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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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( Cable connection )



( USB connection )



## ■ Features

- Ultra slim
- Universal AC input / Full range
- 2 pole EURO plug, Class II power unit
- No load power consumption <0.075W
- **Energy efficiency Level VI**
- Comply with EU ErP and meet CoC version 5
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- 3 years warranty

## ■ Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

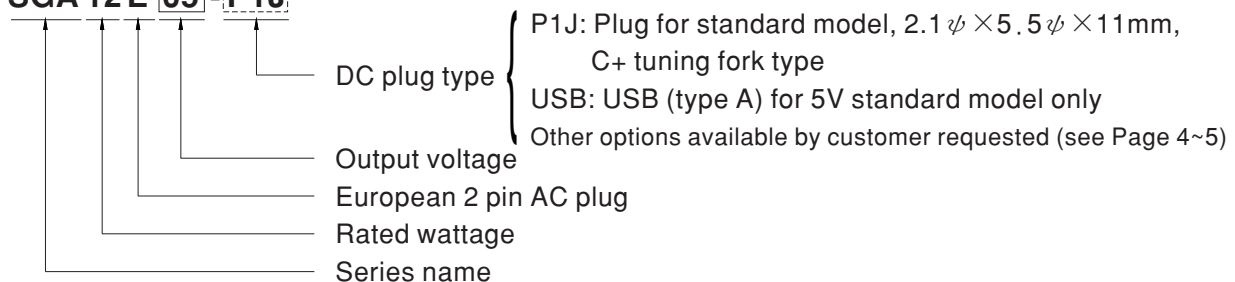
## ■ Description

SGA12E is a 12W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA12E is a class II power unit (no FG) equipped with the standard 2-Pin European plug, accepting the input range from 90VAC to 264VAC. The whole series provides different models with output voltages ranging between 5VDC and 48VDC that it can satisfy the demands for various types of consumer electronic devices.

With the efficiency up to 86% and the extremely low no-load power consumption below 0.075W, SGA12E is compliant with EU ErP and meet CoC version 5. The supreme feature allows the adaptor to save the energy when it is under either the operating mode or the standby mode. The entire series is approved for international safety regulations; moreover, it adopts the 94V-0 flame retardant plastic case that it can effectively prevent users from electric hazards.

