



TEST DATA OF RMB50A-1 (100V INPUT)

Regulated DC Power Supply

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COSEL CO., LTD.

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Model RMB50A-1		Temperature 25°C Testing Circuitry Figure A																														
Item	Efficiency 効率																															
Object																																
1. Graph <div style="float: right;"> □ Load 50% —△— Load 100% </div> <p>Efficiency [%]</p> <p>Input Voltage [V]</p> <p>Note: Slanted line shows the range of the rated input voltage.</p> <p>(注)斜線は定格入力電圧範囲を示す。</p>		2. Values																														
		<table border="1"> <thead> <tr> <th>Input Voltage [V]</th><th>Load 50% Efficiency [%]</th><th>Load 100% Efficiency [%]</th></tr> </thead> <tbody> <tr><td>75</td><td>67.7</td><td>72.5</td></tr> <tr><td>80</td><td>68.1</td><td>73.1</td></tr> <tr><td>85</td><td>67.9</td><td>73.5</td></tr> <tr><td>90</td><td>67.6</td><td>73.7</td></tr> <tr><td>100</td><td>67.0</td><td>74.0</td></tr> <tr><td>110</td><td>66.1</td><td>74.0</td></tr> <tr><td>120</td><td>65.1</td><td>73.8</td></tr> <tr><td>132</td><td>63.8</td><td>73.6</td></tr> <tr><td>140</td><td>63.0</td><td>73.2</td></tr> </tbody> </table>	Input Voltage [V]	Load 50% Efficiency [%]	Load 100% Efficiency [%]	75	67.7	72.5	80	68.1	73.1	85	67.9	73.5	90	67.6	73.7	100	67.0	74.0	110	66.1	74.0	120	65.1	73.8	132	63.8	73.6	140	63.0	73.2
Input Voltage [V]	Load 50% Efficiency [%]	Load 100% Efficiency [%]																														
75	67.7	72.5																														
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Model

RMB50A-1

Item

Power Factor (by Input Voltage)
力率 (入力電圧特性)

Object

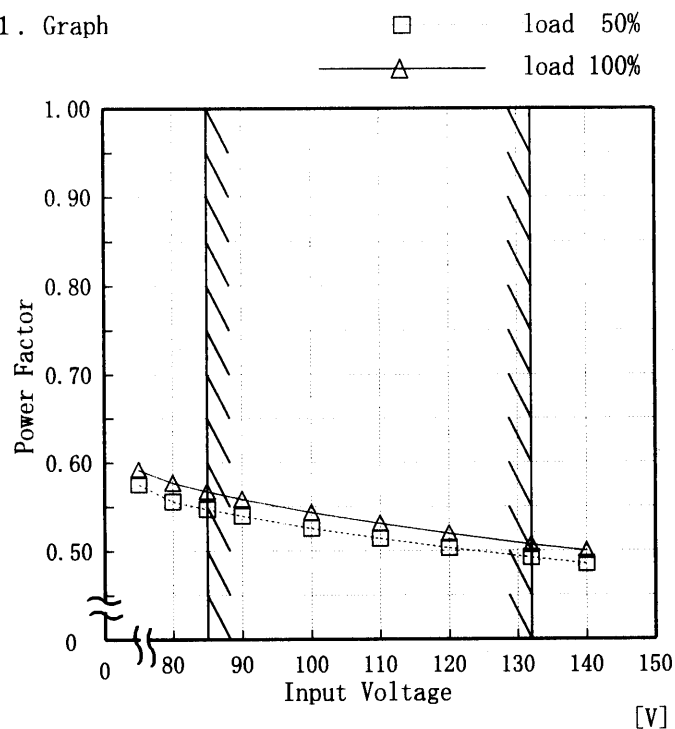
Temperature

25°C

Testing Circuitry

Figure A

1. Graph



Note: Slanted line shows the range of the rated input voltage.

(注) 斜線は定格入力電圧範囲を示す。

2. Values

Input Voltage [V]	load 50%	load 100%
	Power Factor	Power Factor
75	0.58	0.59
80	0.56	0.58
85	0.55	0.57
90	0.54	0.56
100	0.53	0.54
110	0.51	0.53
120	0.50	0.52
132	0.49	0.51
140	0.49	0.50

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Model	RMB50A-1
Item	Hold-Up Time 出力保持時間
Object	+5.0V1.5A

1. Graph

—△—

Load 50%

—□—

Load 100%

Input Voltage [V]	Hold-Up Time [mS] (Load 50%)	Hold-Up Time [mS] (Load 100%)
75	27	23
80	31	26
85	35	30
90	40	34
100	50	43
110	61	53
120	73	65
132	89	80
140	101	90

This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.

Note: Slanted line shows the range of the rated input voltage.

