

1.5 Watt

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
48 V: 80 VDC

Output

- Output Voltage • See table
- Minimum Load • 10%
- Line Regulation • $\pm 0.2\%$ typical
- Load Regulation • $\pm 0.5\%$ typical
- Setpoint Accuracy • $\pm 1\%/\pm 3\%$ typical, positive/negative output
- Ripple & Noise • 75 mV pk-pk 20 MHz bandwidth
- Temperature Coefficient • 0.03%/°C
- Short Circuit Protection • Continuous

General

- Efficiency • See table
- Isolation Voltage • 1500 VDC
- Isolation Resistance • $10^9 \Omega$
- Isolation Capacitance • 85 pF typical
- Switching Frequency • 300 kHz typical at nominal input, full load
- MTBF • >1 Mhrs to MIL-HDBK-217F at 25 °C, GB

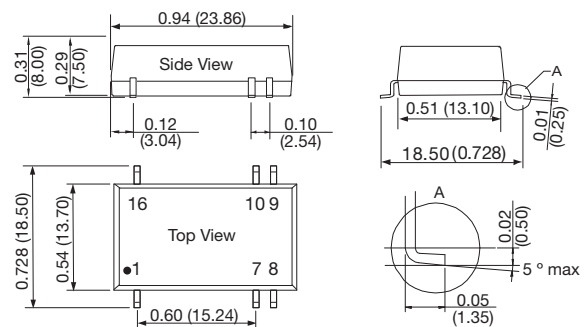
Environmental

- Operating Temperature • -40 °C to +85 °C, derate from 100% load at 70 °C to 50% load at 85 °C
- Storage Temperature • -55 °C to +125 °C
- Case Temperature • 100 °C max
- Cooling • Convection-cooled
- Lead Temperature • 245 °C, 0.06 in (1.5 mm) from case, 10 s

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number
24 VDC	3.3 V	455 mA	72%	ISL2403A
	5 V	300 mA	76%	ISL2405A
	9 V	167 mA	78%	ISL2409A
	12 V	125 mA	79%	ISL2412A
	15 V	100 mA	80%	ISL2415A
	± 5 V	± 150 mA	74%	ISL2405
	± 12 V	± 63 mA	78%	ISL2412
	± 15 V	± 50 mA	80%	ISL2415
48 VDC	3.3 V	455 mA	72%	ISL4803A
	5 V	300 mA	76%	ISL4805A
	9 V	167 mA	78%	ISL4809A
	12 V	125 mA	79%	ISL4812A
	15 V	100 mA	80%	ISL4815A
	± 5 V	± 150 mA	74%	ISL4805
	± 12 V	± 63 mA	78%	ISL4812
	± 15 V	± 50 mA	80%	ISL4815

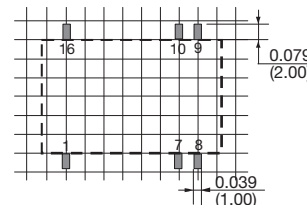
Mechanical Details

Weight: 0.011 lbs (5.2 g)



Recommended footprint

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



Pin	Single	Dual
1	GND	GND
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

Dimensions in inches (mm)
Tolerance: ± 0.010 (± 0.25)

Pin tolerance: ± 0.004 (± 0.10 mm)