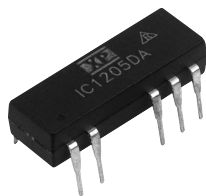


IC Series



- 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 Protection • None

Output

- Output Voltage • See table
- Minimum Load • 10%
- Line Regulation • 1.2%/1% Δ 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 • 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 ^{(†)^(^)} |
| | 12.0 V | 83 mA | 77% | IC0512DA ^{(†)^(^)} |
| | 15.0 V | 67 mA | 76% | IC0515DA ^{(†)^(^)} |
| 12 VDC | 5.0 V | 200 mA | 73% | IC1205DA ^{(†)^(^)} |

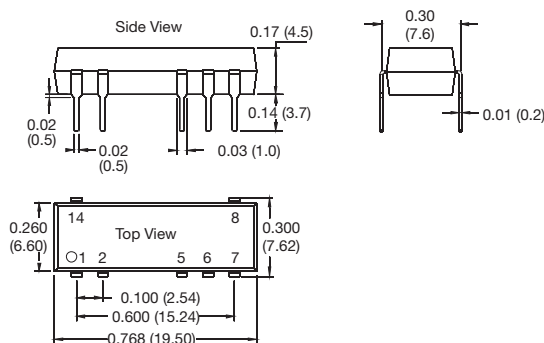
Notes

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

^(†) Available from Farnell & element14. See pages 284-290.

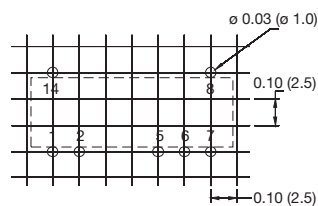
^(^) Available from Newark. See pages 291-296.

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)