

1 Watt

ID Series



- Single & Dual Output
- SIP Package
- Industry Standard Pinout
- 6000 VDC Isolation
- -40 °C to +85 °C Operation
- MTBF >3 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%
 Line Regulation • 1.2%/1% ΔV_{in}
 Load Regulation • 7.5% 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 • 5 V input: 1 s max,
 12 V input: continuous

General

- Efficiency • See table
 Isolation Voltage • 6000 VDC, 1 mA max
 Isolation Resistance • $10^9 \Omega$
 Isolation Capacitance • 10 pF typical
 Switching Frequency • 5 V input: 250 kHz,
 12 V input: 50 kHz
 typical at nominal input and full load
 MTBF • >3 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

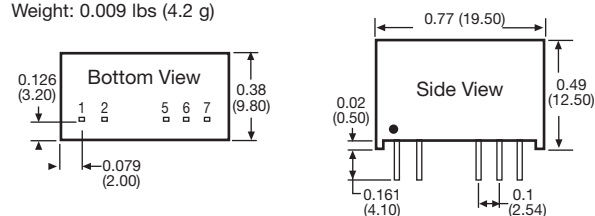
Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number ⁽¹⁾
5 VDC	5.0 V	200 mA	70%	ID0505SA
	9.0 V	111 mA	72%	ID0509SA
	12.0 V	84 mA	73%	ID0512SA
	15.0 V	67 mA	74%	ID0515SA
12 VDC	5.0 V	200 mA	70%	ID1205SA
	9.0 V	111 mA	71%	ID1209SA
	12.0 V	84 mA	72%	ID1212SA
	15.0 V	67 mA	75%	ID1215SA

Notes

1. For dual output versions, delete 'A' from part number and split current equally between outputs.

Mechanical Details

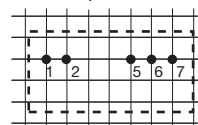
Weight: 0.009 lbs (4.2 g)



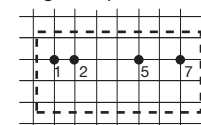
Recommended footprint

Top view grid: 0.1 x 0.1 in (2.54 x 2.54 mm)
 Diameter: 0.39" (1.0 mm)

Dual Output



Single Output



Pin	Single	Dual
1	Vin	Vin
2	GND	GND
5	0 V	-Vo
6	No Pin	0 V
7	+Vo	+Vo

Notes

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

Pin diameter: 0.020 x 0.012 (0.50 x 0.30)
 Pin tolerance: ± 0.004 (± 0.10 mm)