出力保持時間とは、入力電圧断から出力電圧が、定電圧精度の規格範囲を保持しているところまでの時間。

(注)斜線は定格入力電圧範囲を示す。

Temperature 25℃
Testing Circuitry Figure A

2. Values

Input Voltage [V]	Load 50%	Load 100%
	Hold-Up Time [mS]	Hold-Up Time [mS]
75	27	23
80	31	26
85	35	30
90	40	34
100	50	43
110	61	53
120	73	65
132	89	80
140	101	90

Input Voltage [V]

75

80

85

90

100

110

120

132

140

Load 50% Hold-Up Time [mS]

27

31

35

40

50

61

73

89

101

Load 100% Hold-Up Time [mS]

23

26

30

34

43

53

65

80

90

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Model		RMB50A-1	Temperature Testing Circuitry	25℃ Figure A																														
Item		Hold-Up Time 出力保持時間																																
Object		+12.0V3.6A																																
1. Graph		<div><div>△</div>Load 50%</div> <div><div>□</div>Load 100%</div> <div><div><div>Hold-Up Time [mS]</div><div><div>1000</div><div>100</div><div>10</div><div>1</div><div>0</div><div>80</div><div>90</div><div>100</div><div>110</div><div>120</div><div>130</div><div>140</div><div>150</div><div>Input Voltage [V]</div></div></div></div>	2. Values																															
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Model		RMB50A-1	Testing Circuitry Figure A																																																		
Item		Instantaneous Interruption Compensation 瞬時停電保障																																																			
Object		+5.0V1.50A																																																			
1. Graph		<div> <div> <div>△</div> <div>□</div> <div>○</div> </div> <div> <div>Input Volt. 85V</div> <div>Input Volt. 100V</div> <div>Input Volt. 132V</div> </div> </div> <p>Instantaneous Compensation Time [mS]</p> <p>Load Current [A]</p> <p>This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy. Note: Slanted line shows the range of the rated load current.</p> <p>瞬時停電保障時間とは、出力電圧が定電圧精度の規格範囲を保持している瞬時停電時間をいう。 (注) 斜線は定格負荷電流範囲を示す。</p>	2. Values																																																		
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Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]																																																		
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Model

RMB50A-1

Item

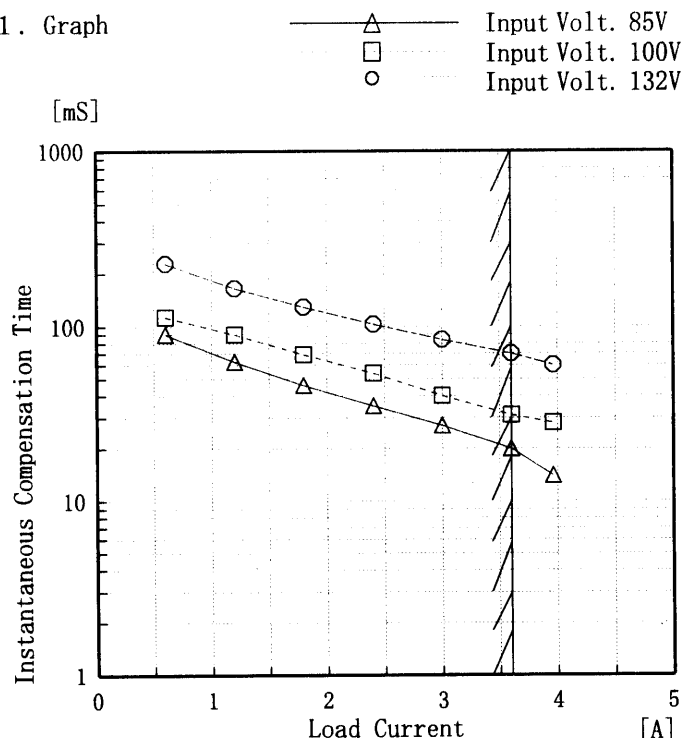
Instantaneous Interruption Compensation
瞬時停電保障

Object

+12.0V 3.60A

Testing Circuitry Figure A

1. Graph



This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.

Note: Slanted line shows the range of the rated load current.

瞬時停電保障時間とは、出力電圧が定電圧精度の規格範囲を保持している瞬時停電時間をいう。

(注) 斜線は定格負荷電流範囲を示す。

2. Values

Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Time [mS]		
0.0	—	—	—
0.60	90	113	229
1.20	63	90	166
1.80	46	69	129
2.40	35	54	103
3.00	27	40	84
3.60	20	31	70
3.96	14	28	60
—	—	—	—
—	—	—	—
—	—	—	—

— 8 —

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Model		RMB50A-1	Temperature Testing Circuitry	25℃ Figure A
Item		Ripple Voltage (by Load Current) リップル電圧 (負荷電流特性)		
Object		+5.0V 1.50A		

1. Graph

□

Input Volt. 85V

—△—

Input Volt. 132V

[mV]

150

125

100

75

50

25

0

Ripple Voltage

0

0.5

1

1.5

2

Load Current

[A]

2. Values

Load Current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]
	Ripple Output Volt. [mV]	Ripple Output Volt. [mV]
0.00	5	5
0.25	5	5
0.50	10	10
1.00	10	10
1.25	10	10
1.50	10	10
1.75	10	10
—	—	—
—	—	—
—	—	—
—	—	—

Ripple Voltage is shown as p-p in the figure below.

Note: Slanted line shows the range of the rated load current.

リップル電圧は、下図 p-p 値で示される。

(注) 斜線は定格負荷電流範囲を示す。

T1: Due to AC Input Line
入力商用周期

T2: Due to Switching
スイッチング周期

Ripple [mVp-p]

T1

T2

Fig. Complex Ripple Wave Form

図 リップル波形詳細図

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Model		RMB50A-1	
Item		Ripple Voltage (by Load Current) リップル電圧 (負荷電流特性)	
Object		+12V 3.6A	

1. Graph

□

Input Volt. 85V

—△—

Input Volt. 132V

[mV]

150

125

100

75

50

25

0

Ripple Voltage

0

1

2

3

4

5

Load Current

[A]

Ripple Voltage is shown as p-p in the figure below.