## ■ Model Encoding

**SGA 12 E 05 - P1J**



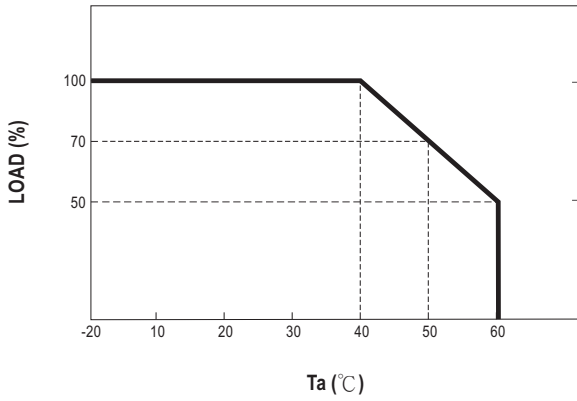




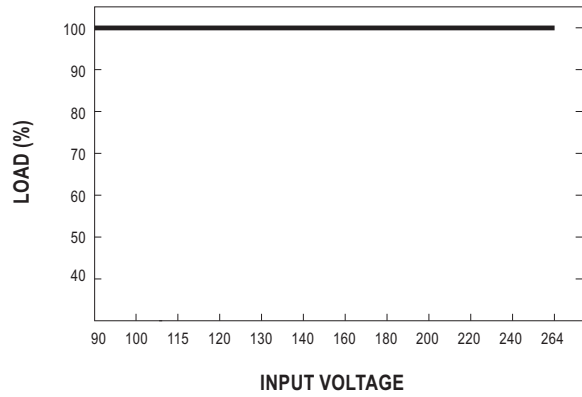
**SPECIFICATION**

ORDER NO.		SGA12E05- <input type="checkbox"/> <input type="checkbox"/> =P1J, USB	SGA12E07-P1J	SGA12E09-P1J	SGA12E12-P1J	SGA12E15-P1J	SGA12E18-P1J	SGA12E24-P1J	SGA12E48-P1J	
OUTPUT	SAFETY MODEL NO.	SGA12E05	SGA12E07	SGA12E09	SGA12E12	SGA12E15	SGA12E18	SGA12E24	SGA12E48	
	DC VOLTAGE <span style="float:right">Note.2</span>	5V	7.5V	9V	12V	15V	18V	24V	48V	
	RATED CURRENT	2.4A	1.6A	1.33A	1A	0.8A	0.666A	0.5A	0.25A	
	CURRENT RANGE	0 ~ 2.4A	0 ~ 1.6A	0 ~ 1.33A	0 ~ 1A	0 ~ 0.8A	0 ~ 0.666A	0 ~ 0.5A	0 ~ 0.25A	
	RATED POWER (max.)	12W	12W	12W	12W	12W	12W	12W	12W	
	RIPPLE & NOISE (max.) <span style="float:right">Note.3</span>	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	
	VOLTAGE TOLERANCE <span style="float:right">Note.4</span>	± 5.0%	± 5.0%	± 5.0%	± 3.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%	
	LINE REGULATION <span style="float:right">Note.5</span>	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LOAD REGULATION <span style="float:right">Note.6</span>	± 5.0%	± 5.0%	± 5.0%	± 3.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%	
SETUP, RISE, HOLD UP TIME	1300ms, 50ms, 12ms/230VAC      1300ms, 50ms, 12ms/115VAC at full load									
INPUT	VOLTAGE RANGE	90 ~ 264VAC								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	80%	83%	83%	83%	84.5%	85%	85%	86%	
	AC CURRENT	0.5A / 115VAC		0.25A / 230VAC						
	INRUSH CURRENT (max.)	Cold start 30A / 115VAC		60A / 230VAC						
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC								
PROTECTION	OVERLOAD	110 ~ 200% rated output power						120 ~ 250% rated output power		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	110 ~ 140% rated output voltage								
	Protection type : Clamp by zener diode, output short									
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH non-condensing								
	TEMP. COEFFICIENT	± 0.03% / °C (0 ~ 40°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	TUV EN60950-1, EAC TP TC 004 approved								
	WITHSTAND VOLTAGE	I/P-O/P:4242VDC								
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Parameter	Standard					Test Level / Note		
		Conducted emission	EN55032(CISPR32)					Class B		
		Radiated emission	EN55032(CISPR32)					Class B		
		Harmonic current	EN61000-3-2					Class A		
		Voltage flicker	EN61000-3-3					-----		
	EMC IMMUNITY	Parameter	Standard					Test Level / Note		
		ESD	EN61000-4-2					Level 3, 8KV air; Level 2, 4KV contact		
		RF field susceptibility	EN61000-4-3					Level 2, 3V/m		
		EFT bursts	EN61000-4-4					Level 2, 1KV		
		Surge susceptibility	EN61000-4-5					Level 3, 1KV/L-N		
Conducted susceptibility		EN61000-4-6					Level 2, 3V			
Magnetic field immunity		EN61000-4-8					Level 1, 1A/m			
Voltage dips , interruption	EN61000-4-11					>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods				
OTHERS	LIFE	3 years : 100% load 40°C, 8hours / day								
	MTBF	265Khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION	62.2*27.4*39.7mm (L*W*H)								
	PACKING	100g ; 90pcs / 10kg / CARTON for cable connection ; 59.5g ; 90pcs / 8kg / CARTON for USB connection								
CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested								
	CABLE	See page 4~5 ; Other type available by customer requested								
NOTE	<p>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</p> <p>2.DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</p> <p>3.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf &amp; 47µf capacitor.</p> <p>4.Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5.Line regulation is measured from low line to high line at rated load.</p> <p>6.Load regulation is measured from 10% to 100% rated load</p> <p>7.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p>									

### Derating Curve



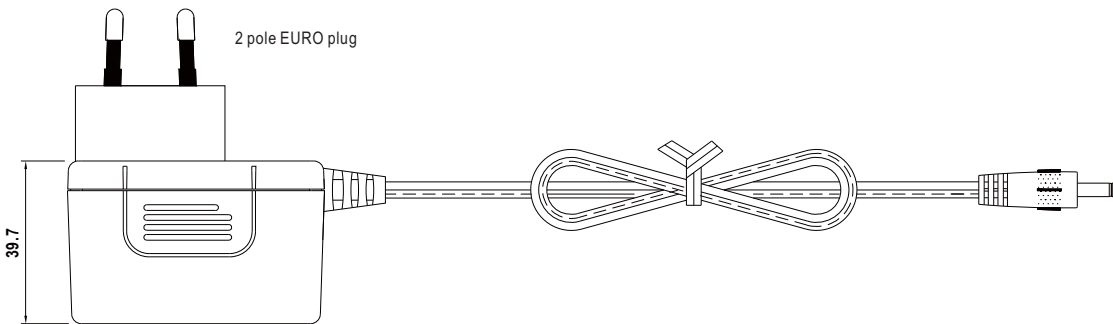
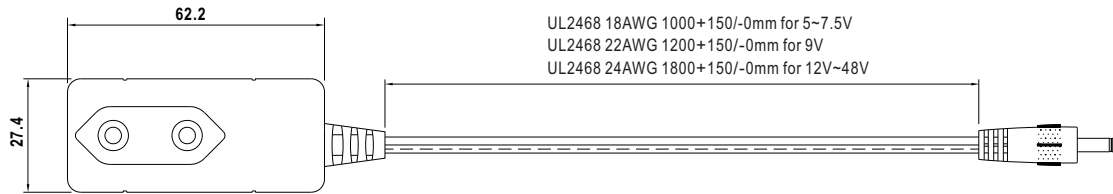
### Static Characteristics



