

# 2 Watts IL Series



- Single Output
- SIP Package
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- Short Circuit Protection
- -40°C to +85°C Operation
- Industry Standard Pinout

## Specification

### Input

- Input Voltage Range • Nominal  $\pm 10\%$
- Input Current (no load) • See table
- Input Reflected Ripple • 20 mA rms
- Input Reverse Voltage Protection • None

### Output

- Output Voltage • See table
- Minimum Load • None
- Line Regulation • 1.2%/1%  $\Delta V_{in}$
- Load Regulation •  $\pm 10\%$ , 20-100% load change, 3.3 V models:  $\pm 20\%$
- Setpoint Accuracy •  $\pm 3\%$
- Ripple & Noise • 60 mV pk-pk, 20 MHz BW
- Temperature Coefficient • 0.02%/°C
- Short Circuit Protection • 1 s max
- Maximum Capacitive Load • 220  $\mu$ F

### General

- Efficiency • See table
- Isolation Voltage • 1000 VDC minimum (3000 VDC -H option)
- Isolation Resistance •  $10^9 \Omega$
- Isolation Capacitance • 60 pF typical
- Switching Frequency • 50 kHz variable

### Environmental

- Operating Temperature • -40 to +85 °C, derate linearly to 0 at 100 °C
- Storage Temperature • -40 to +125 °C
- Case Temperature • 100 °C max
- Cooling • Free-air convection

### Notes

1. Add suffix 'H' to model for 3000VDC isolation.
2. All dimensions in inches (mm).

Input Voltage	No Load Input Current	Output Voltage	Output Current	Efficiency	Model Number <sup>(1)</sup>
5 VDC	35 mA	3.3 V	400 mA	71%	IL0503S
	35 mA	5.0 V	400 mA	77%	IL0505S†
	35 mA	9.0 V	222 mA	77%	IL0509S†
	35 mA	12.0 V	168 mA	80%	IL0512S†
	35 mA	15.0 V	132 mA	82%	IL0515S†
	35 mA	24.0 V	84 mA	82%	IL0524S
12 VDC	20 mA	3.3 V	400 mA	72%	IL1203S
	20 mA	5.0 V	400 mA	78%	IL1205S†
	20 mA	9.0 V	222 mA	82%	IL1209S†
	20 mA	12.0 V	168 mA	84%	IL1212S†
	20 mA	15.0 V	132 mA	84%	IL1215S†
	25 mA	24.0 V	84 mA	82%	IL1224S
24 VDC	10 mA	3.3 V	400 mA	74%	IL2403S
	10 mA	5.0 V	400 mA	80%	IL2405S
	10 mA	9.0 V	222 mA	84%	IL2409S
	10 mA	12.0 V	168 mA	84%	IL2412S
	10 mA	15.0 V	132 mA	84%	IL2415S
	10 mA	24.0 V	84 mA	84%	IL2424S
48 VDC	7 mA	3.3 V	400 mA	72%	IL4803S
	7 mA	5.0 V	400 mA	78%	IL4805S
	7 mA	9.0 V	222 mA	82%	IL4809S
	7 mA	12.0 V	168 mA	80%	IL4812S
	7 mA	15.0 V	132 mA	82%	IL4815S
	7 mA	24.0 V	84 mA	82%	IL4824S

† Available from Farnell InOne. See pages 236-237

## Mechanical Details

