



# Test Report: RSDH-300-24

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300W High Reliable 250~1500Vdc Ultra Wide Input  
DC-DC Converter

## ■ 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

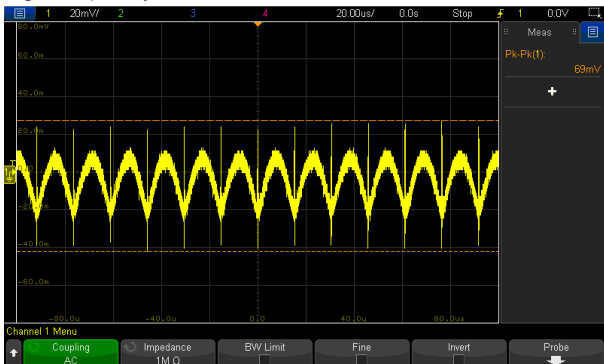
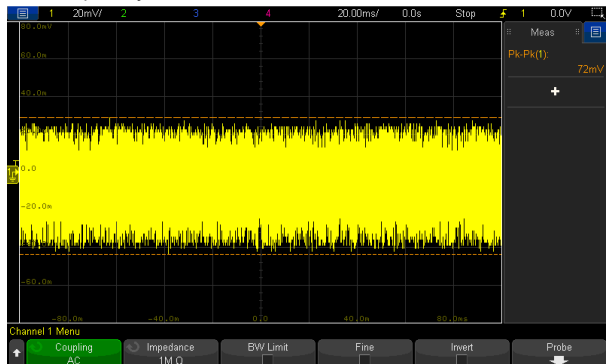
E.M.C. Test

## ■ RELIABILITY TEST

ENVIRONMENT TEST

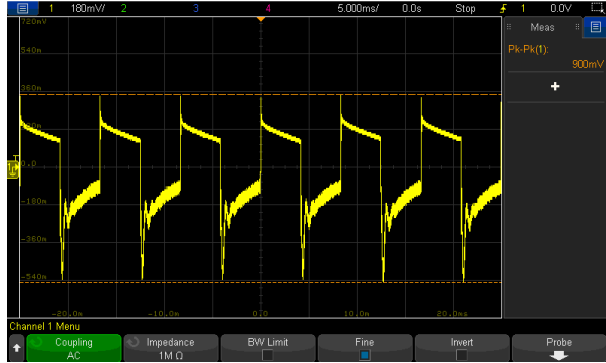
## DESIGN VERIFY TEST

### OUTPUT FUNCTION TEST

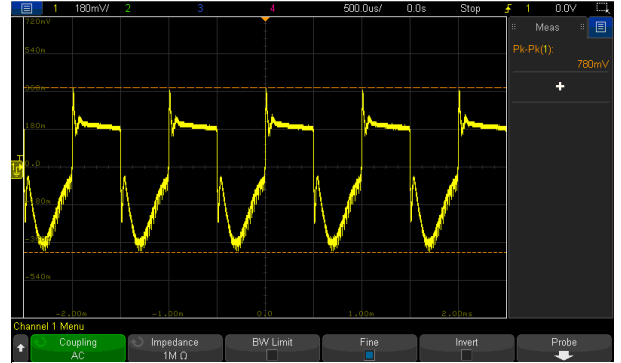
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 24V~29V	I/P : 800 VDC O/P : MIN LOAD Ta : 25°C	22.849V~29.989V/800VDC
2	OUTPUT VOLTAGE TOLERANCE (Max)	V1: -1.0%~ +1.0%	I/P: 1500VDC / 250 VDC O/P:FULL/ MIN. LOAD Ta:25°C	V1: -0.18%~0.13%
3	LINE REGULATION (Max)	V1: -0.5%~+0.5 %	I/P: 1500VDC / 250 VDC O/P:FULL LOAD Ta:25°C	V1: -0.16%~0.04 %
4	LOAD REGULATION (Max)	V1: -1.5%~+1.5 %	I/P: 800VDC O/P:FULL ~MIN LOAD Ta:25°C	V1: -0.18%~0.13%
5	OVER/UNDERSHOOT TEST	< ±5%	I/P: 800 VDC O/P:FULL LOAD Ta:25°C	TEST: 0.4 %
6	RIPPLE & NOISE (Max)	V1: 240mVp-p	I/P: 800 VDC O/P:FULL LOAD Ta:25°C	72mVp-p
		high frequency :	low frequency :	
				
