



■ Features :

- Universal AC input / Full range
- No load power consumption < 0.5W
- Meet EISA 2007 (Energy Independence and Security Act)
- 3 pole AC inlet IEC320-C14
- Class I power (with earth pin)
- Full output 5~48V safety approval
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- LED indicator for power on
- Approvals: UL / CUL / TUV / BSMI / CB / FCC / CE
- Pass LPS
- 2 years warranty

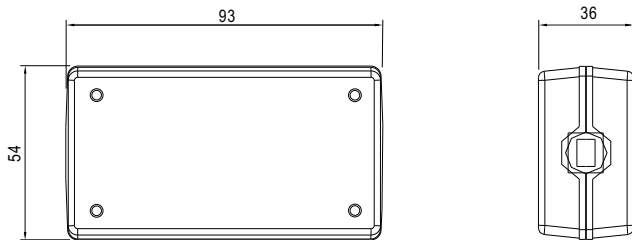
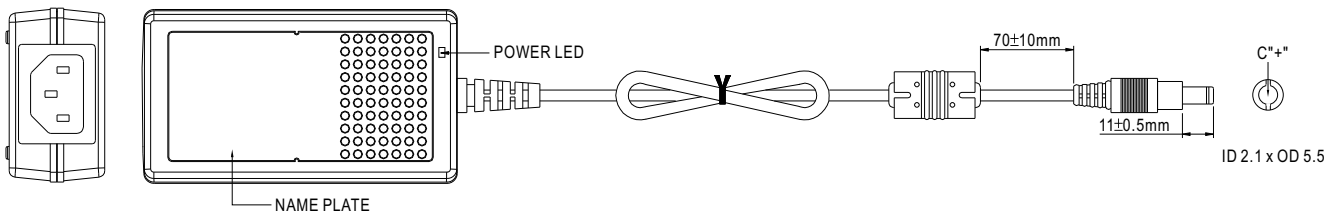
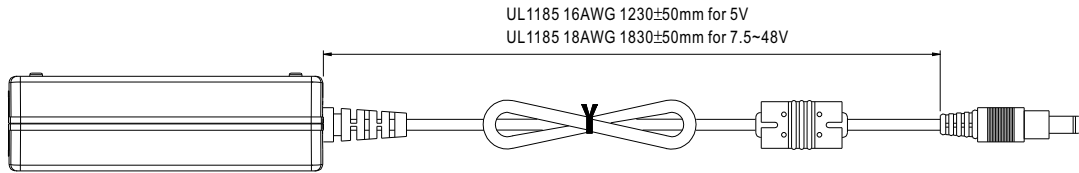


SPECIFICATION

ORDER NO.	GS25A05-P1J	GS25A07-P1J	GS25A09-P1J	GS25A12-P1J	GS25A15-P1J	GS25A18-P1J	GS25A24-P1J	GS25A28-P1J	GS25A48-P1J	
OUTPUT	SAFETY MODEL NO.	GS25A05	GS25A07	GS25A09	GS25A12	GS25A15	GS25A18	GS25A24	GS25A28	GS25A48
	DC VOLTAGE <small>Note.2</small>	5V	7.5V	9V	12V	15V	18V	24V	28V	48V
	RATED CURRENT	4.0A	2.93A	2.77A	2.08A	1.66A	1.38A	1.04A	0.89A	0.52A
	CURRENT RANGE	0 ~ 4.0A	0 ~ 2.93A	0 ~ 2.77A	0 ~ 2.08A	0 ~ 1.66A	0 ~ 1.38A	0 ~ 1.04A	0 ~ 0.89A	0 ~ 0.52A
	RATED POWER (max.)	20W	22W	25W	25W	25W	25W	25W	25W	25W
	RIPPLE & NOISE (max.) <small>Note.3</small>	50mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p	240mVp-p
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION <small>Note.6</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
SETUP, RISE, HOLD UP TIME	500ms, 20ms, 50ms/230VAC 500ms, 20ms, 15ms/115VAC at full load									
INPUT	VOLTAGE RANGE	90 ~ 264VAC 135 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	74%	78%	79%	81%	82%	82%	83%	83%	84%
	AC CURRENT	0.7A / 100VAC								
	INRUSH CURRENT (max.)	45A / 230VAC								
	LEAKAGE CURRENT(max.)	0.75mA / 240VAC								
PROTECTION	OVERLOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	105 ~ 135% rated output voltage Protection type : Clamp by zener diode								
ENVIRONMENT	WORKING TEMP.	0 ~ +50°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03% / °C (0~50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336 approved								
	WITHSTAND VOLTAGE	I/P-O/P:4242VDC, I/P-FG:2121VDC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, FCC PART 15 / CISPR22 class B, CNS13438 class B								
	HARMONIC CURRENT	Compliance to EN61000-3-2,3								
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A								
OTHERS	MTBF	500Khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION	93*54*36mm (L*W*H)								
	PACKING	230g ; 60pcs / 15kg / CARTON								
CONNECTOR	PLUG	Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested								
	CABLE	Standard type UL1185 6ft (4FT only for 5V output) for stock ; 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 & 50% load.</p> <p>3. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf 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 20% 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.</p>									

