

# 2 Watt IG Series



- Single & Dual Output
- SIP 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%
- Line Regulation • 1.2%/1% Δ Vin
- Load Regulation • ±15% for a 10-100% load change
- Setpoint Accuracy • 100-110% of nominal at 10% load
- Ripple & Noise • 250 mV pk-pk 20 MHz bandwidth
- Temperature Coefficient • 0.03%/°C
- Short Circuit Protection • Continuous

### General

- Efficiency • See table
- Isolation Voltage • 6000 VDC (tested for 1 min)
- Isolation Resistance • 10<sup>9</sup> Ω
- Isolation Capacitance • 10 pF max
- Switching Frequency • 5 V input: 45 kHz, 12 V/24 V input: 50 kHz typical at nominal input, full load
- MTBF • >3.5 MHrs to MIL-HDBK-217F at 25 °C, GB

### Environmental

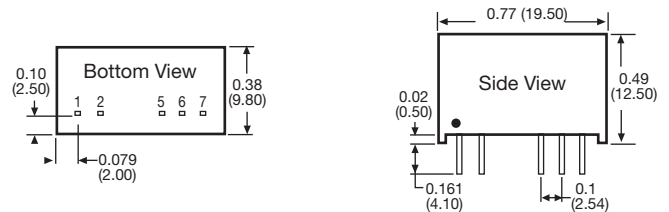
- Operating Temperature • -40 °C to +85 °C
- Storage Temperature • -55 °C to +125 °C
- Case Temperature • 105 °C max
- Cooling • Convection-cooled

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number <sup>(1)</sup>
5 VDC	5.0 V	400 mA	74%	IG0505SA
	9.0 V	222 mA	77%	IG0509SA
	12.0 V	167 mA	77%	IG0512SA
	15.0 V	133 mA	77%	IG0515SA
12 VDC	5.0 V	400 mA	75%	IG1205SA
	9.0 V	222 mA	78%	IG1209SA
	12.0 V	167 mA	80%	IG1212SA
	15.0 V	133 mA	78%	IG1215SA
24 VDC	5.0 V	400 mA	75%	IG2405SA
	9.0 V	222 mA	77%	IG2409SA
	12.0 V	167 mA	80%	IG2412SA
	15.0 V	133 mA	79%	IG2415SA

### Notes

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

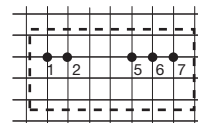
### Mechanical Details



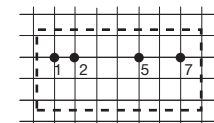
### Recommended footprint

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	-Vin	-Vin
5	0 V	-Vo
6	No Pin	0 V
7	+Vo	+Vo

### Notes

Dimensions in inches (mm) Pin diameter: 0.020 x 0.012 (0.50 x 0.30)  
 Weight: 0.009 lbs (4.3 g) Pin tolerance: ±0.004 (±0.10 mm)  
 Tolerance: ±0.010 (±0.25)