7	DYNAMIC LOAD	V1: 2400mVp-p	I/P: 800VDC O/P: (1)FULL /MIN LOAD 50%DUTY / 120HZ (2)FULL /MIN LOAD 50%DUTY / 1KHZ (3)FULL /MIN LOAD 50%DUTY / 500HZ (4)FULL /MIN LOAD 50%DUTY / 3KHZ (5)FULL /MIN LOAD 50%DUTY / 8KHZ (6)FULL /MIN LOAD 50%DUTY /	(1) 900mVp-p (2) 780mVp-p (3) 730mVp-p (4) 544mVp-p (5) 737mVp-p (6) 685mVp-p

10KHZ  
Ta:25°C

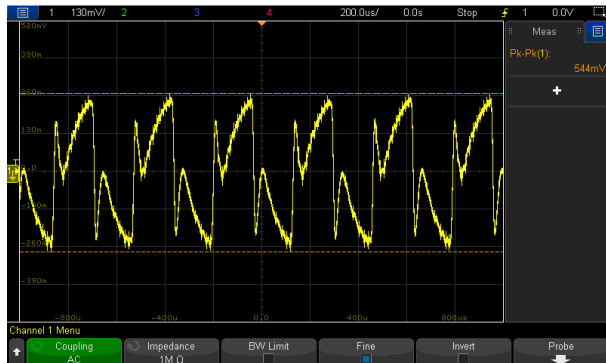
FULL /50% LOAD 50%DUTY / 120HZ



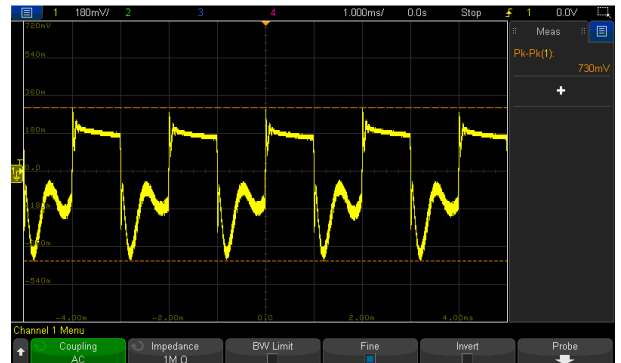
FULL /50% LOAD 50%DUTY / 1KHZ



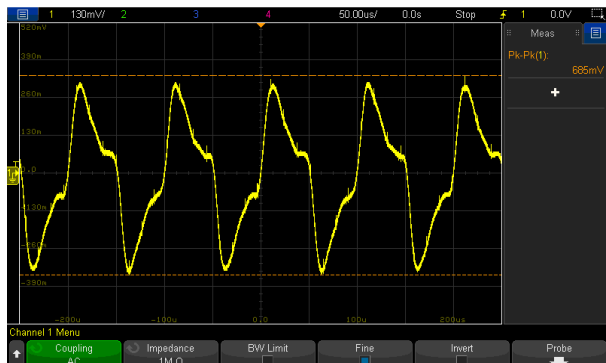
FULL /50% LOAD 50%DUTY / 3KHZ



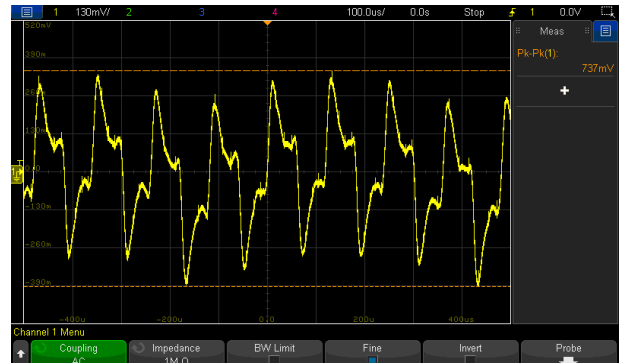
FULL /50% LOAD 50%DUTY / 500HZ



FULL /50% LOAD 50%DUTY / 10KHZ



FULL /50% LOAD 50%DUTY / 8KHZ



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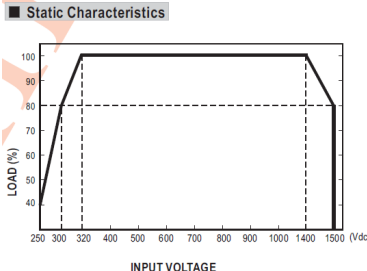
EXERNAL CAPACITANCE LOAD(Max.)

5000uF

