



Test Report: MSP-1000-12

1000W Single Output Medical Type

■ DESIGN VERIFY TEST

Output Function Test
Input Function Test
Protection Function Test
Control Function Test
Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test
E.M.C. Test

■ RELIABILITY TEST

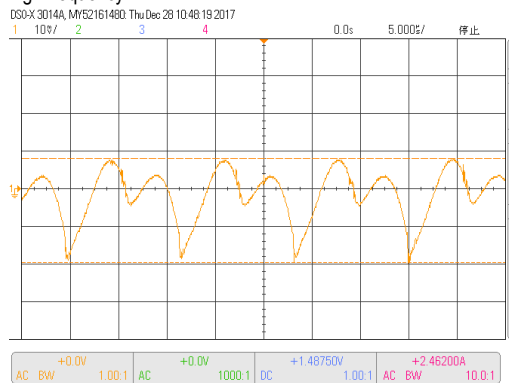
ENVIRONMENT TEST

DESIGN VERIFY TEST

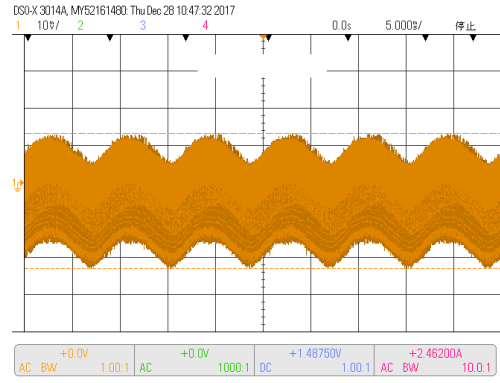
OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 11V~ 14 V	I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C	10.486V~14.415V/230VAC 10.47V~14.426V/115VAC
2	OUTPUT VOLTAGE(Max) TOLERANCE	V1: 2%~ -2 %	I/P: 200VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25°C	V1:0.42%~ 0%
3	LINE REGULATION (Max)	V1: 0.5%~ -0.5 %	I/P: 200VAC~ 264VAC O/P:FULL LOAD Ta:25°C	V1:0%~0%
4	LOAD REGULATION(Max)	V1: 2%~ -2 %	I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25°C	V1:0.08%~0.25%
5	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230VAC O/P:FULL LOAD Ta:25°C	<±5%
6	RIPPLE & NOISE(Max)	V1: 150mVp-p	I/P:230VAC O/P:FULL LOAD Ta:25°C	V1:36.2mVp-p

high frequency :



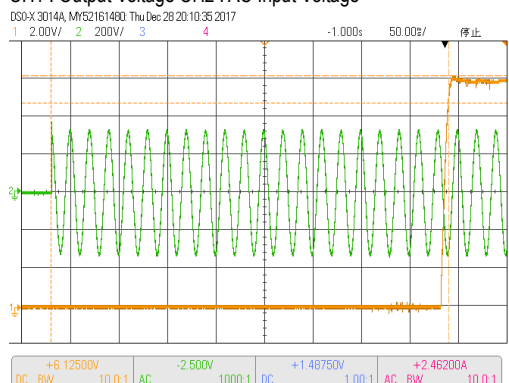
low frequency :



7	SET UP TIME(Max)	230VAC/1000ms 115VAC/2000ms	I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	230VAC/410ms 115VAC/472ms
---	------------------	--------------------------------	--	------------------------------

