

1.5 Watts

ISL Series



- Single & Dual Regulated Outputs
- 4:1 Input Range
- SMD Package
- Industry Standard Pinout
- 1500 VDC Isolation
- Short Circuit Protection
- 3 Year Warranty

Specification

Input

- Input Voltage Range** • 24 V (9-36 VDC)
48 V (18-72 VDC)
- Input Reverse Voltage Protection** • None
- Input Surge** • 24 V: 40 VDC for 100 ms
48 V: 80 VDC for 100 ms

Output

- Output Voltage** • See table
- Minimum Load** • 10%⁽¹⁾
- Line Regulation** • $\pm 0.2\%$ typical
- Load Regulation** • $\pm 0.5\%$ typical
- Setpoint Accuracy** • $\pm 1\%/\pm 3\%$ typical, positive/negative output
- Ripple & Noise** • 100 mV pk-pk 20 MHz bandwidth
- Temperature Coefficient** • 0.03%/°C
- Short Circuit Protection** • Continuous, automatic recovery

General

- Efficiency** • See table
- Isolation Voltage** • 1500 VDC
- Isolation Resistance** • $10^9 \Omega$
- Isolation Capacitance** • 1000 pF typical
- Switching Frequency** • 550 kHz typical at nominal input, full load
- MTBF** • >1 Mhrs to MIL-HDBK-217F at 25 °C, GB

Environmental

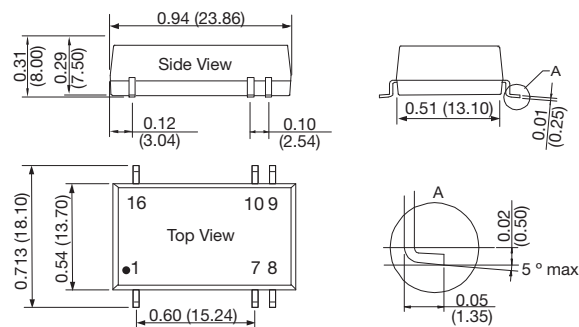
- Operating Temperature** • -40 °C to +85 °C, derate from 100% load at 70 °C to 0% load at 100 °C
- Storage Temperature** • -55 °C to +125 °C
- Case Temperature** • 100 °C max
- Cooling** • Convection-cooled
- Lead Temperature** • 240 °C, 0.06 in (1.5 mm) from case, 10 s

Notes

1. Operation at no load will not damage unit but it may not meet all specifications.

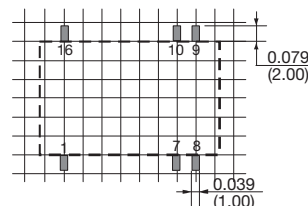
Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number
24 VDC	3.3 V	455 mA	72%	ISL2403A
	5.0 V	300 mA	76%	ISL2405A
	9.0 V	167 mA	78%	ISL2409A
	12.0 V	125 mA	79%	ISL2412A
	15.0 V	100 mA	80%	ISL2415A
	± 5.0 V	± 150 mA	74%	ISL2405
	± 12.0 V	± 63 mA	78%	ISL2412
48 VDC	± 15.0 V	± 50 mA	80%	ISL2415
	3.3 V	455 mA	72%	ISL4803A
	5.0 V	300 mA	76%	ISL4805A
	9.0 V	167 mA	78%	ISL4809A
	12.0 V	125 mA	79%	ISL4812A
	15.0 V	100 mA	80%	ISL4815A
	± 5.0 V	± 150 mA	74%	ISL4805
	± 12.0 V	± 63 mA	78%	ISL4812
	± 15.0 V	± 50 mA	80%	ISL4815

Mechanical Details



Recommended footprint

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



Pin	Single	Dual
1	-Vin	-Vin
7	N.C.	N.C.
8	N.C.	0 V
9	+Vo	+Vo
10	0 V	-Vo
16	Vin	Vin

N.C. Not connected

Notes

1. All dimensions in inches (mm)
2. Tolerance: ± 0.010 (± 0.25)
3. Weight: 0.011 lbs (5.2 g)
4. Pin tolerance: ± 0.004 (± 0.10 mm)