I/P : 800VDC  
O/P : TESTING LOAD  
Ta : 25°C

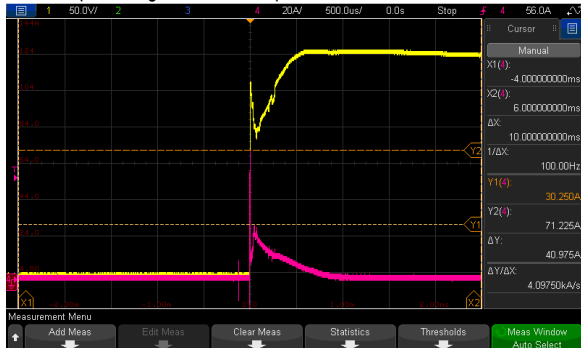
TEST: OK

## INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	250VDC~ 1500 VDC 	I/P: TESTING O/P:FULL LOAD Ta:25°C  I/P: LOW-LINE-0.2= 249.8V HIGH-LINE+3V= 1503V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec . OFF: 30 Sec 10MIN ( POWER ON/OFF NO DAMAGE )	236V~ 1400 V/FULL LOAD 235V~ 1500 V/80% LOAD 234V~ 1500 V/40% LOAD  TEST: <u>OK</u>
2	EFFICIENCY(TYP)	88%/300VDC 90%/800VDC 86%/1500VDC	I/P: 300VDC ( 80% LOAD ) I/P: 800VDC I/P: 1500VDC ( 80% LOAD ) O/P:FULL LOAD Ta:25°C	89.68%/300VDC 90.65%/800VDC 89.46%/1500VDC
3	INRUSH CURRENT(TYP)	120A/300VDC 300A/800VDC 500A/1500VDC COLD START	I/P: 300VDC ( 80% LOAD ) I/P: 800VDC I/P: 1500VDC ( 80% LOAD ) O/P:FULL LOAD Ta:25°C	I = 30.25A/ 300VDC I = 92.5A/ 800VDC I =172 A/ 1500VDC