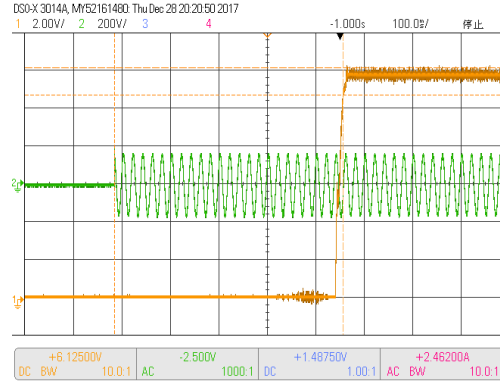
INPUT=230VAC/50HZ @ FULL LOAD

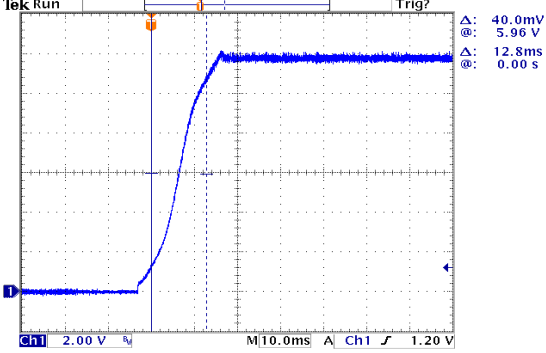
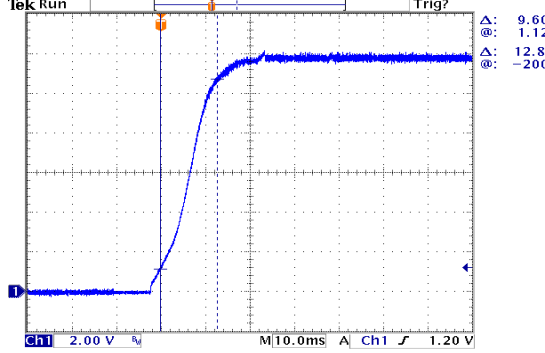
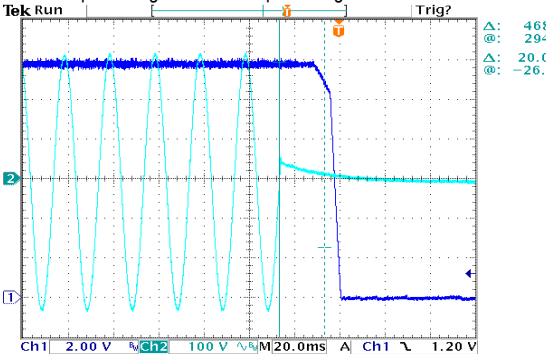
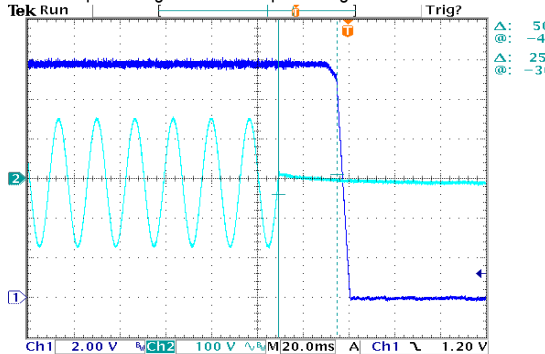
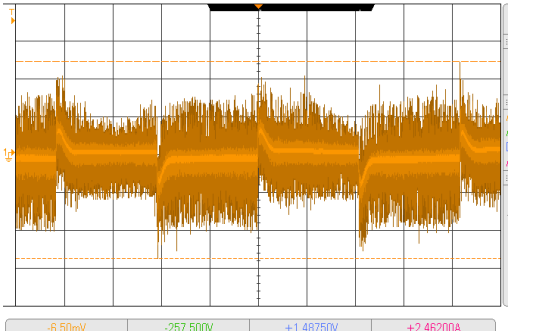
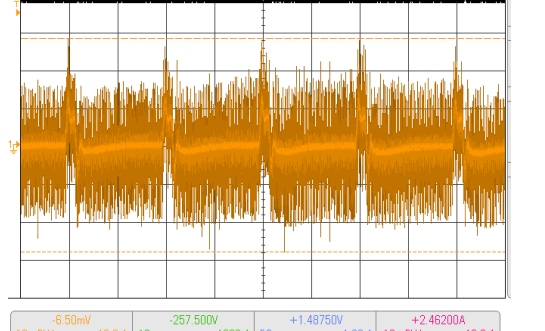
CH1 : Output Voltage CH2 : AC Input Voltage