Note: Slanted line shows the range of the rated load current.

リップル電圧は、下図 p-p 値で示される。

(注) 斜線は定格負荷電流範囲を示す。

T1: Due to AC Input Line
入力商用周期

T2: Due to Switching
スイッチング周期

T2

Ripple [mVp-p]

T1

Fig. Complex Ripple Wave Form

図 リップル波形詳細図

Temperature

25℃

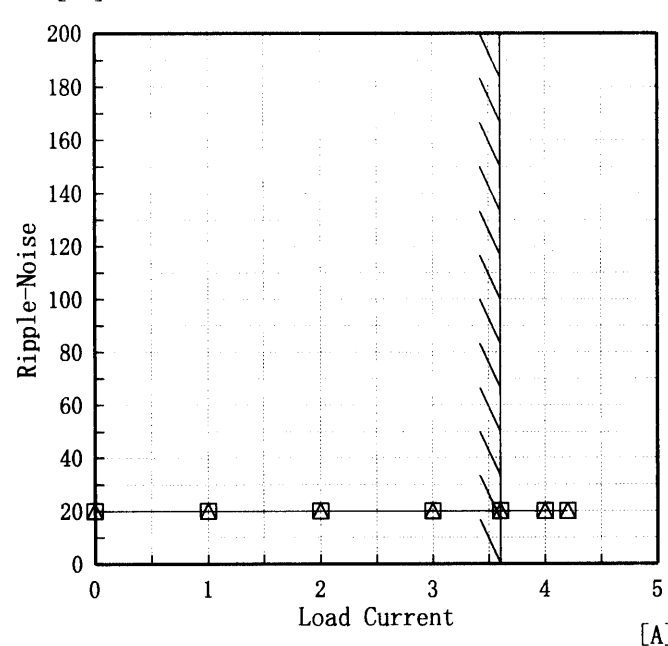
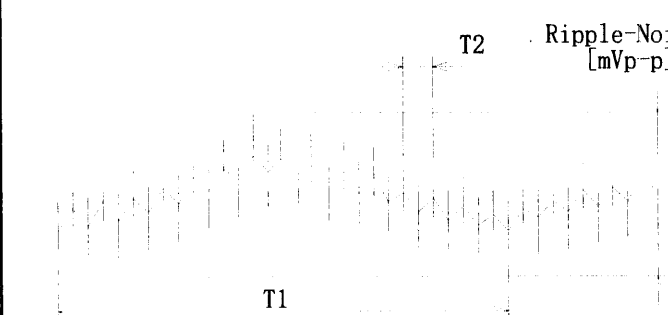
Testing Circuitry

Figure A

2. Values

Load Current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]
	Ripple Output Volt. [mV]	Ripple Output Volt. [mV]
0.00	5	5
1.00	5	5
2.00	5	5
3.00	10	10
3.60	10	10
4.00	20	20
4.20	20	20
—	—	—
—	—	—
—	—	—
—	—	—

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Model	RMB50A-1	Temperature	25℃																																						
Item	Ripple-Noise リップルノイズ	Testing Circuitry	Figure A																																						
Object	+12V3.6A																																								
1. Graph		2. Values																																							
<div><div><div>□</div><div>Input Volt. 85V</div></div><div><div>—△—</div><div>Input Volt. 132V</div></div></div> 		<table><tr><th rowspan="2">Load current [A]</th><th>Input Volt. 85 [V]</th><th>Input Volt. 132 [V]</th></tr><tr><th>Ripple-Noise [mV]</th><th>Ripple-Noise [mV]</th></tr><tr><td>0.00</td><td>20</td><td>20</td></tr><tr><td>1.00</td><td>20</td><td>20</td></tr><tr><td>2.00</td><td>20</td><td>20</td></tr><tr><td>3.00</td><td>20</td><td>20</td></tr><tr><td>3.60</td><td>20</td><td>20</td></tr><tr><td>4.00</td><td>20</td><td>20</td></tr><tr><td>4.20</td><td>20</td><td>20</td></tr><tr><td>—</td><td>—</td><td>—</td></tr><tr><td>—</td><td>—</td><td>—</td></tr><tr><td>—</td><td>—</td><td>—</td></tr><tr><td>—</td><td>—</td><td>—</td></tr></table>		Load current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]	Ripple-Noise [mV]	Ripple-Noise [mV]	0.00	20	20	1.00	20	20	2.00	20	20	3.00	20	20	3.60	20	20	4.00	20	20	4.20	20	20	—	—	—	—	—	—	—	—	—	—	—	—
Load current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]																																							
	Ripple-Noise [mV]	Ripple-Noise [mV]																																							
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Ripple-Noise is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.																																									
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<div><div>T1: Due to AC Input Line 入力商用周期</div><div>T2: Due to Switching スイッチング周期</div></div> <div><div>T2</div><div>Ripple-Noise [mVp-p]</div></div> <div><div>T1</div></div>																																									
Fig. Complex Ripple Wave Form 図 リップル波形詳細図																																									