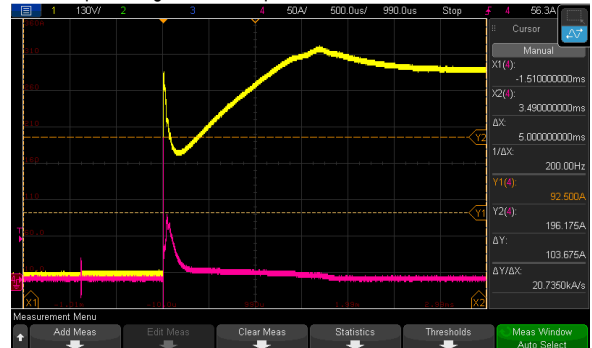
INPUT=250VDC @ TEST LOAD

CH1: DC Input Voltage CH4: Input current



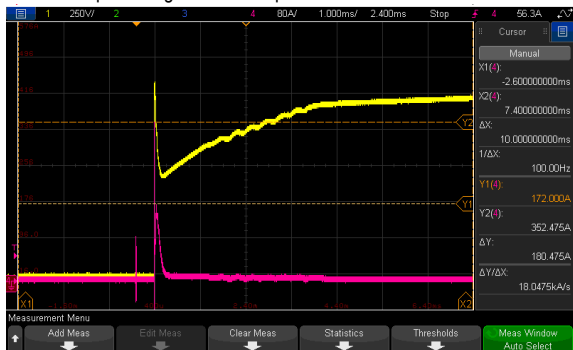
INPUT=800VDC @ FULL LOAD

CH1: DC Input Voltage CH4: Input current



INPUT=1500VDC @ TEST LOAD

CH1: DC Input Voltage CH4: Input current



## PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	105 %~ 135 % RATED OUTPUT POWER Protection type : Hiccup mode when output voltage<55%, recovers automatically after condition is removed; Constant current limiting, recovers automatically after fault condition is removed within 55% ~ 100% rated output voltage	I/P: 1400 VDC I/P: 800 VDC I/P: 320 VDC O/P:TESTING Ta:25°C	123.3%/ 1400 VDC 123.2%/ 800 VDC 121.8%/ 320 VDC PROTECTION TYPE : Hiccup mode when output voltage<55%, recovers automatically after condition is removed; Constant current limiting, recovers automatically after fault condition is removed within 55% ~ 100% rated output voltage
2	OVER VOLTAGE PROTECTION	CH: 33V~42V Protection type : Hiccup mode, recovers automatically after fault condition is removed	I/P: 1500VDC I/P: 800VDC I/P: 250VDC O/P:MIN LOAD Ta:25°C	34.4V/ 1500 VDC 34.4V/ 800 VDC 34.4V/ 250 VDC PROTECTION TYPE : Hiccup mode, recovers automatically after fault condition is removed
3	OVER TEMPERATURE PROTECTION	SPEC: NO DAMAGE Protection type : Hiccup mode, recovers automatically after fault condition is removed	I/P: 250VDC I/P: 1500VDC O/P:FULL LOAD	O.T.P Active PROTECTION TYPE : Hiccup mode, recovers automatically after fault condition is removed
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE Hiccup mode , recovers automatically after fault condition is removed	I/P: 250VDC I/P: 1500VDC O/P: FULL LOAD Ta:25°C	NO DAMAGE PROTECTION TYPE : Hiccup mode , recovers automatically after fault condition is removed
5	DC INPUT UNDER VOLTAGE LOCKOUT	Under voltage protection range: 200 ~ 225Vdc , Under voltage release range:225 ~ 246.5Vdc	I/P:TESTING O/P: TEST LOAD Ta:25°C	NO DAMAGE Under voltage protection range TEST: <u>214</u> Vdc , Under voltage release range TEST: <u>239</u> Vdc ,
6.	DC INPUT REVERSE POLARITY	By internal Bridge Diode, no damage, recovers automatically after fault condition removed	I/P: 1500 VDC O/P: FULL LOAD Ta:25°C	TEST: <u>OK</u> NO DAMAGE, recovers automatically after fault condition is removed

## COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT																																				
1	PWM Transistor ( D to S) or (C to E) Peak Voltage	Q1/Q2/Q3/Q4 Rated: 28 A/ 650 V	DC ON/OFF I/P:High-Line +3V = 1503V 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	<table border="0"> <tr> <td>Q1</td> <td>Q3</td> </tr> <tr> <td>VDS:</td> <td>VDS:</td> </tr> <tr> <td>(1) 537V</td> <td>(1) 555V</td> </tr> <tr> <td>(2) 547V</td> <td>(2) 575V</td> </tr> <tr> <td>(3) 543V</td> <td>(3) 567V</td> </tr> <tr> <td>(4) 539V</td> <td>(4) 555V</td> </tr> <tr> <td>(5) 539V</td> <td>(5) 547V</td> </tr> <tr> <td>(6) 543V</td> <td>(6) 563V</td> </tr> <tr> <td>(7) 555V</td> <td>(7) 587V</td> </tr> <tr> <td>Q2</td> <td>Q4</td> </tr> <tr> <td>VDS:</td> <td>VDS:</td> </tr> <tr> <td>(1) 523V</td> <td>(1) 559V</td> </tr> <tr> <td>(2) 531V</td> <td>(2) 567V</td> </tr> <tr> <td>(3) 527V</td> <td>(3) 557V</td> </tr> <tr> <td>(4) 515V</td> <td>(4) 557V</td> </tr> <tr> <td>(5) 515V</td> <td>(5) 553V</td> </tr> <tr> <td>(6) 523V</td> <td>(6) 561V</td> </tr> <tr> <td>(7) 547V</td> <td>(7) 547V</td> </tr> </table>	Q1	Q3	VDS:	VDS:	(1) 537V	(1) 555V	(2) 547V	(2) 575V	(3) 543V	(3) 567V	(4) 539V	(4) 555V	(5) 539V	(5) 547V	(6) 543V	(6) 563V	(7) 555V	(7) 587V	Q2	Q4	VDS:	VDS:	(1) 523V	(1) 559V	(2) 531V	(2) 567V	(3) 527V	(3) 557V	(4) 515V	(4) 557V	(5) 515V	(5) 553V	(6) 523V	(6) 561V	(7) 547V	(7) 547V
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2	Diode Peak Voltage	Q100 /Q103 Rated : 20 A/ 600V	DC ON/OFF I/P:High-Line +3V =1503 V Vo=Vmax 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 Vo=Vnormal O/P: (1)Full Load Ta:25°C	<table border="0"> <tr> <td>Q100:</td> <td>Q103:</td> </tr> <tr> <td>Vo=Vmax</td> <td>Vo=Vmax</td> </tr> <tr> <td>VDS:</td> <td>VDS:</td> </tr> <tr> <td>(1) 277V</td> <td>(1) 327V</td> </tr> <tr> <td>(2) 267V</td> <td>(2) 308V</td> </tr> <tr> <td>(3) 285V</td> <td>(3) 294V</td> </tr> <tr> <td>(4) 275V</td> <td>(4) 305V</td> </tr> <tr> <td>(5) 275V</td> <td>(5) 302V</td> </tr> <tr> <td>(6) 267V</td> <td>(6) 308V</td> </tr> <tr> <td>(7) 245V</td> <td>(7) 274V</td> </tr> <tr> <td>(8) 245V</td> <td>(8) 251V</td> </tr> <tr> <td>Vo=Vnormal</td> <td>Vo=Vnormal</td> </tr> <tr> <td>(1) 249V</td> <td>(1) 276V</td> </tr> </table>	Q100:	Q103:	Vo=Vmax	Vo=Vmax	VDS:	VDS:	(1) 277V	(1) 327V	(2) 267V	(2) 308V	(3) 285V	(3) 294V	(4) 275V	(4) 305V	(5) 275V	(5) 302V	(6) 267V	(6) 308V	(7) 245V	(7) 274V	(8) 245V	(8) 251V	Vo=Vnormal	Vo=Vnormal	(1) 249V	(1) 276V										
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(1) 249V	(1) 276V																																							
3	Input Capacitor Voltage	C5/C6/C7/C8 Rated: 120μ / 400 V	I/P:High-Line +3V =1503V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change (4)Full load continue	<table border="0"> <tr> <td>C5</td> <td>C7</td> </tr> <tr> <td>(1)372V</td> <td>(1)381V</td> </tr> <tr> <td>(2)372V</td> <td>(2)381V</td> </tr> <tr> <td>(3)375V</td> <td>(3)381V</td> </tr> <tr> <td>(4)372V</td> <td>(4)381V</td> </tr> </table>	C5	C7	(1)372V	(1)381V	(2)372V	(2)381V	(3)375V	(3)381V	(4)372V	(4)381V																										
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(4)372V	(4)381V																																							