INPUT=115VAC/60HZ @ FULL LOAD

CH1 : Output Voltage CH2 : AC Input Voltage

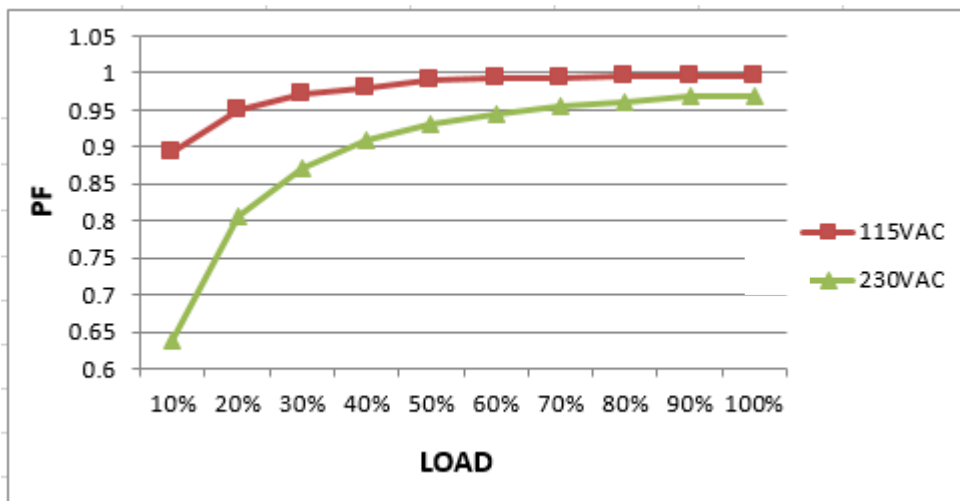


8 RISE TIME (Max)	230VAC/50ms 115VAC/50ms	I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	230VAC/12.8ms 115VAC/12.8ms
INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage 		INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage 	
9 HOLD UP TIME (Typ.)	230VAC/16ms 115VAC/16ms	I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	230VAC/20.0ms 115VAC/25.6ms
INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 		INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 	
10 DYNAMIC LOAD	V1: 1200 mVp-p	I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25°C	(1)519mVp-p (2)563mVp-p
FULL /50% LOAD 50%DUTY / 120HZ 		FULL /50% LOAD 50%DUTY / 1KHZ 	

