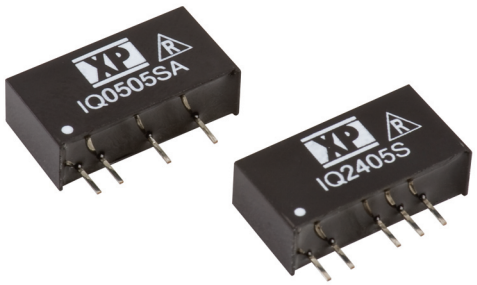
1 Watt
IQ Series



- Single & Dual Output
- SIP Package
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- –40 °C to +85 °C Operation
- Semi–regulated
- 3 Year Warranty

Specification

Input

Input Voltage Range	• Nominal ±10%
Input Reflected Ripple Current	• 5 & 12 V: 20 mA, 15 V: 30 mA 24 V: 40 mA, 48 V: 50 mA pk-pk, 5 Hz to 20 MHz
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• None[1]
Line Regulation	• 1.2%/1% Δ Vin
Load Regulation	• See table (10-100%)
Setpoint Accuracy	• ±3%
Ripple & Noise	• 50 mV pk-pk max, 20 MHz bandwidth
Temperature Coefficient	• 0.02%/°C
Maximum Capacitive Load	• See table

General

Efficiency	• See table
Isolation Voltage	• 1000 VDC minimum, 3000 VDC option[2]
Isolation Resistance	• 10^9 Ω
Isolation Capacitance	• 60 pF typical
Switching Frequency	• Variable, 55 kHz - 85 kHz
MTBF	• >1.1 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

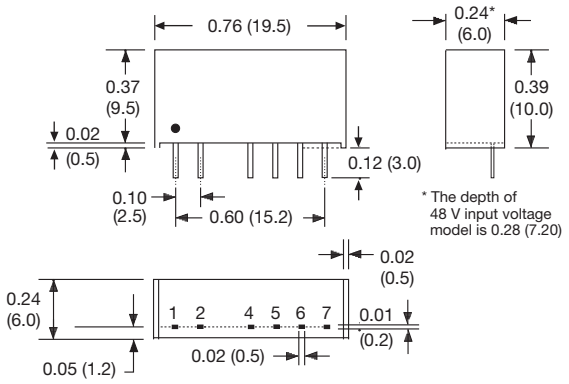
Operating Temperature	• -40 °C to +85 °C
Storage Temperature	• -40 °C to +125 °C
Case Temperature	• 100 °C max
Cooling	• Convection-cooled

Safety

Safety Approvals	• UCE & UKCA meets all applicable directives & legislation.

Input Voltage	Output Voltage	Output Current	No Load Input Current	Max Capacitive Load	Efficiency	Load Reg.	Model[3] Number
5 VDC	5.0 V	200 mA	20 mA	200 µF	83%	6.0%	IQ0505SA
	9.0 V	111 mA	20 mA	200 µF	86%	5.5%	IQ0509SA
	12.0 V	83 mA	20 mA	100 µF	87%	5.5%	IQ0512SA
	15.0 V	67 mA	20 mA	100 µF	87%	5.0%	IQ0515SA
12 VDC	5.0 V	200 mA	15 mA	200 µF	84%	4.0%	IQ1205SA
	9.0 V	111 mA	15 mA	200 µF	86%	3.5%	IQ1209SA
	12.0 V	83 mA	15 mA	100 µF	88%	3.5%	IQ1212SA
	15.0 V	67 mA	15 mA	100 µF	88%	3.0%	IQ1215SA
15 VDC	5.0 V	200 mA	10 mA	200 µF	84%	4.0%	IQ1505SA
	9.0 V	111 mA	10 mA	200 µF	86%	3.5%	IQ1509SA
	12.0 V	83 mA	10 mA	100 µF	87%	3.5%	IQ1512SA
	15.0 V	67 mA	10 mA	100 µF	89%	3.0%	IQ1515SA
24 VDC	5.0 V	200 mA	7 mA	200 µF	81%	4.0%	IQ2405SA
	9.0 V	111 mA	7 mA	200 µF	84%	3.5%	IQ2409SA
	12.0 V	83 mA	7 mA	100 µF	85%	3.5%	IQ2412SA
	15.0 V	67 mA	7 mA	100 µF	86%	2.5%	IQ2415SA
48 VDC	5.0 V	200 mA	5 mA	200 µF	78%	4.0%	IQ4805SA
	9.0 V	111 mA	5 mA	200 µF	80%	3.5%	IQ4809SA
	12.0 V	83 mA	5 mA	100 µF	81%	3.0%	IQ4812SA
	15.0 V	67 mA	5 mA	100 µF	81%	3.0%	IQ4815SA

Mechanical Details



Notes

1. Operation at no load will not damage unit but it may not meet all specifications.
2. For optional 3000 VDC isolation, add suffix '-H' to the model number.
3. For dual output delete suffix 'A' and split output current equally between rails.
4. All dimensions in inches (mm).
5. Pin pitch tolerance: ±0.014 (±0.35)
6. Case tolerance: ±0.02 (±0.5)
7. Weight: 0.06 lbs (2.8 g)

Pin Connections				
Pin	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	+Vin	+Vin
2	-Vin	-Vin	-Vin	-Vin
4	-Vout	-Vout	N.P	N.P
5	N.P	Common	-Vout	-Vout
6	+Vout	+Vout	N.P	Common
7	N.P	N.P	+Vout	+Vout