			Ta:25°C	C6 (1)378V (2)378V (3)378V (4)372V	C8 (1)384V (2)378V (3)384V (4)384V
4	Control IC Voltage Test	PWM IC U1 Rated 8.3V~ 28 V  I/P IC U4 Rated 6.5V~ 30 V  IC U200 Rated 3.5V~ 36V	DC ON/OFF I/P:High-Line +3V =1503 V O/P(1)FULL LOAD (2) Output Short (3)O.L.P (4)O.V.P. (5)NO LOAD VRmin(Low LINE) Ta:25°C	U1/U4: (1) 17.2V (2) 17.2V (3) 17.2V (4) 17.2V (5) 17.2V	U200 (1) 25.6V (2) 25.6V (3) 25.6V (4) 33.9V (5) 23.1V
5	Clamp Diode Peak Voltage	D1 / D2 / D3/ D4 Rated : 1000V /1 A	I/P : High-Line +3V =1503V DC ON/OFF O/P : (1) Dynamic Load 90%Duty/1KHz (2)Full load continue Ta : 25°C	D1: (1) 449V (2) 449V  D3: (1) 457V (2) 457V	D2: (1) 449V (2) 449V  D4: (1) 457V (2) 461V

**SAFETY TEST**

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P:4KVAC/min I/P-FG: 3.75 KVAC/min O/P-FG: 2KVAC/min	I/P-O/P: 4.4 KVAC/min I/P-FG: 4.125 KVAC/min O/P-FG: 2.4 KVAC/min Ta:25°C	I/P-O/P: 9.88mA I/P-FG: 7.69mA O/P-FG: 8.09mA NO DAMAGE
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P: 600 VDC Ta:25°C	I/P-O/P: 9999 MΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25°C	4mΩ

**E.M.C TEST**

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	RADIATION	BS EN/EN55032(CISPR32) CLASS A	I/P: 400VDC/800 VDC O/P:FULL LOAD Ta:25°C	PASS Test by certified Lab
2	CONDUCTION	BS EN/EN55032(CISPR32) CLASS A	I/P: 400VDC/800 VDC O/P:FULL LOAD Ta:25°C	PASS Test by certified Lab



3	E.S.D	BS EN/EN61000-4-2 Level 3, 8KV air Level 2, 4KV contact	I/P: 400VDC/800 VDC O/P:FULL LOAD Ta:25°C	<input checked="" type="checkbox"/> CRITERIA A <input type="checkbox"/> CRITERIA B
4	E.F.T	BS EN/EN61000-4-4 INPUT: 2KV	I/P: 400VDC/800 VDC O/P:FULL LOAD Ta:25°C	<input checked="" type="checkbox"/> CRITERIA A <input type="checkbox"/> CRITERIA B
5	SURGE	BS EN/EN61000-4-5 Level 4, 2KV/Vin+ ~ Vin-, 4KV Vin~FG	I/P: 400VDC/800 VDC O/P:FULL LOAD Ta:25°C	<input checked="" type="checkbox"/> CRITERIA A <input type="checkbox"/> CRITERIA B
6	Test by certified Lab & Test Report Prepare Any contradictions of the test results, please refer to the latest EMC test report			