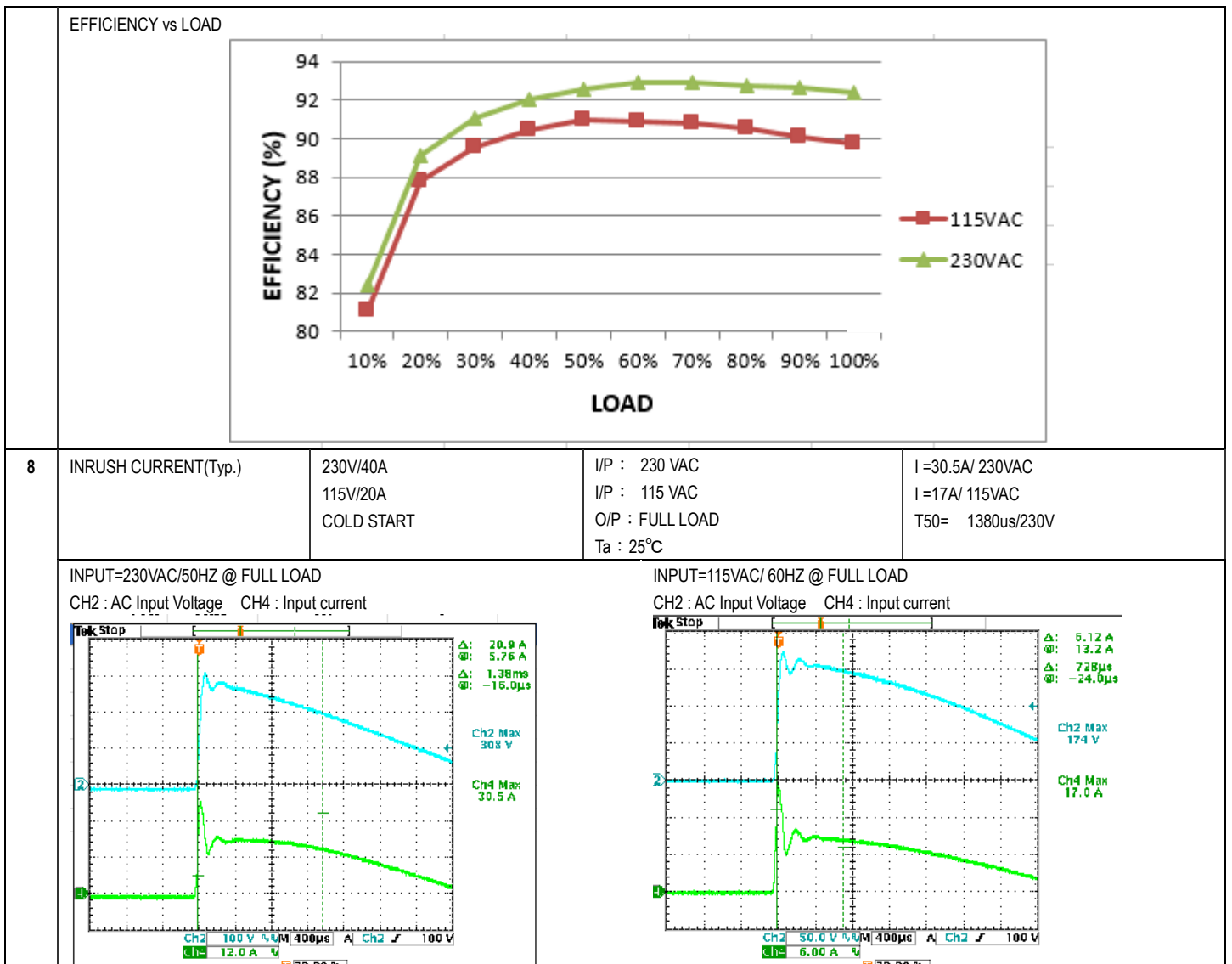
INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	90VAC~264VAC	I/P:TESTING O/P:FULL LOAD Ta:25°C	78V~264V
			I/P: LOW-LINE-3V=87 V HIGH-LINE+15%=300 V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (POWER ON/OFF NO DAMAGE)	TEST: OK
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P:100 VAC ~264 VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: OK
3	INPUT CURRENT (Typ.)	230V/ 5A 115V/ 8.5A	I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	I=4.7A/ 230VAC I=8.005A/ 115VAC
4	LEAKAGE CURRENT	Earth leakage current < 360 uA/264VAC	I/P : 264 VAC O/P : Min LOAD Ta : 25°C	L-FG : 287.4uA N-FG : 290.5uA
		Touch leakage current < 100 uA/264VAC	I/P : 264 VAC O/P : Min LOAD Ta : 25°C	L-V+ : 86.4uA L-V-: 86.9uA N-V+: 86.2uA N-V-: 86.7uA
5	NO LOAD CONSUMPTION	< 0.75W No load power consumption<0.75W when RC+&RC- open	I/P : 115VAC I/P : 230VAC O/P : NO LOAD Ta : 25°C	< 0.403 W < 0.667 W
6	POWER FACTOR (Typ.)	0.95/ 230VAC 0.98/115VAC	I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	PF=0.972/230VAC PF=0.995/115VAC

P.F vs LOAD



7	EFFICIENCY(Typ.)	91.5%	I/P:230 VAC O/P:FULL LOAD Ta:25°C	92.07%
---	------------------	-------	---	--------

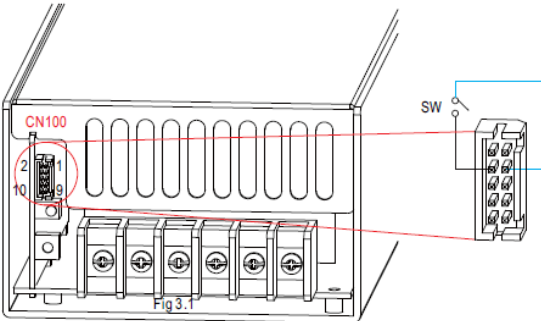
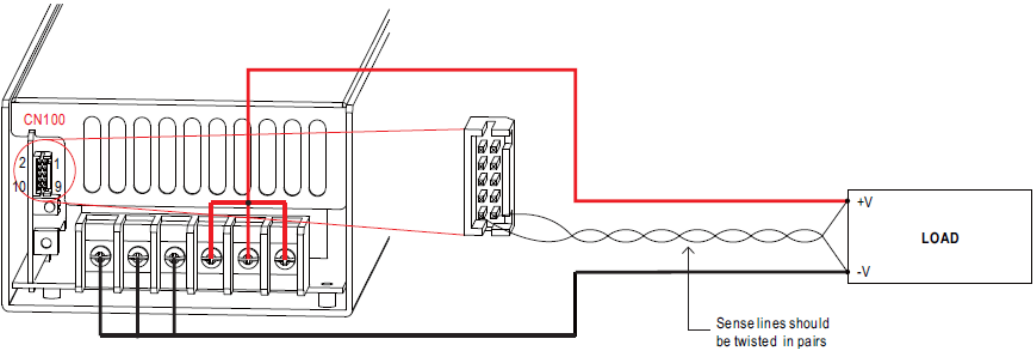


