

# 2 Watts IL Series



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

## Specification

### Input

- Input Voltage Range • Nominal  $\pm 10\%$
- Input Current (no load) • See table
- Input Reflected Ripple • 20 mA rms (5 Hz to 20 MHz with 12  $\mu$ H)
- Input Reverse Voltage Protection • None

### Output

- Output Voltage • See table
- Minimum Load • None<sup>(3)</sup>
- Line Regulation • 1.2%/1%  $\Delta$  Vin
- 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 • Variable
- MTBF • >2 Mhrs

### Environmental

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

### Notes

1. Add suffix 'H' to model for 3000 VDC isolation.
2. All dimensions in inches (mm).
3. Operation at no load will not damage unit but it may not meet all specifications.

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	80%	IL0509S†
	35 mA	12.0 V	168 mA	82%	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. See pages 204-206.

## Mechanical Details

