

Model : GS12x12 12W
V1 :+12V / 1.0A

AC-DC Single Output adaptor

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	120mVp-p (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	45mVp-p	P
2	VOLTAGE TOLERANCE	-3% ~ +3% (Max)	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C	-0.48% ~ +0.46%	P
3	LINE REGULATION	-1% ~ +1% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0.01% ~ +0%	P
4	LOAD REGULATION	-3% ~ +3% (Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	-0.47% ~ +0.46%	P
5	SET UP TIME	500 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	6.9 mS	P
6	RISE TIME	20 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	5.67 mS	P
7	HOLD UP TIME	10 mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	24.28 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	62.0V ~ 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	77% (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	79.71%	P
4	AVERAGE EFFICIENCY	>72%	I/P:115/230VAC O/P:25%、50%、75%、100% LOAD Ta:25°C	79.9% (115VAC) 77.6% (230VAC)	P
5	AC CURRENT	0.31A	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.287A	P
6	NO LOAD POWER CONSUMPTION	< 0.3W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.09W	P

7	INRUSH CURRENT	< 45A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	40.382A	P
8	LEAKAGE CURRENT	< 0.25mA	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	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	>105%	I/P:230VAC O/P:TESTING Ta:25°C	175% HICCUP MODE RESET AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	CLAMP BY ZENER DIODE 115 ~ 135%	I/P:0VAC O/P: TESTING Ta:25°C	CLAMP BY ZENER DIODE 127.5%(15.3V)	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

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT																																																						
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 6HRS I/P:230VAC O/P:100% LOAD Ta=25.0℃ 2. ROOM AMBIENT BURN-IN : 8HRS I/P:230VAC O/P:100% LOAD Ta=40.9℃ 3. ROOM AMBIENT BURN-IN : 4HRS I/P:115VAC O/P:100% LOAD Ta=25.9℃ <table><tr><th>NO</th><th>Position</th><th>P/N</th><th>1</th><th>2</th><th>3</th></tr><tr><td>1</td><td>LF1</td><td>UU-9.8 LF509</td><td>55.9 ℃</td><td>69.5 ℃</td><td>66.2 ℃</td></tr><tr><td>2</td><td>C5</td><td>CapXon 33uF/400V 13*20 KM 105℃</td><td>56.1 ℃</td><td>71.7 ℃</td><td>57.4 ℃</td></tr><tr><td>3</td><td>U1</td><td>TYN279PN</td><td>85.1 ℃</td><td>102.3 ℃</td><td>76.7 ℃</td></tr><tr><td>4</td><td>T1</td><td>EI-19 TF1647</td><td>78.1 ℃</td><td>93.2 ℃</td><td>75.8 ℃</td></tr><tr><td>5</td><td>C110</td><td>CapXon 220uF/25V 8*16 KF 105℃</td><td>52.3 ℃</td><td>69.5 ℃</td><td>52.7 ℃</td></tr><tr><td>6</td><td>C105</td><td>CapXon 470uF/25V 10*16 KF 105℃</td><td>69.8 ℃</td><td>85.4 ℃</td><td>68.1 ℃</td></tr><tr><td>7</td><td>D100</td><td>SB2100</td><td>79.4 ℃</td><td>94.8 ℃</td><td>77.3 ℃</td></tr><tr><td>8</td><td>CASE</td><td>UPON CENTER</td><td>52.2 ℃</td><td>68.1 ℃</td><td>51.8 ℃</td></tr></table>			NO	Position	P/N	1	2	3	1	LF1	UU-9.8 LF509	55.9 ℃	69.5 ℃	66.2 ℃	2	C5	CapXon 33uF/400V 13*20 KM 105℃	56.1 ℃	71.7 ℃	57.4 ℃	3	U1	TYN279PN	85.1 ℃	102.3 ℃	76.7 ℃	4	T1	EI-19 TF1647	78.1 ℃	93.2 ℃	75.8 ℃	5	C110	CapXon 220uF/25V 8*16 KF 105℃	52.3 ℃	69.5 ℃	52.7 ℃	6	C105	CapXon 470uF/25V 10*16 KF 105℃	69.8 ℃	85.4 ℃	68.1 ℃	7	D100	SB2100	79.4 ℃	94.8 ℃	77.3 ℃	8	CASE	UPON CENTER	52.2 ℃	68.1 ℃	51.8 ℃	P
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SAFETY & E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	SAFETY STANDARDS	TUV: Certificate No : S 50114483 (ONLY FOR "E" TYPE) UL: File No : E183223 (ONLY FOR "U" TYPE) BSMI: Certificate No : R33100 (ONLY FOR "U" TYPE)			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:0.676mA 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

OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C105 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=57358HRS I/P:230 VAC O/P:FULL LOAD Ta=40°C LIFE TIME=20705HRS I/P:115 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=68685HRS			P
2	MTBF	MIL-HDBK-217F NOTICES2 STRESS ANALYSIS PREDICTION TOTAL FAILURE RATE: 0.7069 M.T.B.F: 1414.6KHRS			P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2007.12.25	第二次試產	PASS	PETER	T.K.CHENG