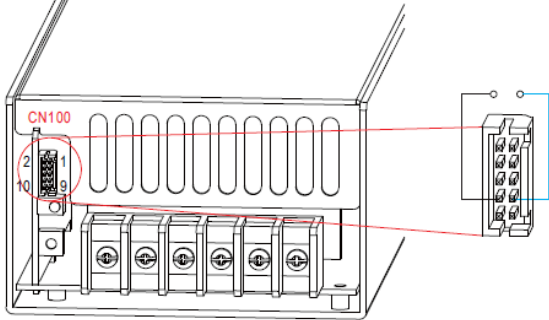
PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDOP	RESULT
1	OVER LOAD PROTECTION	105%~ 135 % Protection type : Constant current limiting, recovers automatically after fault condition is removed	I/P: 264VAC I/P: 230VAC I/P: 115VAC O/P:TESTING Ta:25°C	118.64%/ 264VAC 118.66%/ 230VAC 118.61%/115VAC PROTECTION TYPE : Constant current limiting, recovers automatically after fault condition is removed
2	OVER VOLTAGE PROTECTION	14.5V~16.5V Protection type : Shut down o/p voltage, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 90VAC O/P:MIN LOAD Ta:25°C	15.407V/ 264VAC 15.407V/ 230VAC 15.407V/ 90VAC PROTECTION TYPE : Shut down o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down	I/P: 264VAC I/P: 90VAC O/P:FULL LOAD	O.T.P. Active Protection type : Shut down o/p voltage, recovers automatically after temperature goes

				down
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 264VAC I/P: 90VAC O/P: FULL LOAD Ta:25°C	NO DAMAGE PROTECTION TYPE : Constant current limiting, recovers automatically after fault condition is removed

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT						
1	CURRENT SHARING	< 10%	I/P : 230 VAC O/P : FULL/50% LOAD Ta : 25°C	O/P : 90% PSU1 : 76.9A PSU2 : 73.7 A PSU3 : 74.2A PSU4 : 73.3A O/P : 50% PSU1 : 44.5 A PSU2 : 39.6 A PSU3 : 41.8A PSU4 : 39.8A						
2	REMOTE ON/OFF CONTROL	<p>The PSU can be turned ON/OFF by using the "Remote Control" function.</p> <table border="1"> <tr> <td>Between RC+(pin3) and RC-(pin4)</td> <td>Output Status</td> </tr> <tr> <td>SW ON (Short)</td> <td>ON</td> </tr> <tr> <td>SW OFF (Open)</td> <td>OFF</td> </tr> </table>	Between RC+(pin3) and RC-(pin4)	Output Status	SW ON (Short)	ON	SW OFF (Open)	OFF	 <p>I/P: 230 VAC O/P: FULL LOAD Ta:25°C TEST RESULT : OK</p>	
Between RC+(pin3) and RC-(pin4)	Output Status									
SW ON (Short)	ON									
SW OFF (Open)	OFF									
3	REMOTE SENSE	S+ / S- >0.5V	 <p>I/P: 230 VAC O/P:FULL LOAD Ta:25°C TEST RESULT: > 0.5 V</p>							

