



Model : A-301-1K0-F 1000W

## OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	AC VOLTAGE	230VAC $\pm$ 10% (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	229.8VAC	P
2	AC VOLTAGE REGULATION	230VAC $\pm$ 10% (Typ)	I/P:11VDC-15VDC O/P:FULL-MIN. LOAD Ta:25°C	223.7-229.8VAC	P
3	AC WAVEFORM	MODEFIED SINE WAVE	I/P:12VDC O/P:FULL LOAD Ta:25°C	MODEIFIED SINE WAVE	P
4	AC FREQUENCY	50Hz $\pm$ 1% (Typ)	I/P:12VDC O/P:MIN LOAD Ta:25°C	50.005Hz	P
5	CONTINUOUS POWER	1000W (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	1000W (60mins)	P
6	SURGE POWER	2400W (Min)	I/P:12VDC O/P:TESTING Ta:25°C	10120W	P

## INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	DC VOLTAGE RANGE	10VDC ~ 15VDC (Typ)	I/P: TESTING O/P:MIN LOAD Ta:25°C	9.6-15.2VDC	P
2	EFFICIENCY	82% (TYP)	I/P:12VDC O/P:FULL LOAD Ta:25°C	81.7%	P
3	NO LOAD CURRENT DRAW	0. 4A (Max) WITHOUT FAN	I/P: 12VDC O/P:NO LOAD Ta:25°C	0.37A	P
4	DC INPUT CURRENT	110A (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	102A	P

## PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	BAT. LOW ALARM	9.5-10.5VDC	I/P:TESTING O/P:50% LOAD Ta:25°C	9.83VDC	P
2	BAT. LOW SHUTDOWN	9 ~ 10VDC	I/P:TESTING O/P:50% LOAD Ta:25°C	9.4VDC SHUT DOWN AUTO-RECOVER	P



3	INPUT POLARITY REVERSE	FUSE OPEN	I/P:TESTING O/P:NO LOAD Ta:25°C	FUSE OPEN RESET REPLACEMENT FUSE	P
4	OVER LOAD PROTECTION	>1200W (TYP)	I/P:12VDC O/P:TESTING Ta:25°C	1200W SHUT DOWN RESET: RE-POWER ON	P
5	OVER VOLTAGE PROTECTION	15-16VDC(Max)	I/P:TESTING O/P:NO LOAD Ta:25°C	15.35VDC SHUT DOWN RESET: AUTO-RECOVER	P
6	OUTPUT SHORT PROTECTION	YES	I/P:12VDC O/P:SHORT Ta:25°C	OK SHUT DOWN RESET: RE-POWER ON	P
7	OVER TEMPERATURE PROTECTION	55°C ~ 65°C (RT)	I/P:12VDC O/P:FULL LAOD Ta:25°C	57.1°C SHUT DOWN RESET AUTO-RECOVER	P
8	FAN CONTROL	>40°C FAN ON (RT)	I/P:12VDC O/P:TESTING Ta:25°C	46.7°C 30.0°C FAN OFF	P

## CONTROL FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	REMOTE CONTROL	YES	I/P:12VDC O/P:FULL LOAD Ta:25°C	YES	P

## ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT																																								
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 1.5HRS I/P:12VDC O/P:100% LOAD Ta=23°C			P																																								
			<table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>P/N</th> <th>TEMP Ta=23°C</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>T4</td> <td>ERL-28</td> <td>55.9°C</td> </tr> <tr> <td>2</td> <td>I/P C81</td> <td>2200UF/25V 12.5*25 105°C</td> <td>57.3°C</td> </tr> <tr> <td>3</td> <td>O/P C16</td> <td>150UF/400V 25*30 85°C</td> <td>47.5°C</td> </tr> <tr> <td>4</td> <td>I/P Q40</td> <td>P60NF TO-220</td> <td>66.3°C</td> </tr> <tr> <td>5</td> <td>O/P Q45</td> <td>IR IRF840 TO-220</td> <td>101.1°C</td> </tr> <tr> <td>6</td> <td>BD</td> <td>RURP8100</td> <td>62.9°C</td> </tr> <tr> <td>7</td> <td>I/P L1</td> <td>T14*28*12</td> <td>90.5°C</td> </tr> <tr> <td>8</td> <td>CASE</td> <td>UPON CASE</td> <td>50.7°C</td> </tr> <tr> <td>9</td> <td>U15</td> <td>LM335</td> <td>48.3°C</td> </tr> </tbody> </table>	NO	Position	P/N	TEMP Ta=23°C	1	T4	ERL-28	55.9°C	2	I/P C81	2200UF/25V 12.5*25 105°C	57.3°C	3	O/P C16	150UF/400V 25*30 85°C	47.5°C	4	I/P Q40	P60NF TO-220	66.3°C	5	O/P Q45	IR IRF840 TO-220	101.1°C	6	BD	RURP8100	62.9°C	7	I/P L1	T14*28*12	90.5°C	8	CASE	UPON CASE	50.7°C	9	U15	LM335	48.3°C		
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## OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C81 IS THE MOST CRITICAL COMPONENT I/P: 12VDC O/P:FULL LOAD Ta=25°C LIFE TIME= 23752HRS			P



2	MTBF	MIL-HDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE: 10.160498 M.T.B.F : 98420HRS	P
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DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2004.7.9	A301-1K0-F3	PASS	T.K.CHENG	MAX LIN