## ■ RELIABILITY TEST

### ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT																																																																																				
1	TEMPERATURE RISE TEST	MODEL : RSDH-300-24 1. ROOM AMBIENT BURN-IN : 2 HRS I/P : 800 VDC O/P : FULL LOAD Ta= 25 °C 2. HIGH AMBIENT BURN-IN : 2 HRS I/P : 800 VDC O/P : FULL LOAD Ta= 55 °C																																																																																						
				<table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= 25 °C</th> <th>HIGH AMBIENT Ta= 55 °C</th> </tr> </thead> <tbody> <tr><td>1</td><td>C2</td><td>52.6°C</td><td>77.3°C</td></tr> <tr><td>2</td><td>RTH3</td><td>61.0°C</td><td>84.3°C</td></tr> <tr><td>3</td><td>R84</td><td>64.0°C</td><td>88.8°C</td></tr> <tr><td>4</td><td>C10</td><td>57.2°C</td><td>81.6°C</td></tr> <tr><td>5</td><td>LF2</td><td>60.7°C</td><td>85.7°C</td></tr> <tr><td>6</td><td>BD1</td><td>62.3°C</td><td>88.3°C</td></tr> <tr><td>7</td><td>BD2</td><td>64.9°C</td><td>90.8°C</td></tr> <tr><td>8</td><td>R50</td><td>71.4°C</td><td>97.2°C</td></tr> <tr><td>9</td><td>C7</td><td>64.4°C</td><td>89.7°C</td></tr> <tr><td>10</td><td>ZNR5</td><td>61.0°C</td><td>86.0°C</td></tr> <tr><td>11</td><td>C5</td><td>62.4°C</td><td>88.0°C</td></tr> <tr><td>12</td><td>C13</td><td>57.0°C</td><td>82.6°C</td></tr> <tr><td>13</td><td>R45</td><td>73.4°C</td><td>99.8°C</td></tr> <tr><td>14</td><td>D1</td><td>69.1°C</td><td>95.9°C</td></tr> <tr><td>15</td><td>Q10</td><td>65.4°C</td><td>93.0°C</td></tr> <tr><td>16</td><td>D3</td><td>70.9°C</td><td>97.2°C</td></tr> <tr><td>17</td><td>R96</td><td>76.4°C</td><td>102.8°C</td></tr> <tr><td>18</td><td>C78</td><td>71.9°C</td><td>97.9°C</td></tr> <tr><td>19</td><td>U1</td><td>74.1°C</td><td>100.1°C</td></tr> <tr><td>20</td><td>U4</td><td>68.3°C</td><td>95.4°C</td></tr> </tbody> </table>	NO	Position	ROOM AMBIENT Ta= 25 °C	HIGH AMBIENT Ta= 55 °C	1	C2	52.6°C	77.3°C	2	RTH3	61.0°C	84.3°C	3	R84	64.0°C	88.8°C	4	C10	57.2°C	81.6°C	5	LF2	60.7°C	85.7°C	6	BD1	62.3°C	88.3°C	7	BD2	64.9°C	90.8°C	8	R50	71.4°C	97.2°C	9	C7	64.4°C	89.7°C	10	ZNR5	61.0°C	86.0°C	11	C5	62.4°C	88.0°C	12	C13	57.0°C	82.6°C	13	R45	73.4°C	99.8°C	14	D1	69.1°C	95.9°C	15	Q10	65.4°C	93.0°C	16	D3	70.9°C	97.2°C	17	R96	76.4°C	102.8°C	18	C78	71.9°C	97.9°C	19	U1	74.1°C	100.1°C	20	U4	68.3°C	95.4°C
NO	Position	ROOM AMBIENT Ta= 25 °C	HIGH AMBIENT Ta= 55 °C																																																																																					
1	C2	52.6°C	77.3°C																																																																																					
2	RTH3	61.0°C	84.3°C																																																																																					
3	R84	64.0°C	88.8°C																																																																																					
4	C10	57.2°C	81.6°C																																																																																					
5	LF2	60.7°C	85.7°C																																																																																					
6	BD1	62.3°C	88.3°C																																																																																					
7	BD2	64.9°C	90.8°C																																																																																					
8	R50	71.4°C	97.2°C																																																																																					
9	C7	64.4°C	89.7°C																																																																																					
10	ZNR5	61.0°C	86.0°C																																																																																					
11	C5	62.4°C	88.0°C																																																																																					
12	C13	57.0°C	82.6°C																																																																																					
13	R45	73.4°C	99.8°C																																																																																					
14	D1	69.1°C	95.9°C																																																																																					
15	Q10	65.4°C	93.0°C																																																																																					
16	D3	70.9°C	97.2°C																																																																																					
17	R96	76.4°C	102.8°C																																																																																					
18	C78	71.9°C	97.9°C																																																																																					
19	U1	74.1°C	100.1°C																																																																																					
20	U4	68.3°C	95.4°C																																																																																					