4	DC OK SIGNAL	<p>The TTL signal out, PSU turn on = 3.3 ~ 5.6V ; PSU turn off = 0 ~ 1V DC-OK signal is a TTL level signal. High when PSU turns on.</p> <table border="1" data-bbox="459 421 817 519"> <thead> <tr> <th>Between DC-OK(pin7) and GND(pin6,8)</th> <th>Output Status</th> </tr> </thead> <tbody> <tr> <td>3.3 ~ 5.6V</td> <td>ON</td> </tr> <tr> <td>0 ~ 1V</td> <td>OFF</td> </tr> </tbody> </table> <p>I/P:230VAC O/P:FULL LOAD Ta:25°C TEST RESULT: PSU turn on = 5.27V PSU turn off = 0.005V</p>	Between DC-OK(pin7) and GND(pin6,8)	Output Status	3.3 ~ 5.6V	ON	0 ~ 1V	OFF					
Between DC-OK(pin7) and GND(pin6,8)	Output Status												
3.3 ~ 5.6V	ON												
0 ~ 1V	OFF												
5	5V STANDBY	5VSB : 5V@0.3A ; tolerance± 5%, ripple : 50mVp-p(max.)	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	TEST RESULT : 4.94 V /0.303A Ripple : 5.1 mVp-p									
6	FAN CONTROL	FAN ON/OFF BY BY NTC (RT50) OR LOAD	I/P: 230 VAC O/P:TESTING	<table border="1" data-bbox="1149 1093 1500 1191"> <thead> <tr> <th></th> <th>TEMP.</th> <th>LOAD</th> </tr> </thead> <tbody> <tr> <td>FAN ON</td> <td>55°C</td> <td>>15.2%</td> </tr> <tr> <td>FAN OFF</td> <td>36°C</td> <td><14.8%</td> </tr> </tbody> </table>		TEMP.	LOAD	FAN ON	55°C	>15.2%	FAN OFF	36°C	<14.8%
	TEMP.	LOAD											
FAN ON	55°C	>15.2%											
FAN OFF	36°C	<14.8%											

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q911 Rated 26 A/ 600V	I/P:High-Line +3V =303V AC ON/OFF VDS: O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4)Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25°C	VDS: (1)547V (2)547V (3)555V (4)559V (5)547V (6)543V (7)551V
2	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q1 Rated 34A/ 600V	I/P:High-Line +3V =303V V AC ON/OFF O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4)Dynamic Load Full Load/ Min. Load 90%Duty/3KHz	VDS: (1) 515 V (2) 519V (3) 511V (4) 519V (5) 515V (6) 519V (7) 458V

