

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 $\pm 10\%$
 Input Reverse Voltage Protection • None

Output

- Output Voltage • See table
 Minimum Load • 10%
 Line Regulation • 1.2%/1% ΔV_{in}
 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 • 1500 VDC minimum, 3000 VDC optional⁽¹⁾,
 tested for 1 minute
 Isolation Resistance • 10⁹ Ω
 Isolation Capacitance • 25 pF typical
 Switching Frequency • 100 kHz typical at nominal input, full load
 MTBF • >3.5 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

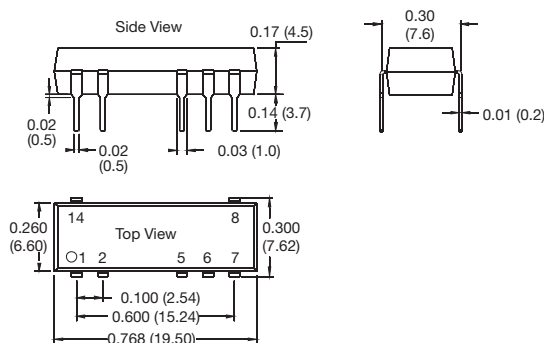
- Operating Temperature • -40 °C to +85 °C
 Storage Temperature • -55 °C to +125 °C
 Case Temperature • 105 °C max
 Cooling • Convection-cooled
 Lead Temperature • 250 °C, 0.06 in (1.5 mm) from case, 10 s

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

Notes

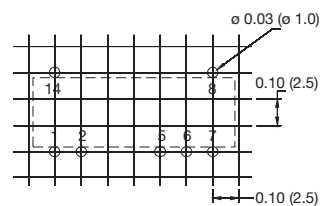
1. IC0505DA available with 3000 VDC isolation, add suffix 'H' to part number.

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)