1 Watt
ISJ Series

- Single Output
- Ultra Slim SMD Package
- Industry Standard Pinout
- 1500 VDC Isolation
- MTBF >3.5 MHrs
- –40 °C to +85 °C Operation
- 3 Year Warranty

Specification

Input

Input Voltage Range	• Nominal ±10%
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• 10%
Line Regulation	• 1.2%/1% Δ Vin
Load Regulation	• 7.5% max for 10-100% load change
Setpoint Accuracy	• 100-110% of nominal at 10% load
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 minimum[1]
Isolation Resistance	• 10^9 Ω
Isolation Capacitance	• 25 pF typical
Switching Frequency	• 100 kHz typical 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	• 250 °C, 0.06 in (1.5 mm) from case, 10 s

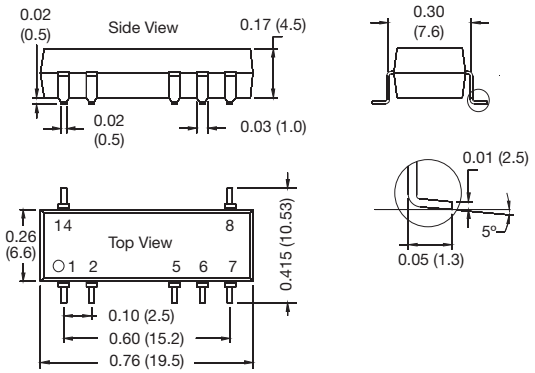
Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number
5 VDC	5.0 V	200 mA	74%	ISJ0505A[1]†^
	12.0 V	83 mA	77%	ISJ0512A†^
	15.0 V	67 mA	76%	ISJ0515A†^
12 VDC	5.0 V	200 mA	73%	ISJ1205A†^

Notes

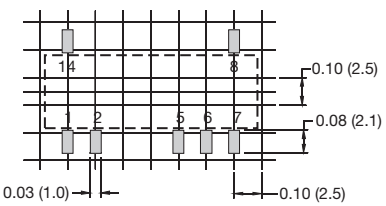
1. ISJ0505A available with 3000 VDC isolation, add suffix '-H' to part number.

† Available from Farnell & element14. See pages 284-290.
^ Available from Newark. See pages 291-296.

Mechanical Details



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



Pin	Function
1	Vin
2	GND
5	0 V.
6	+Vout
7	N.C.
8	N.C.
14	N.C.

N.C. Not connected

Notes

1. All dimensions in inches (mm)
2. Tolerance: ±0.010 (±0.25)
3. Weight: 0.003 lbs (1.4 g)
4. Pin tolerance: ±0.004 (±0.10 mm)