



Test Report : GSM06x05

AC-DC Green Medical Adaptor

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

■ SAFETY TEST

Safety Test

■ RELIABILITY TEST

Environment Test

Other test

DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	50mVp-p (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	30mVp-p	P
2	VOLTAGE TOLERANCE	-5% - +5% (Max)	I/P:90VAC~264VAC O/P:FULL-MIN. LOAD Ta:25°C	-2.80% ~ +2.66%	P
3	LINE REGULATION	-0.5% - +0.5% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0.31% ~ +0.11%	P
4	LOAD REGULATION	-5% - +5% (Max)	I/P:230VAC O/P:FULL -MIN LOAD Ta:25°C	-2.42% ~ +2.66%	P
5	SET UP TIME	1000mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	648mS	P
6	RISE TIME	50mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	47.8mS	P
7	HOLD UP TIME	12mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	13.6mS	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	68V ~ 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	68% (Typ.)	I/P:230VAC O/P:FULL LOAD Ta:25°C	71.62%	P
4	AVERAGE EFFICIENCY	69.6% (LEVEL V)	I/P:115/230VAC O/P:25%、50%、75%、100% LOAD Ta:25°C	70.68% (115VAC) 71.55% (230VAC)	P
5	AC CURRENT	0.18A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.155A	P
6	NO LOAD POWER CONSUMPTION	0.3W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.2W	P

7	INRUSH CURRENT	< 30A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	20.1A	P
8	LEAKAGE CURRENT	< 0.05mA	I/P:264VAC 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	>105%	I/P:230VAC O/P:TESTING Ta:25°C	1.44A (120%) HICCUP MODE RESET : AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	110%~140%	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

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:5656 VDC/min	I/P-O/P:5656 VDC/min Ta:25°C	I/P-O/P: 0.03uA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>50MΩ	I/P-O/P:500 VDC Ta:25°C	I/P-O/P>100MΩ NO DAMAGE	P

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT																																																
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 4HRS I/P:230VAC O/P:100% LOAD Ta=25°C 2. ROOM AMBIENT BURN-IN : 4HRS I/P:115VAC O/P:100% LOAD Ta=25°C 3. ROOM AMBIENT BURN-IN : 40HRS I/P:230VAC O/P:100% LOAD Ta=40°C			P																																																
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th style="width: 5%;">NO</th> <th style="width: 10%;">Position</th> <th style="width: 30%;">P/N</th> <th style="width: 10%;">1</th> <th style="width: 10%;">2</th> <th style="width: 10%;">3</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">BD1</td> <td style="text-align: center;">LT 2B06</td> <td style="text-align: center;">58.9°C</td> <td style="text-align: center;">65.8°C</td> <td style="text-align: center;">72.3°C</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">I/P C2</td> <td style="text-align: center;">Ltec 6.8u/400V TY105°C 8*16</td> <td style="text-align: center;">61.1°C</td> <td style="text-align: center;">66.3°C</td> <td style="text-align: center;">75.1°C</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">U1</td> <td style="text-align: center;">OB2536AP</td> <td style="text-align: center;">72.7°C</td> <td style="text-align: center;">80.3°C</td> <td style="text-align: center;">88.1°C</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">T1</td> <td style="text-align: center;">EE-15</td> <td style="text-align: center;">76.1°C</td> <td style="text-align: center;">79.1°C</td> <td style="text-align: center;">90.1°C</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">O/P D2</td> <td style="text-align: center;">SB340</td> <td style="text-align: center;">88.6°C</td> <td style="text-align: center;">90.6°C</td> <td style="text-align: center;">102.8°C</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">O/P C5</td> <td style="text-align: center;">N.C.C 680u/10V KY 105°C 8*16</td> <td style="text-align: center;">72.3°C</td> <td style="text-align: center;">74.1°C</td> <td style="text-align: center;">87.0°C</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">C7</td> <td style="text-align: center;">FuhYin 10u/50V HFR 105°C 5*11.5</td> <td style="text-align: center;">53.4°C</td> <td style="text-align: center;">56.2°C</td> <td style="text-align: center;">-----</td> </tr> </tbody> </table>						NO	Position	P/N	1	2	3	1	BD1	LT 2B06	58.9°C	65.8°C	72.3°C	2	I/P C2	Ltec 6.8u/400V TY105°C 8*16	61.1°C	66.3°C	75.1°C	3	U1	OB2536AP	72.7°C	80.3°C	88.1°C	4	T1	EE-15	76.1°C	79.1°C	90.1°C	5	O/P D2	SB340	88.6°C	90.6°C	102.8°C	6	O/P C5	N.C.C 680u/10V KY 105°C 8*16	72.3°C	74.1°C	87.0°C	7	C7	FuhYin 10u/50V HFR 105°C 5*11.5	53.4°C	56.2°C	-----
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2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P : 230VAC O/P : 100% LOAD Ta= -0°C	TEST : OK	P																																																

OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C5 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:100% LOAD Ta=25°C LIFE TIME= 27878HRS I/P:115 VAC O/P:100% LOAD Ta=25°C LIFE TIME= 51089HRS			P
2	MTBF	MIL-KDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE : 1.127 M.T.B.F : 886925HRS			P

TEST RESULT	TESTER	APPROVAL
PASS	PETER	VINCENT