package replace 'S' in model number with 'D'.
- For optional 3 kV isolation add suffix '-H' to the model number.
- For dual output delete suffix 'A' & split output current equally between rails.
- For optional Remote On/Off on SIP models, add suffix '-R' to model number. Applying 5 V via 1 k Ω current limiting resistor and diode turns output off.
- For optional metal case, add suffix '-M' to model number, contact sales for details.
- Output capacitor of 100 μF required to meet quoted ripple & noise.
- Minimum load of 25% required to meet quoted specifications.
- Operation at no load will not damage the converter but it may not meet all specifications.
- Pin pitch tolerance: ± 0.014 (± 0.35), Case tolerance: ± 0.02 (± 0.5)
- Weight: SIP 0.009 lbs (4.0 g), DIP 0.013 lbs (6.0 g)
Metal case weight: SIP 0.014 lbs (6.5 g), DIP 0.017 lbs (8.0 g)

Input Voltage	No Load Input Current	Output Voltage ⁽⁹⁾	Output Current	Max. Capacitive Load	Efficiency	Model Number ⁽¹⁻⁵⁾
4.5-9.0 V	15 mA	3.3 V	303 mA	3300 μF	67%	IW0503SA
	15 mA	5.0 V	200 mA	3300 μF	67%	IW0505SA
	40 mA	9.0 V	111 mA	470 μF	70%	IW0509SA
	55 mA	12.0 V	83 mA	470 μF	70%	IW0512SA
	55 mA	15.0 V	67 mA	470 μF	70%	IW0515SA
	70 mA	24.0 V	42 mA	220 μF	68%	IW0524SA
9.0-18.0 V	15 mA	3.3 V	303 mA	3300 μF	70%	IW1203SA
	15 mA	5.0 V	200 mA	3300 μF	72%	IW1205SA
	15 mA	9.0 V	111 mA	470 μF	77%	IW1209SA
	15 mA	12.0 V	83 mA	470 μF	77%	IW1212SA
	15 mA	15.0 V	67 mA	470 μF	77%	IW1215SA
	15 mA	24.0 V	42 mA	220 μF	73%	IW1224SA
18.0-36.0 V	8 mA	3.3 V	303 mA	3300 μF	70%	IW2403SA
	8 mA	5.0 V	200 mA	3300 μF	72%	IW2405SA
	8 mA	9.0 V	111 mA	470 μF	75%	IW2409SA
	8 mA	12.0 V	83 mA	470 μF	75%	IW2412SA
	8 mA	15.0 V	67 mA	470 μF	75%	IW2415SA
	8 mA	24.0 V	42 mA	220 μF	75%	IW2424SA
36.0-72.0 V	6 mA	3.3 V	303 mA	3300 μF	66%	IW4803SA
	6 mA	5.0 V	200 mA	3300 μF	68%	IW4805SA
	6 mA	9.0 V	111 mA	470 μF	70%	IW4809SA
	6 mA	12.0 V	83 mA	470 μF	70%	IW4812SA
	6 mA	15.0 V	67 mA	470 μF	70%	IW4815SA
	6 mA	24.0 V	42 mA	220 μF	68%	IW4824SA

Mechanical Details



PIN CONNECTIONS		
Pin	Single	Dual
1	-V Input	-V Input
2	+V Input	+V Input
3	Opt. ROF*	Opt. ROF**
5	N.P. / N.C.	N.C.
6	+V Output	+V Output
7	-V Output	-V Output
8	NC	Common

*When optional ROF is present pin 5 is No Connection. When not present pin 3 & 5 are No Pin.

**When optional ROF is present pin 5 is No Connection. When not present pin 3 & 5 are No Connection.

PIN CONNECTIONS		
Pin	Single	Dual
1	-V Input	-V Input
2	-V Input	-V Input
6	NC	Common
8	NC	-V Output
9	+V Output	+V Output
11	-V Output	Common
15	+V Input	+V Input
16	+V Input	+V Input