

## ISG Series



- Regulated Single Output
- SMD Package
- Industry Standard Pinout
- 1000 VDC Isolation
- Short Circuit Protection
- MTBF >3.5 Mhrs
- 3 Year Warranty

### Specification

#### Input

- Input Voltage Range • Nominal  $\pm 5\%$   
 Input Reverse Voltage Protection • None

#### Output

- Output Voltage • See table  
 Minimum Load • 10%  
 Line Regulation •  $\pm 0.25\%$   
 Load Regulation •  $\pm 1\%$ , 10-100% load change  
 Setpoint Accuracy •  $\pm 3\%$  at 100% load  
 Ripple & Noise • 100 mV pk-pk 20 MHz bandwidth  
 Temperature Coefficient •  $0.03\%/^{\circ}\text{C}$   
 Short Circuit Protection • Continuous

#### General

- Efficiency • See table  
 Isolation Voltage • 1000 VDC  
 Isolation Resistance •  $10^9 \Omega$   
 Switching Frequency • 100 kHz typical at nominal input, full load  
 MTBF • >3.5 Mhrs to MIL-HDBK-217F at 25 °C, GB

#### Environmental

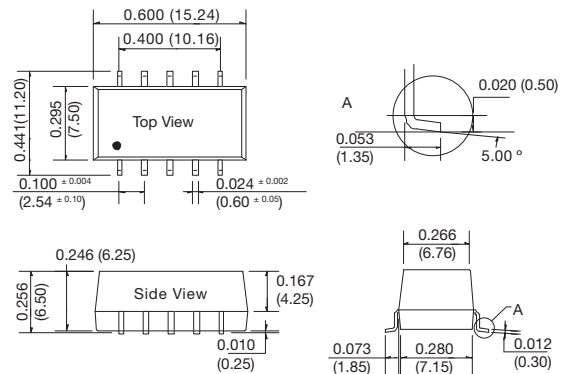
- Operating Temperature •  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ , derate from 100% load at  $70^{\circ}\text{C}$  to 60% load at  $85^{\circ}\text{C}$   
 Storage Temperature •  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$   
 Case Temperature •  $100^{\circ}\text{C}$  max  
 Cooling • Convection-cooled  
 Lead Temperature •  $260^{\circ}\text{C}$ , 0.06 in (1.5 mm) from case, 10 s

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number <sup>(1)</sup>
5 VDC	5 V	150 mA	68%	ISG0505A
	12 V	83 mA	69%	ISG0512A
	15 V	67 mA	69%	ISG0515A
12 VDC	5 V	150 mA	68%	ISG1205A
	12 V	83 mA	69%	ISG1212A
	15 V	67 mA	70%	ISG1215A

1. For optional '-X' pin configuration, add suffix '-X' to part number.

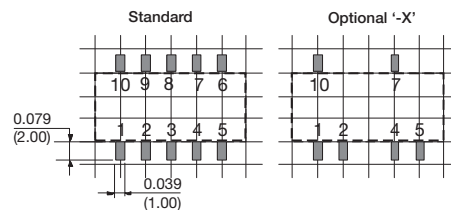
### Mechanical Details

Weight: 0.003 lbs (1.7 g)



#### Recommended footprint

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



Pin	Standard	'-X' Version
1	GND	GND
2	Vin	Vin
4	0 V	0 V
7	+Vo	+Vo
3, 6, 8, 9	N.C.	No Pin
5, 10	N.C.	N.C.

N.C. Not connected

#### Notes

Dimensions in inches (mm)  
 Tolerance:  $\pm 0.010$  ( $\pm 0.25$ )

Pin tolerance:  $\pm 0.004$  ( $\pm 0.10$  mm)