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Model		RMB50A-1		Temperature		25℃																																																								
Item		Overcurrent Protection 過電流保護		Testing Circuitry Figure A																																																										
Object		+5.0V1.50A		2. Values																																																										
1. Graph		<div><div><div></div><div></div><div></div></div><div><div>Input Volt. 85.0 V</div><div>Input Volt. 100.0 V</div><div>Input Volt. 132.0 V</div></div></div> <div><div>[V]</div><div>Output Voltage</div><div>Load Current</div><div>[A]</div></div>																																																												
Object		+12V3.60A		2. Values																																																										
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				<table><tr><th rowspan="2">Output Voltage [V]</th><th>Input Volt. 85.0[V]</th><th>Input Volt. 100.0[V]</th><th>Input Volt. 132.0[V]</th></tr><tr><th>Load Current [A]</th><th>Load Current [A]</th><th>Load Current [A]</th></tr><tr><td>5.00</td><td>-</td><td>-</td><td>-</td></tr><tr><td>4.75</td><td>3.906</td><td>3.865</td><td>3.863</td></tr><tr><td>4.50</td><td>3.874</td><td>3.839</td><td>3.836</td></tr><tr><td>4.00</td><td>3.665</td><td>3.642</td><td>3.637</td></tr><tr><td>3.50</td><td>3.379</td><td>3.364</td><td>3.359</td></tr><tr><td>3.00</td><td>2.997</td><td>2.986</td><td>2.982</td></tr><tr><td>2.50</td><td>2.521</td><td>2.512</td><td>2.509</td></tr><tr><td>2.00</td><td>2.044</td><td>2.038</td><td>2.035</td></tr><tr><td>1.50</td><td>1.545</td><td>1.539</td><td>1.537</td></tr><tr><td>1.00</td><td>1.037</td><td>1.032</td><td>1.030</td></tr><tr><td>0.50</td><td>0.517</td><td>0.516</td><td>0.515</td></tr><tr><td>0.00</td><td>0.314</td><td>0.314</td><td>0.313</td></tr></table>				Output Voltage [V]	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]	Load Current [A]	Load Current [A]	Load Current [A]	5.00	-	-	-	4.75	3.906	3.865	3.863	4.50	3.874	3.839	3.836	4.00	3.665	3.642	3.637	3.50	3.379	3.364	3.359	3.00	2.997	2.986	2.982	2.50	2.521	2.512	2.509	2.00	2.044	2.038	2.035	1.50	1.545	1.539	1.537	1.00	1.037	1.032	1.030	0.50	0.517	0.516	0.515	0.00	0.314	0.314	0.313
Output Voltage [V]	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]																																																											
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Output Voltage [V]	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]																																																											
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COSEL

Model		RMB50A-1	
Item		Overvoltage Protection 過電圧保護	
Object		+5.0V1.50A	
1. Graph		2. Values	

Operating Point [V]	△	Input Volt. 85 V
	□	Input Volt. 100 V
	○	Input Volt. 132 V

Ambient Temp. [°C]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Operating Point [V]		
-20	6.39	6.45	6.51
-10	6.44	6.45	6.39
0	6.39	6.39	6.39
10	6.33	6.39	6.40
20	6.33	6.51	6.40
25	6.45	6.40	6.40
30	6.38	6.39	6.39
40	6.44	6.39	6.39
50	6.38	6.39	6.39
60	6.38	6.39	6.40
-	-	-	-

Object		+12V3.60A	
1. Graph		2. Values	

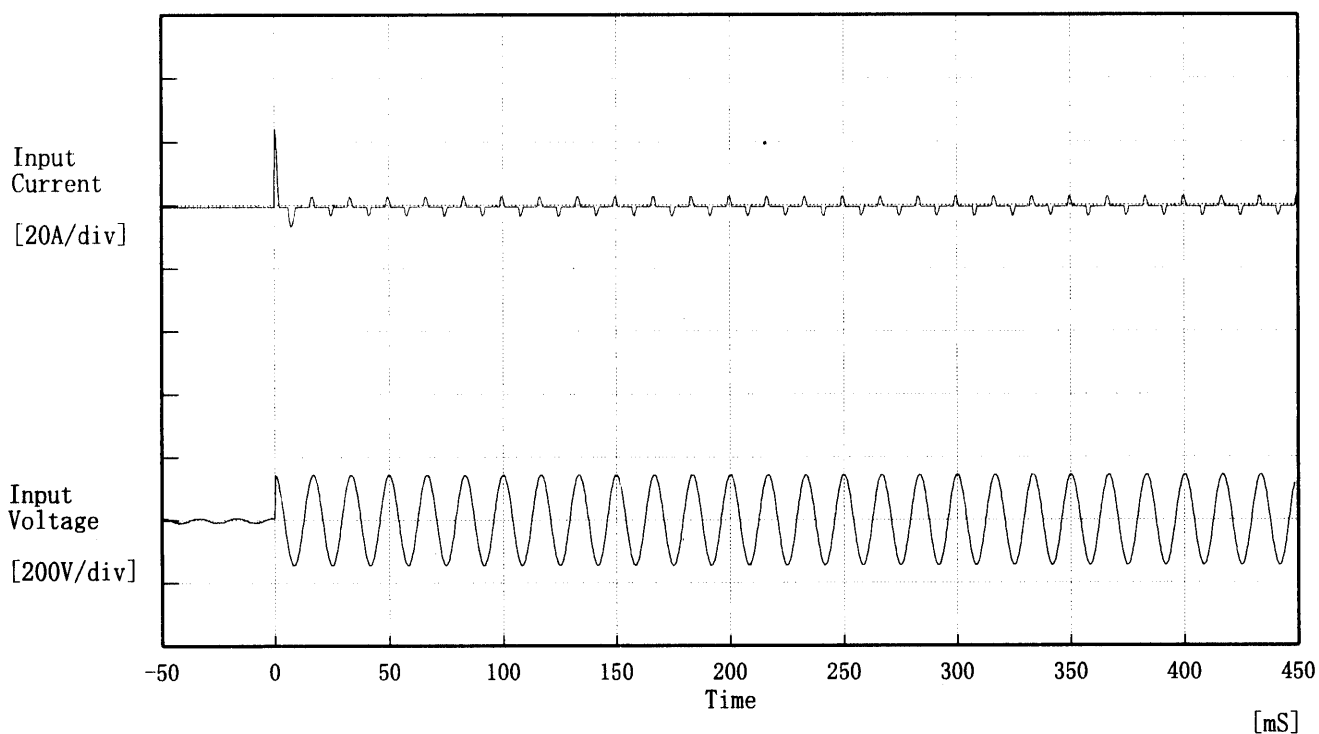
Operating Point [V]	△	Input Volt. 85 V
	□	Input Volt. 100 V
	○	Input Volt. 132 V