			<p>(5)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25°C</p>																							
3	P.F.C DIODE	D6 Rated 6A/ 600V	<p>I/P:High-Line +3V =303V AC ON/OFF O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (4)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz Ta:25°C</p>	<p>(1) 381V (2) 393V (3) 385V (4) 377V</p>																						
4	SR MOSFET Peak Voltage	Q508 Rated 100A/ 80V Q506 Rated 100A/ 80V	<p>I/P:High-Line +3V =303V V AC ON/OFF O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4)Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. (8).NO LOAD (9) burst mode Ta:25°C</p>	<table border="0"> <tr> <td>Q508:</td> <td>Q506:</td> </tr> <tr> <td>VDS:</td> <td>VDS:</td> </tr> <tr> <td>(1)35.6V</td> <td>(1)36.4V</td> </tr> <tr> <td>(2)12.7V</td> <td>(2)13.5V</td> </tr> <tr> <td>(3)35.2V</td> <td>(3)35.6V</td> </tr> <tr> <td>(4)35.6V</td> <td>(4)36V</td> </tr> <tr> <td>(5)35.6V</td> <td>(5)36V</td> </tr> <tr> <td>(6)35.2V</td> <td>(6)36V</td> </tr> <tr> <td>(7)32.8V</td> <td>(7)33.2V</td> </tr> <tr> <td>(8)32.8V</td> <td>(8)31.6V</td> </tr> <tr> <td>(9)32.8V</td> <td>(9)32.4V</td> </tr> </table>	Q508:	Q506:	VDS:	VDS:	(1)35.6V	(1)36.4V	(2)12.7V	(2)13.5V	(3)35.2V	(3)35.6V	(4)35.6V	(4)36V	(5)35.6V	(5)36V	(6)35.2V	(6)36V	(7)32.8V	(7)33.2V	(8)32.8V	(8)31.6V	(9)32.8V	(9)32.4V
Q508:	Q506:																									
VDS:	VDS:																									
(1)35.6V	(1)36.4V																									
(2)12.7V	(2)13.5V																									
(3)35.2V	(3)35.6V																									
(4)35.6V	(4)36V																									
(5)35.6V	(5)36V																									
(6)35.2V	(6)36V																									
(7)32.8V	(7)33.2V																									
(8)32.8V	(8)31.6V																									
(9)32.8V	(9)32.4V																									
5	Input Capacitor Voltage	C5 Rated: 220μ/ 400V	<p>I/P:High-Line +3V =303V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change (4)Full load continue Ta:25°C</p>	<p>(1)453V (2)465V (3)441V (4)437V</p>																						
6	Control IC Voltage Test	<p>PFC IC U1: Absolute Rating: -0.3 V ~ 26 V Operating Range: 12.9 V ~ 25 V PWM IC U900: Absolute Rating: Self-limited Operating Range: 8.85 V ~ 16 V</p>	<p>I/P:High-Line +3V =303V V AC ON/OFF O/P:(1)FULL LOAD (2) Output Short (3)O.L.P (4)O.V.P. (5)NO LOAD VR MIN.LOW LINE Ta:25°C</p>	<table border="0"> <tr> <td>PFC IC</td> <td>PWM IC</td> </tr> <tr> <td>(1) 22.4V</td> <td>(1) 14.4V</td> </tr> <tr> <td>(2) 22V</td> <td>(2) 14.4V</td> </tr> <tr> <td>(3) 21.8V</td> <td>(3) 14.4V</td> </tr> <tr> <td>(4) 19.4V</td> <td>(4) 14.2V</td> </tr> <tr> <td>(5) 18V</td> <td>(5) 13V</td> </tr> </table>	PFC IC	PWM IC	(1) 22.4V	(1) 14.4V	(2) 22V	(2) 14.4V	(3) 21.8V	(3) 14.4V	(4) 19.4V	(4) 14.2V	(5) 18V	(5) 13V										
PFC IC	PWM IC																									
(1) 22.4V	(1) 14.4V																									
(2) 22V	(2) 14.4V																									
(3) 21.8V	(3) 14.4V																									
(4) 19.4V	(4) 14.2V																									
(5) 18V	(5) 13V																									
7	TOP SWITCHING STAND BY POWER	U971 Rated 1.8A/ 700 V	<p>I/P:High-Line +3V =303V V AC ON/OFF O/P: (1)Full Load (2)Remote On/Off Ta:25°C</p>	<p>(1) 561V (2) 553V</p>																						

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P: 4.5KVAC/min I/P-FG :2KVAC/min O/P-FG:1.5KVAC/min	I/P-O/P: 4.6 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG:1.8KVAC/min Ta:25°C	I/P-O/P:5.72mA I/P-FG:4.46mA O/P-FG:5.2m A NO DAMAGE
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ I/P-FG: 500VDC>100MΩ O/P-FG:500VDC>100MΩ	I/P-O/P: 500 VDC I/P-FG: 500 VDC O/P-FG: 500 VDC Ta:25°C	I/P-O/P: 30GΩ I/P-FG: 30GΩ O/P-FG:5.51 GΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25°C	13mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	EN61000-3-2 CLASS A	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	PASS
2	CONDUCTION	EN55032 /EN55011 CLASS B	I/P : 230 VAC (50HZ) O/P : FULL/50% LOAD Ta : 25°C	Test by certified Lab
3	RADIATION	EN55032 /EN55011 CLASS B	I/P : 230 VAC (50HZ) O/P : FULL LOAD Ta : 25°C	Test by certified Lab
4	E.S.D	EN61000-4-2 MEDICAL AIR: 15KV / Contact: 8KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
5	E.F.T	EN61000-4-4 MEDICAL INDUSTRY INPUT : 2KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
6	SURGE	IEC61000-4-5 MEDICAL INDUSTRY L-N : 2KV L,N-PE : 4KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
7	Test by certified Lab & Test Report Prepare			

■ **RELIABILITY TEST**

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	TEMPERATURE RISE TEST	MODEL : MSP-1000-12 1. ROOM AMBIENT BURN-IN : 1 HRS I/P : 230VAC O/P : FULL LOAD Ta= 25 °C 2. HIGH AMBIENT BURN-IN : 1.5 HRS I/P : 230VAC O/P : FULL LOAD Ta= 50 °C		

