

Model : GE12I12-P1J 12W  
+12V / 0~1.0A

**OUTPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	120mVp-p (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	8mVp-p	P
2	VOLTAGE TOLERANCE	-3% ~ +3% (Max)	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C	-0.6% ~ +0.6%	P
3	LINE REGULATION	-1% ~ +1% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0.05% ~ +0.05%	P
4	LOAD REGULATION	-3% ~ +3% (Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	-0.6% ~ +0.6%	P
5	SET UP TIME	4000 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	1842 mS	P
6	RISE TIME	100 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	4 mS	P
7	HOLD UP TIME	10 mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	13 mS	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE RANGE	90VAC ~ 264VAC	I/P:TESTING O/P:FULL LOAD Ta:25°C	57V ~ 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	82.2%	P
4	AVERAGE EFFICIENCY	>77.76% ( LEVEL V )	I/P:115/230VAC O/P:25%、50%、75%、100% LOAD Ta:25°C	82.387% (115VAC) 79.008% (230VAC)	P
5	AC CURRENT	0.4A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.25A	P
6	NO LOAD POWER CONSUMPTION	< 0.3W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.21W	P

7	INRUSH CURRENT	< 80A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	62A	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	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	110 ~ 200% (Typ)	I/P:230VAC O/P:TESTING Ta:25°C	182.7% HICCUP MODE RESET AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	CLAMP BY ZENER DIODE 115 ~ 135% (Typ)	I/P:230VAC O/P:MIN LOAD Ta:25°C	CLAMP BY ZENER DIODE	P
3	SHORT PROTECTION	SHORT OUTPUT 1 HOUR NO DAMAGE	I/P:264VAC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE RESET AUTO RECOVER	P

**SAFETY TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:4242VDC/min	I/P-O/P:4242VDC/min Ta:25°C	I/P-O/P:0.002 mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P:500VDC Ta:25°C	I/P-O/P:>21.5GΩ NO DAMAGE	P

**ENVIRONMENT TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 13HRS I/P:230VAC O/P:100% LOAD Ta=25°C 2. ROOM AMBIENT BURN-IN : 1HRS I/P:230VAC O/P:75% LOAD Ta=40°C 3. ROOM AMBIENT BURN-IN : 44HRS I/P:230VAC O/P:50% LOAD Ta=50°C			P

  

NO	Position	P/N	1	2	3
1	D2	1N4007	59.0°C	67.8°C	67.9°C
2	D8	FR107	78.7°C	86.5°C	79.5°C
3	I/P C4	10uF/400V 10*16 KM 105°C SAMXON	61.5°C	70.4°C	69.3°C
4	Q1	STK0260	78.4°C	87.1°C	79.6°C
5	T1	EF-20	78.5°C	82.6°C	78.6°C
6	O/P D9	MBRF 10100CT	87.8°C	88.6°C	83.9°C
7	O/P C11	680uF/16V 8*16 GT 105°C SAMXON	75.6°C	79.2°C	77.0°C
8	C6	22uF/50V 5*11 RL 105°C SAMXON	64.0°C	71.5°C	70.9°C
9	U1	OB2263	66.5°C	74.8°C	73.4°C



**OTHER**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C11 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:FULL LOAD Ta=30°C LIFE TIME=32558HRS I/P:230 VAC O/P:75% LOAD Ta=40°C LIFE TIME=35876HRS I/P:230 VAC O/P:50% LOAD Ta=50°C LIFE TIME=41786HRS			P
2	MTBF	MIL-KDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE : 1.6537 M.T.B.F : 604706HRS			P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2009.3.10	PRODUCT SAMPLE	PASS	PETER	VINCENT ZENG