Ambient Temp. [°C]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Operating Point [V]		
-20	15.2	15.2	15.2
-10	15.4	15.4	15.4
0	15.5	15.5	15.5
10	15.6	15.6	15.6
20	15.7	15.7	15.7
25	15.7	15.7	15.7
30	15.8	15.8	15.8
40	15.9	15.9	15.9
50	15.9	15.9	15.9
60	16.1	16.1	16.1
-	-	-	-

Note: Slanted line shows the range of the rated ambient temperature.
(注)斜線は定格周囲温度範囲を示す。

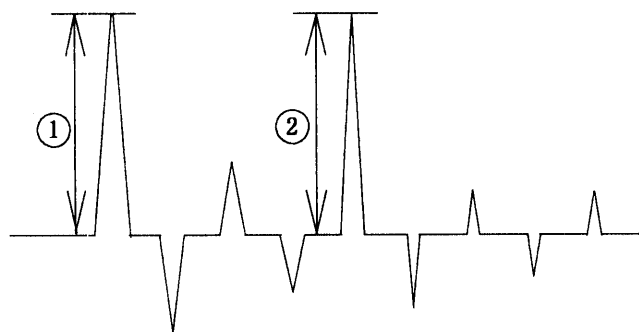
COSEL

Model	RMB50A-1	Temperature 25°C Testing Circuitry Figure A
Item	Inrush Current 突入電流	
Object	_____	



Input Voltage 100 V
Frequency 60 Hz
Load 100 %
Inrush Current

- ① 24.20 [A]
- ② 3.40 [A]



COSEL

Model	RMB50A-1	Temperature	25°C
Item	Dynamic Load Responce 動的負荷変動	Testing Circuitry	Figure A
Object	+5.0V 1.50A		

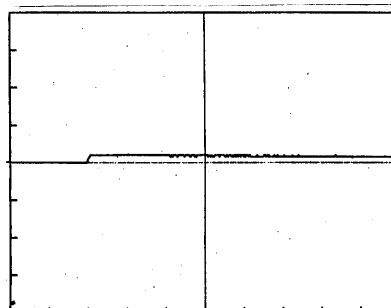
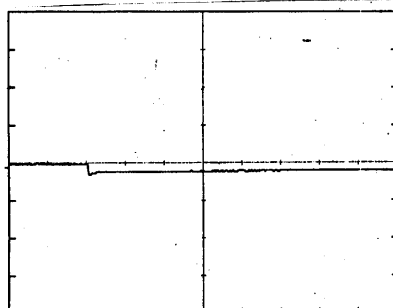
Input Volt. 100 V

Cycle 200 mS

Load Current

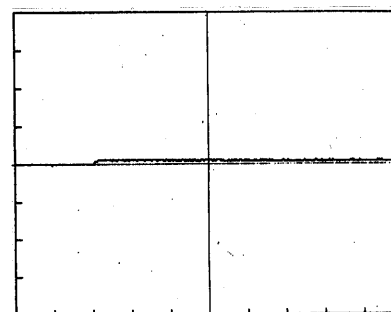
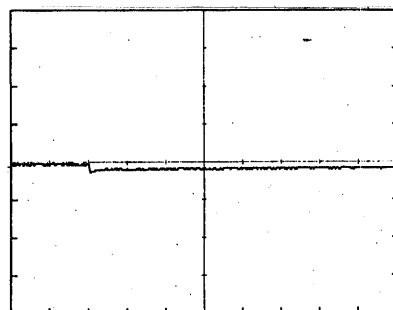
Load 0% ←→

Load 100 %



Load 0% ←→

Load 50 %



100 mV/div

10 mS/div

COSEL

Model	RMB50A-1	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Responce 動的負荷変動	
Object	+12V3.6A	

