

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 • $10\%^{(2)}$
- 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

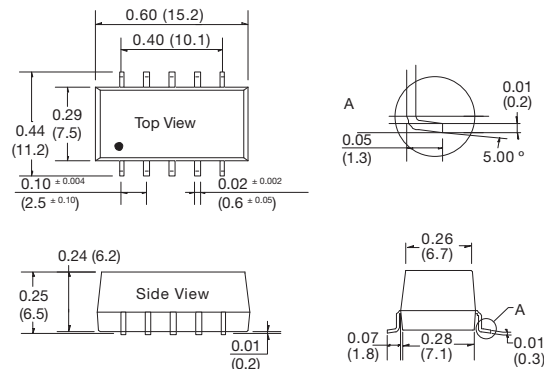
- Operating Temperature • -40°C to $+85^{\circ}\text{C}$, derate from 100% load at 70°C to 60% load at 85°C
- Storage Temperature • -55°C to $+125^{\circ}\text{C}$
- Case Temperature • 100°C max
- Cooling • Convection-cooled
- Lead Temperature • 260°C , 0.06 in (1.5 mm) from case, 10 s

Input Voltage	Output Voltage	Output Current	Efficiency (typical)	Model Number ⁽¹⁾
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 [†] ^

[†] Available from Farnell & element14. See pages 284-290.

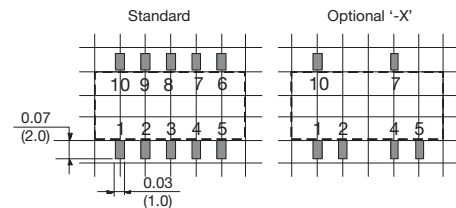
[^] Available from Newark. See pages 291-296.

Mechanical Details



Recommended footprint

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



Pin	Standard	'-X' Version
1	GND	GND
2	V _{in}	V _{in}
4	0 V	0 V
7	+V _o	+V _o
3, 6, 8, 9	N.C.	No Pin
5, 10	N.C.	N.C.

N.C. Not connected

Notes

- For optional '-X' pin configuration, add suffix '-X' to part number.
- Operation at no load will not damage device but may not meet all specifications.
- All dimensions in inches (mm)
- Tolerance: ± 0.010 (± 0.25)
- Weight: 0.003 lbs (1.7 g)
- Pin tolerance: ± 0.004 (± 0.10 mm)