



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

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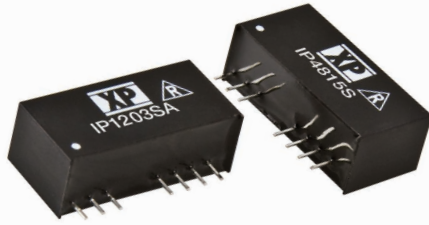
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3 Watts

IP Series



- Regulated Single & Dual Output
- Wide 4:1 Input Range
- SIP Package
- 1600 VDC Isolation
- -40 °C to 85 °C Operation
- Remote On/Off
- 3 Year Warranty

Specification

Input

- Input Voltage Range
 - See table
- Input Reflected Ripple Current
 - 20 mA pk-pk through 12 μ H inductor and 47 μ F capacitor, 5 Hz to 20 MHz
- Input Filter
 - Capacitor
- Input Surge
 - 12 V models: 25 VDC for 100 ms
 - 24 V models: 50 VDC for 100 ms
 - 48 V models: 100 VDC for 100 ms

Output

- Output Voltage
 - See table
- Minimum Load
 - None⁽¹⁾
- Line Regulation
 - $\pm 0.2\%$ max
- Load Regulation
 - $\pm 1.0\%$ max for a 10-100% load change⁽¹⁾
- Setpoint Accuracy
 - $\pm 1\%$ max
- Ripple & Noise
 - 30 mV pk-pk max, 20 MHz bandwidth
- Temperature Coefficient
 - 0.02%/°C
- Short Circuit Protection
 - Continuous with auto recovery (foldback)
- Cross Regulation
 - $\pm 5\%$ on dual output models⁽²⁾
- Remote On/Off
 - Apply 2 to 4 mA to pin 3 to turn off output

General

- Efficiency
 - See table
- Isolation Voltage
 - 1600 VDC
- Isolation Resistance
 - 10⁹ Ω
- Isolation Capacitance
 - 200 pF
- Switching Frequency
 - 100-600 kHz variable
- MTBF
 - >1.7 Mhrs to MIL-HDBK-217F at 25 °C, GB

Environmental

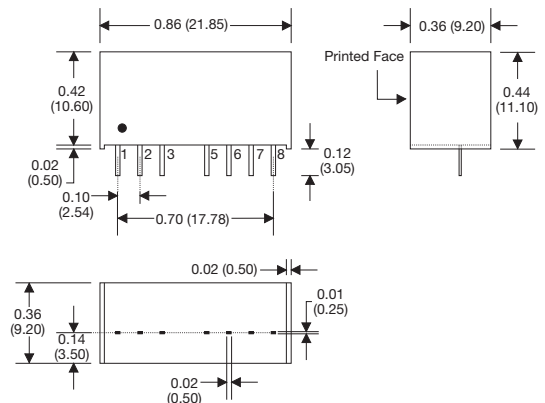
- Operating Temperature
 - -40 °C to +85 °C, derate from 100% load at 70 °C to 30% load at 85 °C
- Storage Temperature
 - -40 °C to +125 °C
- Case Temperature
 - 100 °C max
- Cooling
 - Convection cooled

Notes

1. Operation at no load will not damage the converter but may not meet all specifications.
2. When one output is set to 100% load and the other varies between 25%-100% load.
3. Pin pitch tolerance ± 0.014 (± 0.35)
4. Case tolerance ± 0.02 (0.5)
5. Weight: 0.014 lbs (6.5 g)
6. All dimensions in inches (mm)

Input Voltage	Output Voltage	Output Current	No Load Input Current	Max Capacitive Load	Efficiency	Model Number
4.5-18.0 V	3.3 V	700 mA	40 mA	1760 μ F	72%	IP1203SA
	5.0 V	600 mA	40 mA	1000 μ F	77%	IP1205SA
	12.0 V	250 mA	40 mA	170 μ F	81%	IP1212SA
	15.0 V	200 mA	40 mA	110 μ F	81%	IP1215SA
	± 5.0 V	± 300 mA	40 mA	± 470 μ F	77%	IP1205S
	± 12.0 V	± 125 mA	40 mA	± 100 μ F	80%	IP1212S
	± 15.0 V	± 100 mA	40 mA	± 47 μ F	80%	IP1215S
9.0-36.0 V	3.3 V	700 mA	25 mA	1760 μ F	75%	IP2403SA
	5.0 V	600 mA	25 mA	1000 μ F	79%	IP2405SA
	12.0 V	250 mA	25 mA	170 μ F	82%	IP2412SA
	15.0 V	200 mA	25 mA	110 μ F	82%	IP2415SA
	± 5.0 V	± 300 mA	25 mA	± 470 μ F	79%	IP2405S
	± 12.0 V	± 125 mA	25 mA	± 100 μ F	79%	IP2412S
	± 15.0 V	± 100 mA	25 mA	± 47 μ F	80%	IP2415S
18.0-75.0 V	3.3 V	700 mA	15 mA	1760 μ F	74%	IP4803SA
	5.0 V	600 mA	15 mA	1000 μ F	78%	IP4805SA
	12.0 V	250 mA	15 mA	170 μ F	80%	IP4812SA
	15.0 V	200 mA	15 mA	110 μ F	81%	IP4815SA
	± 5.0 V	± 300 mA	15 mA	± 470 μ F	79%	IP4805S
	± 12.0 V	± 125 mA	15 mA	± 100 μ F	79%	IP4812S
	± 15.0 V	± 100 mA	15 mA	± 47 μ F	79%	IP4815S

Mechanical Details



PIN CONNECTIONS					
Pin	Single	Dual	Pin	Single	Dual
1	-V Input	-V Input	5	N.C.	N.C.
2	+V Input	+V Input	6	+V Output	+V Output
3	Remote On/Off	Remote On/Off	7	-V Output	Common
4	No Pin	No Pin	8	N.C.	-V Output