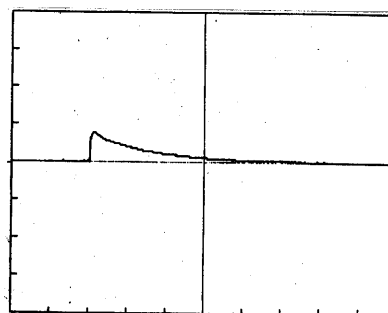
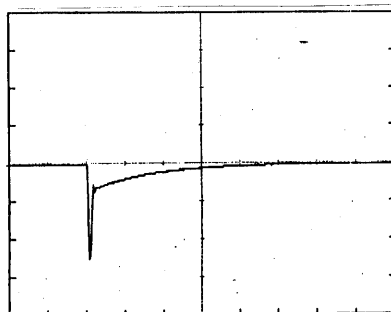
Input Volt. 100 V

Cycle 200 mS

Load Current

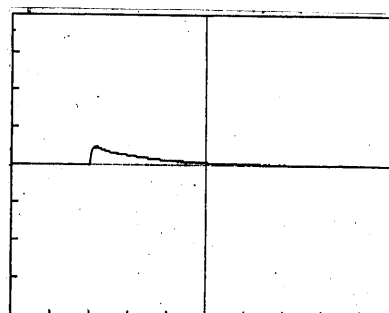
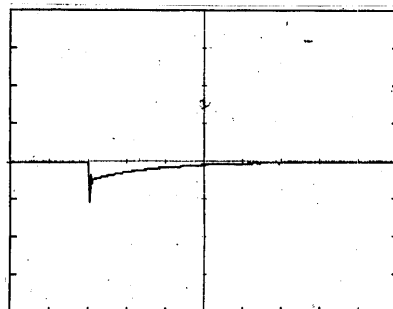
Load 0% ↔