			NO	Position	ROOM AMBIENT Ta= 25 °C	HIGH AMBIENT Ta= 55 °C
			21	T3	70.1°C	96.1°C
			22	C56	67.8°C	93.4°C
			23	D10	69.5°C	95.2°C
			24	TSW1	75.4°C	101.2°C
			25	T2 coil	86.4°C	113.2°C
			26	T2 core	78.5°C	107.4°C
			27	U2	69.5°C	95.9°C
			28	R101	69.9°C	96.0°C
			29	T1 coil	87.4°C	114.1°C
			30	T1 core	83.4°C	114.3°C
			31	C100	75.4°C	102.7°C
			32	C107	71.6°C	98.6°C
			33	C109	71.9°C	98.6°C
			34	C114	61.6°C	90.3°C
			35	LF100	64.0°C	91.0°C
			36	C111	68.0°C	95.2°C
			37	R233	70.1°C	97.2°C
			38	Q1	70.8°C	97.8°C
			39	Q2	71.1°C	98.0°C
			40	Q3	71.4°C	97.7°C
			41	D213	85.6°C	112.5°C
			42	Q4	72.5°C	99.0°C
			43	D216	78.5°C	105.1°C
			44	D218	80.8°C	107.7°C
			45	D217	83.5°C	110.8°C
			46	D214	80.7°C	108.3°C
			47	D212	77.6°C	103.8°C
			48	U200	66.8°C	93.3°C
2	OVER LOAD BURN-IN TEST	NO DAMAGE 1 HOUR ( MIN )	I/P : 800 VDC O/P : 122%LOAD Ta : 25°C		TEST : OK	
3	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P : 300 VDC / 1500 VDC O/P : 100% LOAD Ta= -5 °C O/P : 50% LOAD Ta= -45 °C		TEST : OK	
4	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 55°C / 95 % R.H NO DAMAGE	I/P : 1503 VDC O/P : FULL LOAD Ta= 55 °C HUMIDITY= 95 % R.H		TEST : OK	
5	TEMPERATURE COEFFICIENT	±0.03%/°C(0 ~ 55°C)	I/P : 800 VDC O/P : FULL LOAD		± 0.008%/°C(0~55°C)	



6	STORAGE TEMPERATURE TEST	-40~80°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	-40~55°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: 800 VDC / FULL LOAD DC ON 3sec/DC OFF 1sec TEST 1cycle: 800 VDC / FULL LOAD Burn In Test
8	VIBRATION TEST	10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes	1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10~500Hz (3) Sweep Time : 10min/sweep cycle (4) Acceleration : 4G (5) Test Time : 180min in each axis (X.Y.Z) (6) Ta : 25°C
9	CAPACITOR LIFE CYCLE	SUPPOSE C107 IS THE MOST CRITICAL COMPONENT (1) I/P : 800VDC O/P : FULL LOAD Ta= 25 °C LIFE TIME (2) I/P : 800VDC O/P : FULL LOAD Ta= 55 °C LIFE TIME (3) I/P : 800VDC O/P : 75% LOAD Ta= 55 °C LIFE TIME (4) I/P : 800VDC O/P : 50% LOAD Ta= 55 °C LIFE TIME	(1) 132261HRS (2) 21071.8HRS (3) 37545.3HRS (4) 79235.2HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 277.9K hrs min. Telcordia SR-332 (Bellcore) ; 99.1K hrs min. MIL-HDBK-217F (25°C)	
11	Ongoing Reliability Test	I/P : 800VDC O/P : FULL LOAD TA=50°C Demonstration Mean Time Between Failure : 30000 hours	

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	Yuwei	Liutt	Wangdz

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