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Stocking Distributor

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[SWG150-05](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

Model SWG150 Series

Parameter		Model		
		SWG150-05	SWG150-12	SWG150-24
Input Conditions	Rated Input Voltage		100 to 240 VAC (140 to 340 VDC)	
	Allowable Input Voltage		85 to 264 VAC (120 to 370 VDC)	
	Input Current (typ)		2.0 A (100 VAC) / 1.0 A (200 VAC)	
	Rated Frequency		50 / 60 Hz	
	Allowable Frequency Range		47 to 63 Hz	
	Efficiency (typ)	AC 100 V	83%	83%
		AC 200 V	86%	86%
	Power Factor (typ)		0.99 A (100 VAC) / 0.93 A (200 VAC)	
	Inrush Current (typ) ^{1,2}		20 A ($V_{IN} = 100$ V) / 40 A ($V_{IN} = 200$ V) $I_O = 100\%$ at Cold Start	
	Leakage Current (max)		0.40 mA ($V_{IN} = 100$ V) / 0.75 mA ($V_{IN} = 240$ V) 60 Hz $I_O = 100\%$ per measuring method of IEC60950-1 and PSE	
Output Conditions	Rated Output Voltage		5 V	12 V
	Rated Output Current		30 A	13 A
	Static Input Variation		20 mV max	48 mV max
	Static Load Variation		40 mV max	100 mV max
	Ripple ³	0° to 50° C	80 mVp-pmax	120 mVp-pmax
		-10° to 0° C	140 mVp-pmax	160 mVp-pmax
	Ripple Noise ³	0° to 50° C	120 mVp-pmax	150 mVp-pmax
		-10° to 0° C	160 mVp-pmax	180 mVp-pmax
	Ambient Temperature Variation	0° to 50° C	50 mV max	120 mV max
		-10° to 0° C	60 mV max	150 mV max
	Time Course Drift ⁴		20 mV max	48 mV max
	Startup Time ¹		350 ms typ ($V_{IN} = 100$ V $I_O = 100\%$)	
Additional Functions	Output Holding Time ¹		20 ms typ ($V_{IN} = 100$ V $I_O = 100\%$)	
	Voltage Variation Range ⁹		4.00 to 5.50 V	10.0 to 13.2 V
	Voltage Set Point		5.00 to 5.15 V	12.00 to 12.48 V
Environmental Conditions	Overcurrent Protection		Detection above 105% of rated current (automatic recovery)	
	Overvoltage Protection ⁵		5.75 to 7.00 V	15.0 to 18.0 V
	Operations Display		LED Display: Green	
Environmental Conditions	Operating Temperature Range		-10°C to 71°C (with derating)	
	Storage Temperature Range		-20°C to 75°C	
	Operating Humidity Range		20% to 90% RH (no condensation)	
	Storage Humidity Range		20% to 90% RH (no condensation)	
	Cooling Requirements		Natural air cooling	
	Vibration Resistance	Vibration Frequency		10 to 55 Hz
		Sweep Time		3 minutes
		Acceleration		19.6 m/s ² (2 G)
		Vibration Direction		x, y, z
		Vibration Time		One hour in each of three directions
	Shock Resistance		196.1m/s ² (20G) 11 ms One each of three directions x, y, z	
	Installation Conditions		Derating may be required due to mounting orientation	

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Parameter		Model				
		SWG150-05	SWG150-12	SWG150-24		
Insulation ⁷	Insulation Withstand Voltage	Input-Output	3000 VAC one minute (leakage current 10 mA or less)			
		Input-FG	2000 VAC one minute (leakage current 10 mA or less)			
		Output-FG	500 VAC one minute (leakage current 100 mA or less)			
	Insulation Resistance	Input-Output	50 MΩ (measured with 500 VDC Megger)			
		Input-FG				
		Output-FG				
Others	Input/Output Type	Terminal Stand				
	Dimensions	34 mm (W) X 93 mm (H) X 168 mm (D) (without terminal stand)				
	Weight	560g maximum (without cover)				
	Safety Standards	UL60950-1, C-UL (CSA60950-1), EN60950-1, EN50178, PSE				
	EMI Safety	Designed to meet FCC Class B, VCCI Class B, CISPR22 Class B, EN55011 Class B, EN55022 Class B				
	Harmonic Current	Designed to meet IEC61000-3-2				
		Designed to meet EN61000-4-2 (for electrostatic discharge)				
		Designed to meet EN61000-4-3 (for radiated, radio-frequency, electromagnetic field)				
		Designed to meet EN61000-4-4 (for transient burst)				
	Electromagnetic Susceptibility	Designed to meet EN61000-4-5 (for lightning surge)				
		Designed to meet EN61000-4-6 (for conductive radio frequency electromagnetic field)				
		Designed to meet EN61000-4-8 (for power supply frequency electromagnetic field immunity)				
		Designed to meet EN61000-4-11 (for voltage dip/variation)				
Options	Environmental Response	Designed to meet RoHS directive				
	Remote On/Off	Yes				
	Connector	JST (except 5 V output)				
	Cover ⁸	Yes				

1. Specified under rated input/output conditions at an ambient temperature of 25°C.
2. More current above noted values may flow at restart (ambient temperature of 25°C).
3. Ripple noise is measured with a 20 MHz oscilloscope using a 1:1 probe.
4. Time-course drift is measured between 30 minutes to 8 hours after applying input voltage at rated input/output at an ambient temperature 25°C.
5. Reset is performed by reapplying input voltage.
6. Output derating may be required.
7. Insulation conditions are specified at normal temperature and humidity.
8. Derating may be required for the power supply with cover.
9. In the case where output voltage is variable, set a voltage such that Output Voltage Variation, Rated Output Current, and Rated Output Power are not exceeded.