Load 100 %



Load 0% ↔

Load 50 %



200 mV/div

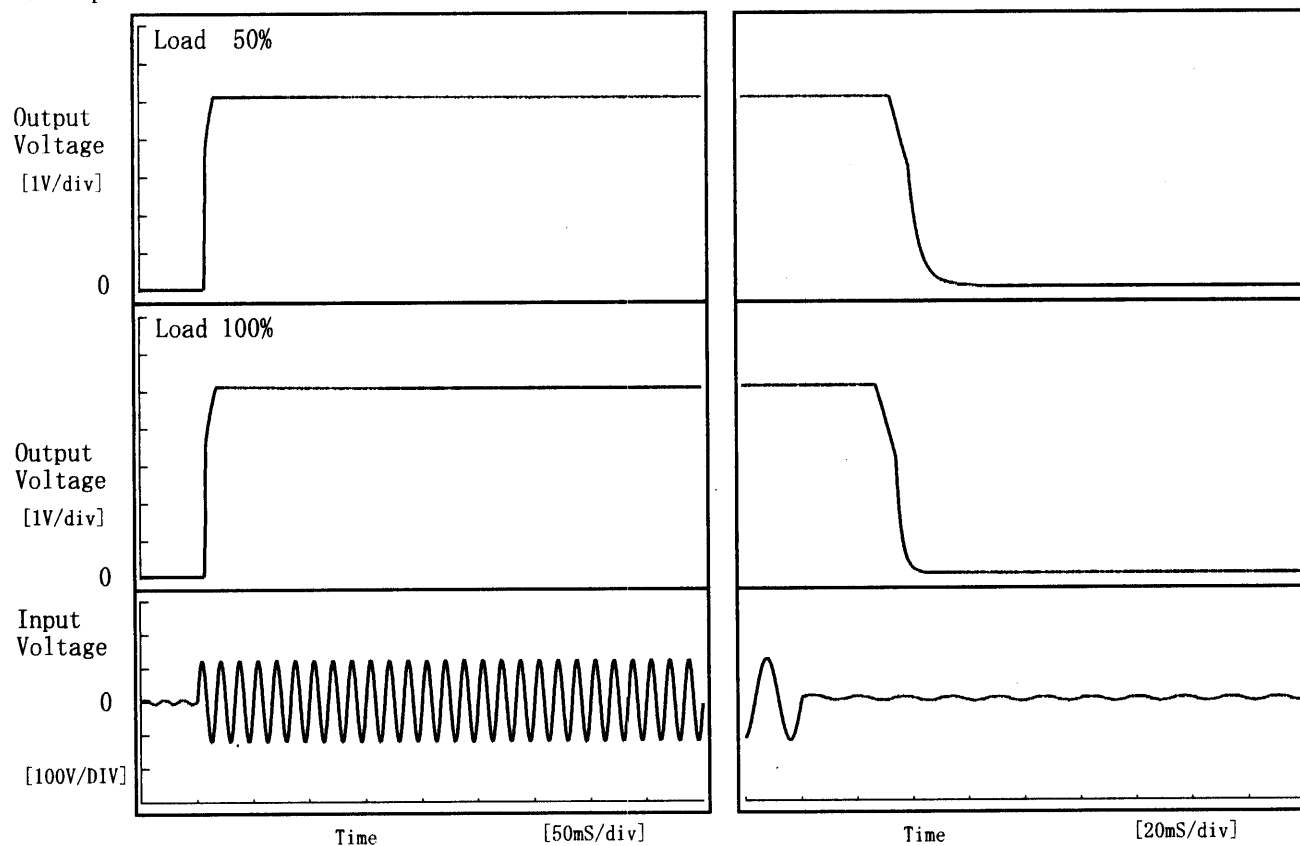
10 mS/div

COSEL

Model	RMB50A-1	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+5.0V1.50A		

1. Graph

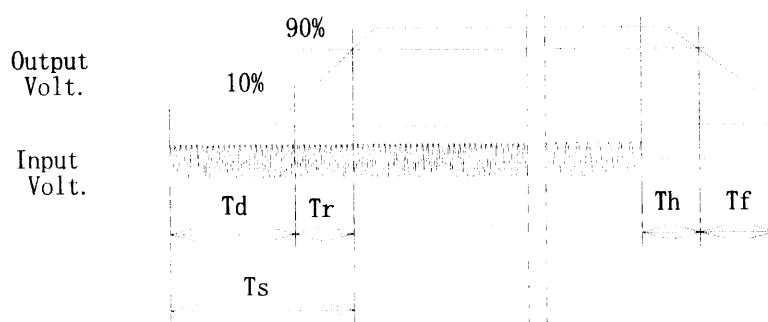
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	7.3	5.0	12.3	34.7	12.2
100 %	7.0	6.8	13.8	29.7	8.8