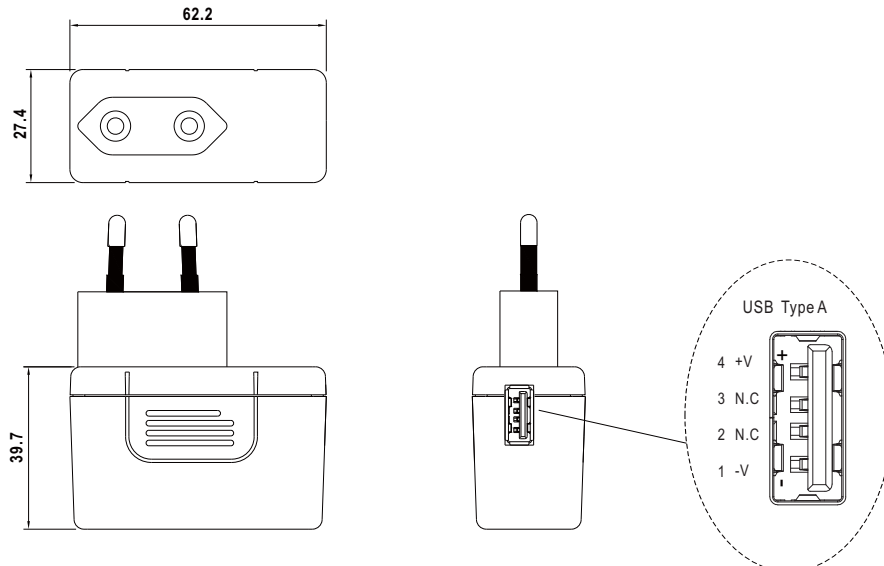
### Mechanical Specification

Unit:mm

#### ※ Cable Connection






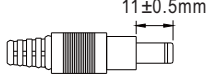

#### ※ USB Connection





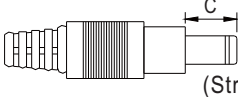
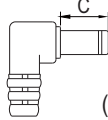


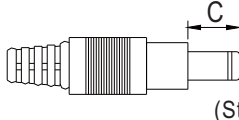
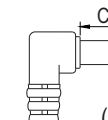


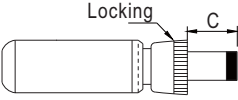


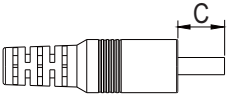
■ DC output plug

☉ Standard plug: P1J

Unit:mm

P1J		Pin Assignment
		
		Outside  Inside

☉ Optional DC plug:

Tuning Fork Style		Type No.	A	B	C
			OD	ID	L
   (Straight)  (Right-angled)	P1I	5.5	2.1	9.5	
	P1L	5.5	2.5	9.5	
	P1M	5.5	2.5	11.0	
	P1IR	5.5	2.1	9.5	
	P1JR	5.5	2.1	11.0	
	P1LR	5.5	2.5	9.5	
P1MR	5.5	2.5	11.0		
Barrel Style		Type No.	A	B	C
			OD	ID	L
   (Straight)  (Right-angled)	P2I	5.5	2.1	9.5	
	P2J	5.5	2.1	11.0	
	P2L	5.5	2.5	9.5	
	P2M	5.5	2.5	11.0	
	P2IR	5.5	2.1	9.5	
	P2JR	5.5	2.1	11.0	
	P2LR	5.5	2.5	9.5	
	P2MR	5.5	2.5	11.0	
Lock Style		Type No.	A	B	C
			OD	ID	L
   Locking SWITCHCRAFT original or equivalent	P2S(S761K)	5.53	2.03	12.06	
	P2K(761K)	5.53	2.54	12.06	
	P2C(S760K)	5.53	2.03	9.52	
	P2D(760K)	5.53	2.54	9.52	
Min. Pin Style		Type No.	A	B	C
			OD	ID	L
   EIAJ equivalent	P3A	2.35	0.7	11.0	
	P3B	4.0	1.7	11.0	
	P3C	4.75	1.7	11.0	

Center Pin Style	Type No.	A	B	C	D
		OD	ID	L	Center Pin
	P4A	5.5	3.4	11.0	1.0
	P4B	6.5	4.4	11.0	1.4
	P4C	7.4	5.1	11.0	0.6
Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment			
	R6B	PIN No.	Output		
		1	+Vo		
		2	-Vo		
		3	+Vo		
Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment			
	R7B	PIN No.	Output		
		1	+Vo		
		2	-Vo		
		3	-Vo		
		4	+Vo		
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment			
	R7BF	PIN No.	Output		
		1	+Vo		
		2	-Vo		
		3	-Vo		
		4	+Vo		
Stripped and tinned leads	Type No.	Pin Assignment			
<p>Length of Land L1 by request (MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm)</p>	by customer	PIN No.	Output		
		1 (Ribbed)	+Vo		
		2 (Letter)	-Vo		

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>