



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

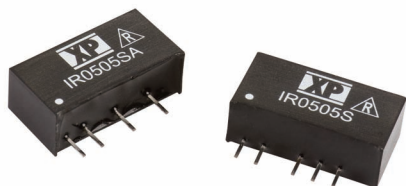
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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



3 Watts

IR Series



- Single & Dual Output
- SIP Package
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- -40 °C to +85 °C Operation
- Semi-regulated
- 3 Year Warranty

Specification

Input

- Input Voltage Range • Nominal $\pm 10\%$
- Input Reflected Ripple Current • 20 mA pk-pk, 5 Hz to 20 MHz
- Input Reverse Voltage Protection • None

Output

- Output Voltage • See table
- Minimum Load • None⁽¹⁾
- Line Regulation • 1.2%/1% ΔV_{in}
- Load Regulation • See table
- Setpoint Accuracy • +2%, -4%
- Ripple & Noise • 50 mV pk-pk max, 20 MHz bandwidth⁽²⁾
- Temperature Coefficient • 0.02%/°C
- Maximum Capacitive Load • See table

General

- Efficiency • See table
- Isolation Voltage • 1000 VDC minimum, 3000 VDC option⁽³⁾
- Isolation Resistance • $10^9 \Omega$
- Isolation Capacitance • 60 pF typical
- Switching Frequency • Variable, 60 kHz - 85 kHz
- MTBF • >1.1 Mhrs to MIL-HDBK-217F at 25 °C, GB

Environmental

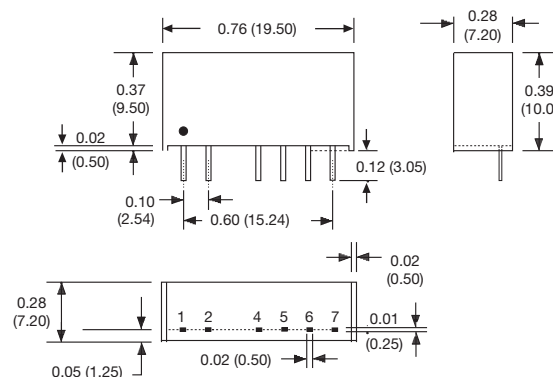
- Operating Temperature • -40 °C to +85 °C
- Storage Temperature • -40 °C to +125 °C
- Case Temperature • 100 °C max
- Cooling • Convection-cooled

Notes

- Operation at no load will not damage unit but it may not meet all specifications.
- Output capacitor of 1 μF required to meet quoted ripple and noise.
- For optional 3 kV isolation, add suffix '-H' to the model number.
- All dimensions in inches (mm).
- Pin pitch tolerance: ± 0.014 (± 0.35)
- Case tolerance: ± 0.02 (± 0.5)
- Weight: 0.006 lbs (2.8 g)

Input Voltage	No Load Input Current	Output Voltage	Output Current	Max Capacitive Load	Efficiency	Load Reg.	Model Number
5 VDC	80 mA	5.0 V	600 mA	220 μF	79%	8.0%	IR0505SA
	70 mA	9.0 V	333 mA	220 μF	84%	7.0%	IR0509SA
	70 mA	12.0 V	250 mA	100 μF	84%	6.0%	IR0512SA
	80 mA	15.0 V	200 mA	100 μF	84%	6.0%	IR0515SA
	80 mA	± 5.0 V	± 300 mA	± 100 μF	82%	7.0%	IR0505S
	70 mA	± 9.0 V	± 167 mA	± 100 μF	85%	6.0%	IR0509S
	70 mA	± 12.0 V	± 125 mA	± 47 μF	85%	6.0%	IR0512S
	70 mA	± 15.0 V	± 100 mA	± 47 μF	86%	5.0%	IR0515S
12 VDC	25 mA	5.0 V	600 mA	220 μF	84%	6.0%	IR1205SA
	25 mA	9.0 V	333 mA	220 μF	87%	4.0%	IR1209SA
	25 mA	12.0 V	250 mA	100 μF	88%	4.0%	IR1212SA
	20 mA	15.0 V	200 mA	100 μF	90%	3.0%	IR1215SA
	25 mA	± 5.0 V	± 300 mA	± 100 μF	85%	5.0%	IR1205S
	25 mA	± 9.0 V	± 167 mA	± 100 μF	88%	4.0%	IR1209S
	25 mA	± 12.0 V	± 125 mA	± 47 μF	89%	3.0%	IR1212S
	20 mA	± 15.0 V	± 100 mA	± 47 μF	90%	3.0%	IR1215S

Mechanical Details



Pin Connections				
Pin	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	+Vin	+Vin
2	-Vin	-Vin	-Vin	-Vin
4	-Vout	-Vout	N.P	N.P
5	N.P	Common	-Vout	-Vout
6	+Vout	+Vout	N.P	Common
7	N.P	N.P	+Vout	+Vout