

## ISQ Series



- Single Output
- SMD Package
- Industry Standard Pinout
- 6000 VDC Isolation
- -40 °C to +85 °C Operation
- MTBF >3.5 MHrs
- 3 Year Warranty

### Specification

#### Input

- Input Voltage Range • Nominal  $\pm 10\%$
- Input Reverse Voltage Protection • None

#### Output

- Output Voltage • See table
- Minimum Load •  $10\%^{(1)}$
- Line Regulation •  $1.2\%/1\% \Delta V_{in}$
- Load Regulation •  $7.5\%$  max for a 10-100% load change
- Setpoint Accuracy • 100-110% of nominal at 10% load
- Ripple & Noise • 200 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 • 6000 VDC
- Isolation Resistance •  $10^9 \Omega$
- Isolation Capacitance • 10 pF typical
- Switching Frequency • 50 kHz at nominal input, full load
- MTBF • >3.5 MHrs to MIL-HDBK-217F at 25 °C, GB
- Recommended Solder Profile • IPC/JEDEC J-STD-020D.1

#### Environmental

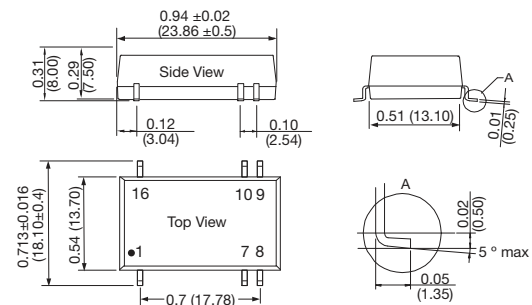
- Operating Temperature • -40 °C to +85 °C
- Storage Temperature • -55 °C to +125 °C
- Case Temperature • 105 °C max
- Cooling • Convection-cooled
- Lead Temperature • 260 °C, 0.06 in (1.5 mm) from case, 10 s

#### Notes

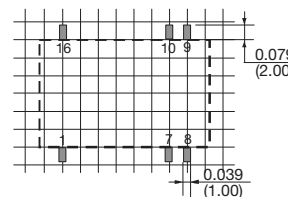
1. Operation at no load will not damage device but may not meet all specifications.

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number <sup>(6)</sup>
5 VDC	5.0 V	400 mA	76%	ISQ0505A
12 VDC	5.0 V	400 mA	76%	ISQ1205A
	15.0 V	133 mA	79%	ISQ1215A
24 VDC	5.0 V	400 mA	77%	ISQ2405A
	15.0 V	133 mA	78%	ISQ2415A

### Mechanical Details



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



Pin	Function
1	-Vin
7	N.C.
8	N.C.
9	+Vo
10	-Vo
16	+Vin

N.C. Not connected

#### Notes

1. All dimensions in inches (mm)
2. Tolerance:  $\pm 0.010$  ( $\pm 0.25$ )
3. Weight: 0.008 lbs (3.8 g)
4. Pin tolerance:  $\pm 0.004$  ( $\pm 0.10$  mm)
5. For optional tape & reel option add suffix -TR to the end of the p/n. Reel quantity = 500