		NO	Position	ROOM AMBIENT Ta= 25 °C	HIGH AMBIENT Ta= 50 °C
		1	BD1	60.1°C	82.9°C
		2	R6	63.2°C	74.1°C
		3	Q1	50.3°C	66.8°C
		4	U1	56.1°C	76.0°C
		5	D5	57.7°C	72.4°C
		6	D6	56.5°C	76.1°C
		7	C6	43.7°C	65.6°C
		8	U971	47.3°C	71.0°C
		9	D981	46.5°C	68.6°C
		10	RY1	49.8°C	67.4°C
		11	RG2	35.2°C	78.5°C
		12	D431	48.2°C	86.7°C
		13	C406	28.9°C	54.7°C
		14	TSW4	37.8°C	61.9°C
		15	L1	42.7°C	78.1°C
		16	T951	34.9°C	69.5°C
		17	C2	48.1°C	61.5°C
		18	LF3	54.1°C	66.9°C
		19	T1-1	63.5°C	89.0°C
		20	T2-1	62.0°C	91.3°C
		21	T2-2	60.4°C	86.3°C
		22	L900	46.7°C	70.9°C
		23	Q910	72.2°C	97.5°C
		24	C933	43.0°C	64.8°C
		25	Q911	61.6°C	86.3°C
		26	U900	36.0°C	62.5°C
		27	C105	31.1°C	73.6°C
		28	C108	42.5°C	79.3°C
		29	U501	44.9°C	86.0°C
		30	Q501	75.9°C	94.4°C
		31	Q506	78.3°C	111.7°C
		32	U504	68.8°C	94.2°C
		33	Q504	85.3°C	106.3°C
		34	Q508	82.1°C	112.6°C
		35	TSW3	37.4°C	62.0°C
2	OVER LOAD BURN-IN TEST	NO DAMAGE 1 HOUR (MIN)		I/P : 230 VAC O/P : 127 % LOAD Ta : 25°C	TEST : OK
3	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR		I/P : 230VAC/90VAC O/P : 100% /80% LOAD Ta= -45°C	TEST : OK
4	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C HUMIDITY= 90 %R.H NO DAMAGE		I/P : 272 VAC O/P : FULL LOAD Ta= 50°C HUMIDITY= 95 %R.H	TEST : OK
5	TEMPERATURE COEFFICIENT	± 0.03 %/°C (0-50°C)		I/P : 230 VAC O/P : FULL LOAD	± 0.015 %/°C (0-50°C)

6	STORAGE TEMPERATURE TEST	-40~85°C	1. Thermal shock Temperature : -45°C~ +90°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/Output condition : STATIC
7	THERMAL SHOCK TEST	-40~50°C	1. Thermal shock Temperature : -45°C~ +55°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 16 CYCLE 5. Input/Output condition : 15cycle:230V/ FULL LOAD AC ON 3sec/AC OFF 1sec TEST 1cycle:230V/ FULL LOAD Burn In Test
8	VIBRATION TEST	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes	1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10~500Hz (3) Sweep Time : 12min/sweep cycle (4) Acceleration : 6G (5) Test Time : 180min in each axis (X.Y.Z) (6) Ta : 25°C
9	CAPACITOR LIFE CYCLE	SUPPOSE C105 IS THE MOST CRITICAL COMPONENT (1) I/P : 230VAC O/P : FULL LOAD Ta= 25°C LIFE TIME (2) I/P : 230VAC O/P : FULL LOAD Ta= 50°C LIFE TIME (3) I/P : 230VAC O/P : 75% LOAD Ta= 50°C LIFE TIME (4) I/P : 230VAC O/P : 50% LOAD Ta= 50°C LIFE TIME	(1) 580719HRS (2) 93162HRS (3) 249582HRS (4) 421443HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 850.5K hrs min. Telcordia SR-332 (Bellcore) ; 105.8K hrs min. MIL-HDBK-217F (25)	
11	DMTBF/Accelerated Life Test	Demonstration Mean Time Between Failure (Expected Life): Above 50,000 hours @ TA 50°C	

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	DANIEL GAO	SANFORD SU	VINCENT TSENG

12.10.30 A50-F031