

Model : GE24I12-P1J 24W
+12V / 0~2.0A

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	-1% ~ +1%	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	-0.94% ~ +0.94%	P
5	SET UP TIME	4000 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	1896 mS	P
6	RISE TIME	100 mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	21 mS	P
7	HOLD UP TIME	10 mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	16 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	58V ~ 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	78% (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	83.8%	P
4	AVERAGE EFFICIENCY	>82.09% (LEVEL V)	I/P:115/230VAC O/P:25%、50%、75%、100% LOAD Ta:25°C	83.656% (115VAC) 82.296% (230VAC)	P
5	AC CURRENT	0.7A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.5A	P
6	NO LOAD POWER CONSUMPTION	< 0.3W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.23W	P

7	INRUSH CURRENT	< 80A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	64A	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	171.1% 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:>30GΩ 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	61.4°C	64.3°C	68.1°C
2	I/P C6	47uF/400V 12.5*30 KM 105°C SAMXON	70.0°C	72.4°C	74.5°C
3	D7	FR107	79.4°C	80.0°C	82.8°C
4	Q1	STK0460	75.5°C	77.5°C	78.5°C
5	L1	20mH	64.1°C	65.7°C	68.9°C
6	T1	EF-25	77.3°C	77.4°C	77.4°C
7	O/P D8	MBRF 10100CT	90.1°C	87.6°C	84.5°C
8	O/P C9	1500uF/16V 10*20 GT 105°C SAMXON	81.8°C	81.3°C	80.0°C
9	C2	22uF/50V 5*11 RL 105°C SAMXON	72.3°C	74.0°C	75.6°C
10	U1	OB2263	71.6°C	74.2°C	76.5°C



OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C9 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:FULL LOAD Ta=30°C LIFE TIME=63554HRS (8HRS/DAY) I/P:230 VAC O/P:75% LOAD Ta=40°C LIFE TIME=31016HRS (24HRS/DAY) I/P:230 VAC O/P:50% LOAD Ta=50°C LIFE TIME=33941HRS (24HRS/DAY)			P
2	MTBF	MIL-KDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE : 1.6605 M.T.B.F : 602234HRS			P

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