■ Mechanical Specification

Unit:mm

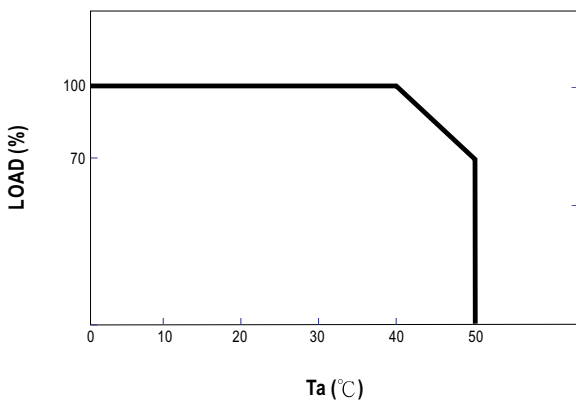


■ Plug Assignment

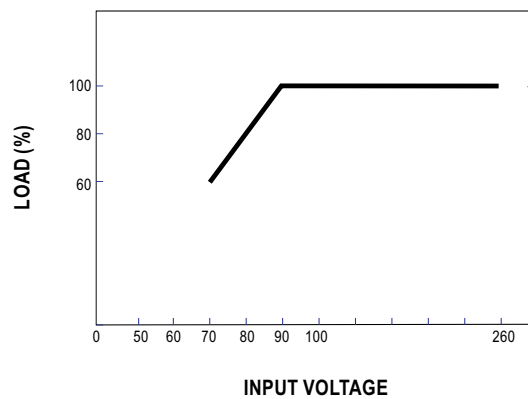
Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

■ Derating Curve



■ Static Characteristics



Model : GS25x09 25W
V1 : +9V / 2.77A

AC-DC Single Output adaptor

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	80mVp-p (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	20mVp-p	P
2	VOLTAGE TOLERANCE	-5% - +5% (Max)	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C	-2.03% ~ +1.74%	P
3	LINE REGULATION	-1% - +1% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0% ~ +0.07%	P
4	LOAD REGULATION	-5% - +5% (Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	-1.87% ~ +1.87%	P
5	SET UP TIME	500 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	173.5 mS	P
6	RISE TIME	20 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	4.79 mS	P
7	HOLD UP TIME	15 mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	15.6 mS	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE RANGE	100VAC ~ 240VAC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	64V ~ 264V	P
2	FREQUENCY RANGE	50HZ - 60HZ (Typ) NO DAMAGE OSC	I/P: 100VAC ~ 240VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: OK	P
3	EFFICIENCY	80% (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	79.4%	P
4	AC CURRENT	0.7A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.523A	P
5	NO LOAD POWER CONSUMPTION	< 0.5W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.22W	P

6	INRUSH CURRENT	< 45A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	40.3A	P
7	LEAKAGE CURRENT	< 0.75mA FOR CLASS I < 0.25mA FOR CLASS II	I/P:240VAC O/P:Min LOAD Ta:25°C	L-FG:0.02mA N-FG:0.02mA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	110~150%	I/P:230VAC O/P:TESTING Ta:25°C	145.5% HICCUP MODE RESET AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	CLAMP BY ZENER DIODE 105 - 135%	I/P:230VAC O/P:MIN LOAD Ta:25°C	CLAMP BY ZENER DIODE 124.5%(11.2V)	P
3	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:264VAC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE RESET AUTO RECOVER	P

SAFETY & E.M.C TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SAFETY STANDARDS	TUV: Certificate No : S 50092395 CLASS I S 50092324 CLASS II UL: File No : E183223 BSMI: Certificate No : R33100			P
2	HARMONIC	IEC61000-3-2 CLASS A	I/P:230VAC / 50HZ O/P:FULL LOAD Ta:25°C	PASS	P
3	CONDUCTION	EN55022 CLASS B	I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C	PASS	P
4	RADIATION	EN55022 CLASS B	I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C	PASS	P
5	E.S.D	IEC61000-4-2 LIGHT INDUSTRY AIR:8KV / Contact:4KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
6	E.F.T	IEC61000-4-4 LIGHT INDUSTRY INPUT: 1KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
7	SURGE	IEC61000-4-5 LIGHT INDUSTRY L-N :1KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
8	WITHSTAND VOLTAGE	I/P-O/P:3KVAC/min	I/P-O/P:3KVAC/min Ta:25°C	I/P-O/P:1.28 mA NO DAMAGE	P



9	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P:500VDC Ta:25°C	I/P-O/P:>100MΩ NO DAMAGE	P
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OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	MTBF	MIL-HDBK-217F NOTICES2 STRESS ANALYSIS PREDICTION TOTAL FAILURE RATE: 1.43 M.T.B.F: 698912HRS			P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2006.12.12	GS25x09	PASS	T.K.CHENG	MAX LIN