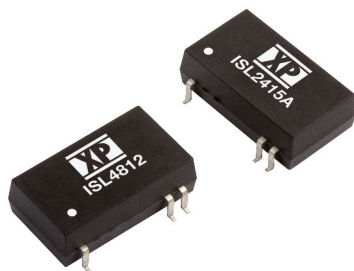


1.5 Watts

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 • $0.03\%/^{\circ}\text{C}$
- 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 $^{\circ}\text{C}$, GB
- Recommended Solder Profile • IPC/JEDEC J-STD-020D.1

Environmental

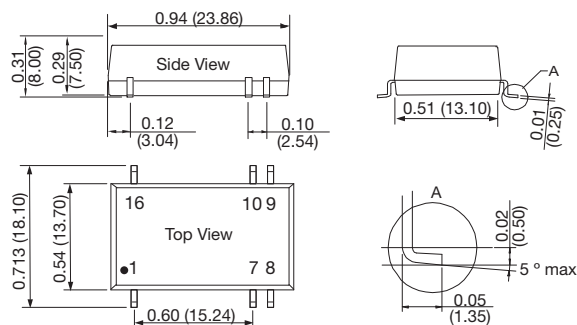
- Operating Temperature • -40°C to $+85^{\circ}\text{C}$, derate from 100% load at 70°C to 0% load at 100°C
- Storage Temperature • -55°C to $+125^{\circ}\text{C}$
- Case Temperature • 100°C max
- Cooling • Convection-cooled
- Lead Temperature • 240°C , 0.06 in (1.5 mm) from case, 10 s

Notes

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

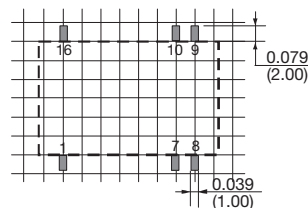
Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number ⁽⁵⁾
24 VDC	3.3 V	455 mA	72%	ISL2403A
	5.0 V	300 mA	76%	ISL2405A
	9.0 V	167 mA	78%	ISL2409A
	12.0 V	125 mA	79%	ISL2412A
	15.0 V	100 mA	80%	ISL2415A
	$\pm 5.0 \text{ V}$	$\pm 150 \text{ mA}$	74%	ISL2405
	$\pm 12.0 \text{ V}$	$\pm 63 \text{ mA}$	78%	ISL2412
48 VDC	$\pm 15.0 \text{ V}$	$\pm 50 \text{ mA}$	80%	ISL2415
	5.0 V	300 mA	76%	ISL4805A

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 ($\pm 0.10 \text{ mm}$)
5. For optional tape & reel option add suffix -TR to the end of the p/n. Reel quantity = 200