# imall

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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### 1 Watt IC Series



- Single Output
- Ultra Slim DIP Package
- Industry Standard Pinout
- 1500 VDC Isolation Standard
- MTBF >3.5 MHrs
- –40 °C to +85 °C Operation
- 3 Year Warranty

#### **Specification**

#### Input

Input Voltage Range	Nominal ±10%
Input Reverse Voltage	None
Protection	

#### Output

Output Voltage •	See table
Minimum Load •	10%
Line Regulation •	1.2%/1% ∆ Vin
Load Regulation •	10% to 100% load change, 5 Vout: 12.8% typ, 15% max, 12 Vout: 6.8% typ, 15% max, 15 Vout: 6.8% typ, 15% max
Setpoint Accuracy •	100-110% of nominal at 10% load
Ripple & Noise •	75 mV pk-pk 20 MHz bandwidth
Temperature Coefficient •	0.03%/°C
Short Circuit Protection •	Continuous, auto recovery

#### General

Efficiency	See table
Isolation Voltage	<ul> <li>1500 VDC minimum, 3000 VDC optional<sup>(1)</sup>, tested for 1 minute</li> </ul>
Isolation Resistance	<ul> <li>10<sup>9</sup>Ω</li> </ul>
Isolation Capacitance	<ul> <li>25 pF typical</li> </ul>
Switching Frequency	<ul> <li>100 kHz typical at nominal input, full load</li> </ul>
MTBF	<ul> <li>&gt;3.5 MHrs to MIL-HDBK-217F at 25 °C, GB</li> </ul>

#### Environmental

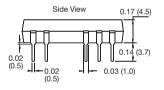
<b>Operating Temperature</b>	<ul> <li>-40 °C to +85 °C</li> </ul>
Storage Temperature	<ul> <li>-55 °C to +125 °C</li> </ul>
Case Temperature	• 105 °C max
Cooling	Convection-cooled
Lead Temperature	• 250 °C, 0.06 in (1.5 mm) from case, 10 s

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number
	5.0 V	200 mA	74%	IC0505DA <sup>(1)</sup>
5 VDC	12.0 V	83 mA	77%	IC0512DA
	15.0 V	67 mA	76%	IC0515DA
12 VDC	5.0 V	200 mA	73%	IC1205DA

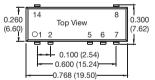
#### Notes -

1. IC0505DA available with 3000 VDC isolation, add suffix 'H' to part number.

#### Mechanical Details

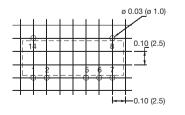






#### Recommended footprint

Top view grid: 0.1 x 0.1 in (2.54 x 2.54 mm)



Pin	Function
1	Vin
2	GND
5	0 V
6	+Vout
7	N.C.
8	N.C.
14	N.C.
N.C. Not connected	

#### Notes

- 1. All dimensions in inches (mm)
- 2. Tolerance: ±0.010 (±0.25)
- 3. Weight: 0.003 lbs (1.4 g) 4. Pin tolerance: ±0.004 (±0.10 mm)

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