2 Watts
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 ±10%
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• 10%[1]
Line Regulation	• 1.2%/1% Δ Vin
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%/°C
Short Circuit Protection	• Continuous, automatic recovery

General

Efficiency	• See table
Isolation Voltage	• 6000 VDC
Isolation Resistance	• 10^9 Ω
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

Environmental

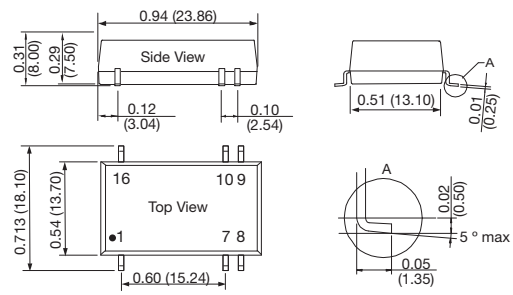
Operating Temperature	• -40 °C to +85 °C
Storage Temperature	• -55 °C to +125 °C
Case Temperature	• 105 °C max
Cooling	• Convection-cooled
Lead Temperature	• 260 °C, 0.06 in (1.5 mm) from case, 10 s

Notes

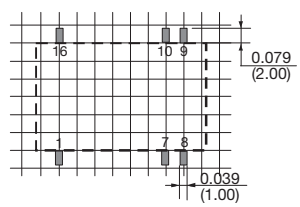
1. Operation at no load will not damage device but may not meet all specifications.

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number
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
	12.0 V	167 mA	80%	ISQ2412A
	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: ±0.010 (±0.25)
3. Weight: 0.008 lbs (3.8 g)
4. Pin tolerance: ±0.004 (±0.10 mm)