

Model : GS15x-3 15W  
+12V / 1.25A

AC-DC Single Output Wall-mount 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	10mVp-p	P
2	VOLTAGE TOLERANCE	-3% - +3% (Max)	I/P:90VAC~264VAC O/P:FULL-MIN. LOAD Ta:25°C	-1.0% ~ +1.0%	P
3	LINE REGULATION	-0.5% - +0.5% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0% ~ +0%	P
4	LOAD REGULATION	-3% - +3% (Max)	I/P:230VAC O/P:FULL -MIN LOAD Ta:25°C	-0.9% ~ +0.9%	P
5	SET UP TIME	3000mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	900mS	P
6	RISE TIME	50mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	3.6mS	P
7	HOLD UP TIME	16mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	16.8mS	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	60V ~ 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	76% (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	81.4%	P
4	AC CURRENT	0.5A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.34A	P
5	NO LOAD POWER	< 1W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.4W	P

6	INRUSH CURRENT	< 50A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	37.6A	P
7	LEAKAGE CURRENT	<0.25mA / 240VAC	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	115~250%	I/P:230VAC O/P:TESTING Ta:25°C	220% HICCUP MODE RESET AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	CLAMP BY ZENER DIODE >120%	I/P:230VAC O/P:MIN LOAD Ta:25°C	18.1V (151%)	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	SPECICATION	TEST CONDITION	RESULT	VERDICT																																																															
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 16HRS I/P:230VAC O/P:100% LOAD Ta=28.3°C 2. ROOM AMBIENT BURN-IN : 1.5HRS I/P:115VAC O/P:100% LOAD Ta=28.3°C 3. ROOM AMBIENT BURN-IN : 3HRS I/P:230VAC O/P:100% LOAD Ta=39.0°C 4. ROOM AMBIENT BURN-IN : 4HRS I/P:230VAC O/P:70% LOAD Ta=49.2°C			P																																																															
				<table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>P/N</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>VCC C4</td> <td>FuhYin 33uF/25V 105°C 5*11 HFR</td> <td>63.2°C</td> <td>59.9°C</td> <td>73.3°C</td> <td>72.7°C</td> </tr> <tr> <td>2</td> <td>Q1</td> <td>K2101</td> <td>78.5°C</td> <td>74.2°C</td> <td>88.4°C</td> <td>84.2°C</td> </tr> <tr> <td>3</td> <td>I/P C2</td> <td>FuhYin 33uF/400V 105°C 15*20 HFR</td> <td>60.4°C</td> <td>63.1°C</td> <td>70.9°C</td> <td>70.8°C</td> </tr> <tr> <td>4</td> <td>O/P C9</td> <td>Ltec 330uF/25V 105°C 8*16 LZG</td> <td>77.2°C</td> <td>73.9°C</td> <td>86.9°C</td> <td>81.0°C</td> </tr> <tr> <td>5</td> <td>O/P C11</td> <td>Ltec 330uF/25V 105°C 8*16 LZG</td> <td>63.2°C</td> <td>60.5°C</td> <td>73.3°C</td> <td>71.4°C</td> </tr> <tr> <td>6</td> <td>O/P D4</td> <td>FCCH10U10</td> <td>85.8°C</td> <td>82.4°C</td> <td>95.1°C</td> <td>87.1°C</td> </tr> <tr> <td>7</td> <td>T1</td> <td>EE-20</td> <td>87.3°C</td> <td>81.6°C</td> <td>97.3°C</td> <td>88.4°C</td> </tr> <tr> <td>8</td> <td>CASE</td> <td>UPON (INSIDE)</td> <td>71.8°C</td> <td>67.4°C</td> <td>81.4°C</td> <td>78.5°C</td> </tr> </tbody> </table>	NO	Position	P/N	1	2	3	4	1	VCC C4	FuhYin 33uF/25V 105°C 5*11 HFR	63.2°C	59.9°C	73.3°C	72.7°C	2	Q1	K2101	78.5°C	74.2°C	88.4°C	84.2°C	3	I/P C2	FuhYin 33uF/400V 105°C 15*20 HFR	60.4°C	63.1°C	70.9°C	70.8°C	4	O/P C9	Ltec 330uF/25V 105°C 8*16 LZG	77.2°C	73.9°C	86.9°C	81.0°C	5	O/P C11	Ltec 330uF/25V 105°C 8*16 LZG	63.2°C	60.5°C	73.3°C	71.4°C	6	O/P D4	FCCH10U10	85.8°C	82.4°C	95.1°C	87.1°C	7	T1	EE-20	87.3°C	81.6°C	97.3°C	88.4°C	8	CASE	UPON (INSIDE)	71.8°C	67.4°C	81.4°C	78.5°C	
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**SAFETY & E.M.C TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SAFETY STANDARDS	TUV: Certificate NO : S 50071802 FOR CLASS I POWER (GS15A TYPE) S 50072133 FOR CLASS II POWER (GS15B/E TYPE) UL: File NO : E206808			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:4242VDC/min	I/P-O/P:4242VDC/min Ta:25°C	I/P-O/P:0.02mA NO DAMAGE	P
9	ISOLATION RESISTANCE	I/P-O/P:500VDC>50MΩ	I/P-O/P:500VDC Ta:25°C	I/P-O/P:>100MΩ NO DAMAGE	P

## OTHER

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C9 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=41698HRS I/P:230 VAC O/P:FULL LOAD Ta=40°C LIFE TIME=16358HRS I/P:230 VAC O/P:70% LOAD Ta=50°C LIFE TIME=27894HRS			P
2	MTBF	MIL-HDBK-217F NOTICES2 PARTS COUNT TOTAL FAILURE RATE: 1.702642 M.T.B.F: 587322HRS			P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2007.4.17	GP15x-3	PASS	T.K.CHENG	MAX LIN