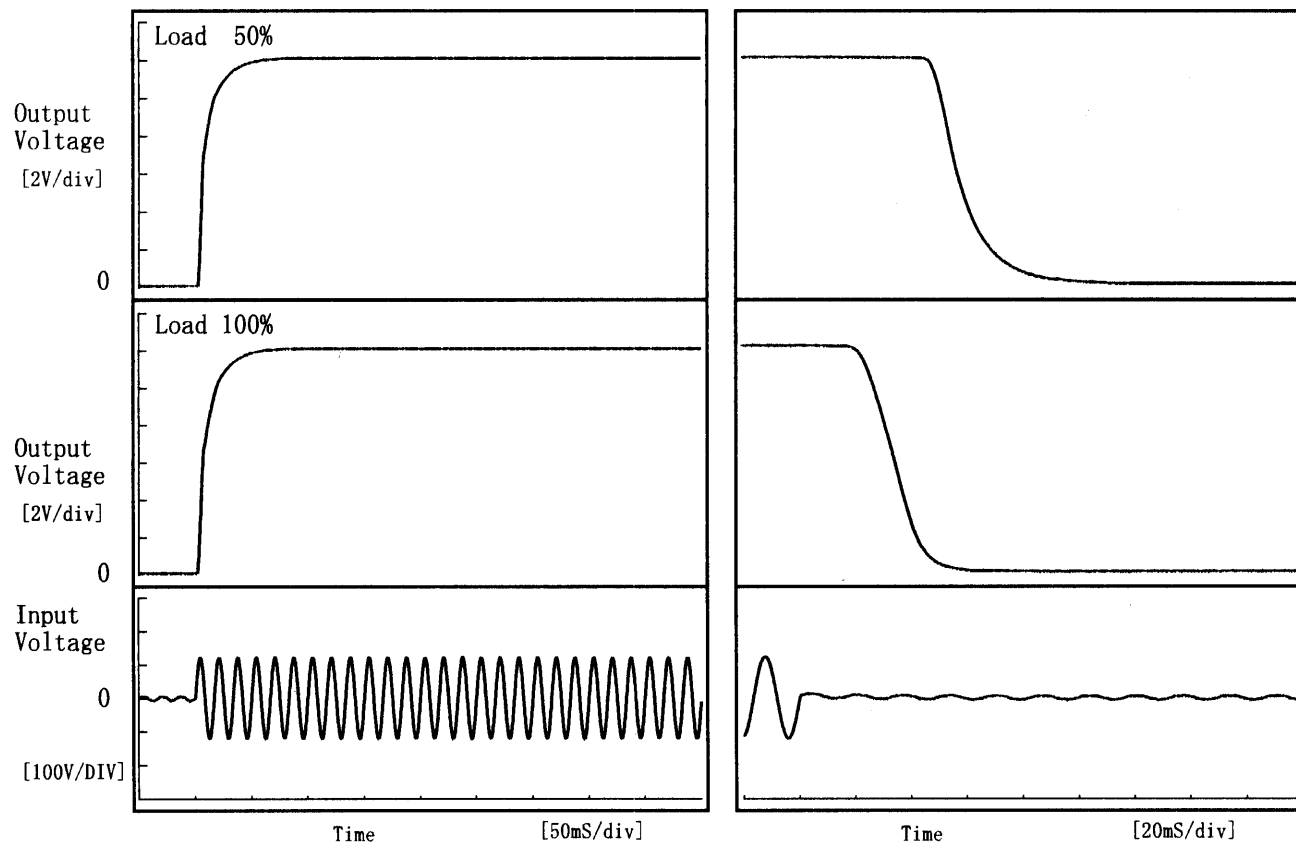


COSEL

Model	RMB50A-1	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+12.0V3.60A		

1. Graph

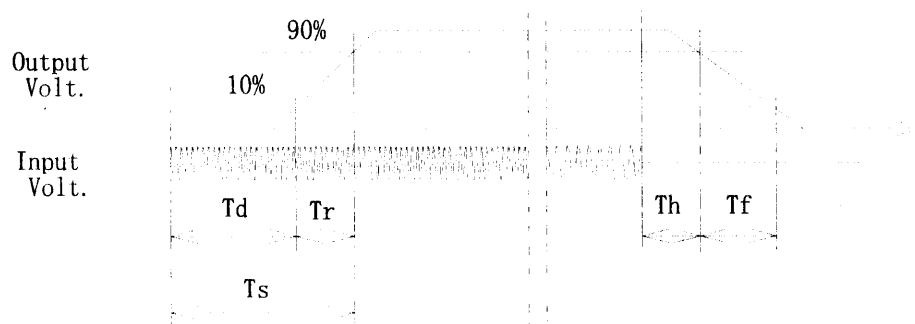
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	3.0	21.5	24.5	49.7	25.3
100 %	3.0	23.0	26.0	25.0	20.3



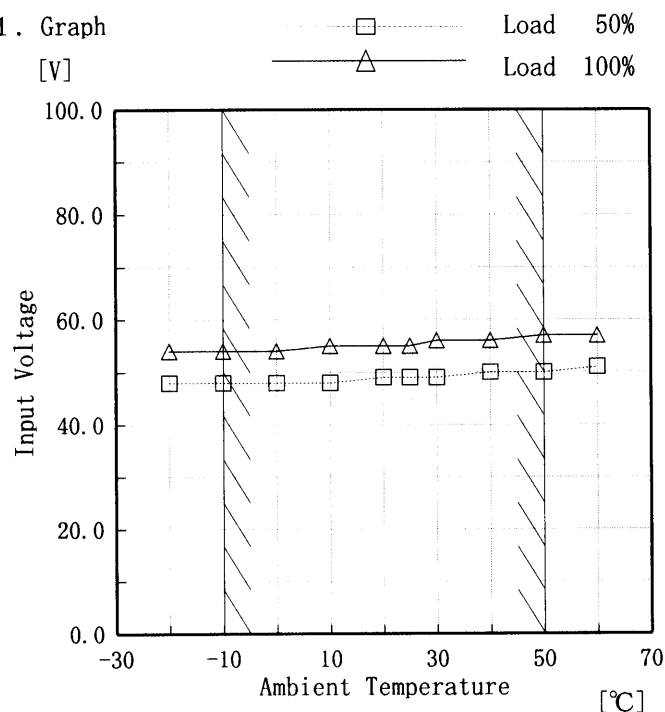
COSEL

Model		RMB50A-1	Testing Circuitry Figure A																																																				
Item		Ambient Temperature Drift 周囲温度変動																																																					
Object		+5.0V1.50A																																																					
1. Graph			2. Values																																																				
<div><div><div>△</div><div>Input Volt. 85.0V</div></div><div><div>□</div><div>Input Volt. 100.0V</div></div><div><div>○</div><div>Input Volt. 132.0V</div></div></div> <p>Output Voltage [V]</p> <p>Ambient Temperature [°C]</p> <p>Load 100%</p>			<table><tr><th>Temperature</th><th>Input Volt. 85.0[V]</th><th>Input Volt. 100.0[V]</th><th>Input Volt. 132.0[V]</th></tr><tr><th>[°C]</th><th>Output Volt. [V]</th><th>Output Volt. [V]</th><th>Output Volt. [V]</th></tr><tr><td>-20</td><td>5.072</td><td>5.072</td><td>5.072</td></tr><tr><td>-10</td><td>5.074</td><td>5.074</td><td>5.073</td></tr><tr><td>0</td><td>5.075</td><td>5.074</td><td>5.075</td></tr><tr><td>10</td><td>5.075</td><td>5.075</td><td>5.075</td></tr><tr><td>20</td><td>5.075</td><td>5.075</td><td>5.075</td></tr><tr><td>25</td><td>5.075</td><td>5.075</td><td>5.075</td></tr><tr><td>30</td><td>5.074</td><td>5.074</td><td>5.074</td></tr><tr><td>40</td><td>5.073</td><td>5.073</td><td>5.073</td></tr><tr><td>50</td><td>5.071</td><td>5.071</td><td>5.071</td></tr><tr><td>60</td><td>5.069</td><td>5.069</td><td>5.069</td></tr><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr></table>	Temperature	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]	[°C]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]	-20	5.072	5.072	5.072	-10	5.074	5.074	5.073	0	5.075	5.074	5.075	10	5.075	5.075	5.075	20	5.075	5.075	5.075	25	5.075	5.075	5.075	30	5.074	5.074	5.074	40	5.073	5.073	5.073	50	5.071	5.071	5.071	60	5.069	5.069	5.069	—	—	—	—
Temperature	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]																																																				
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-10	5.074	5.074	5.073																																																				
0	5.075	5.074	5.075																																																				
10	5.075	5.075	5.075																																																				
20	5.075	5.075	5.075																																																				
25	5.075	5.075	5.075																																																				
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Temperature	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]																																																				
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-10	12.008	12.008	12.008																																																				
0	12.003	12.003	12.003																																																				
10	11.996	11.996	11.996																																																				
20	11.989	11.989	11.988																																																				
25	11.985	11.985	11.985																																																				
30	11.981	11.981	11.981																																																				
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COSEL

Model	RMB50A-1
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+5.0V1.5A

1. Graph

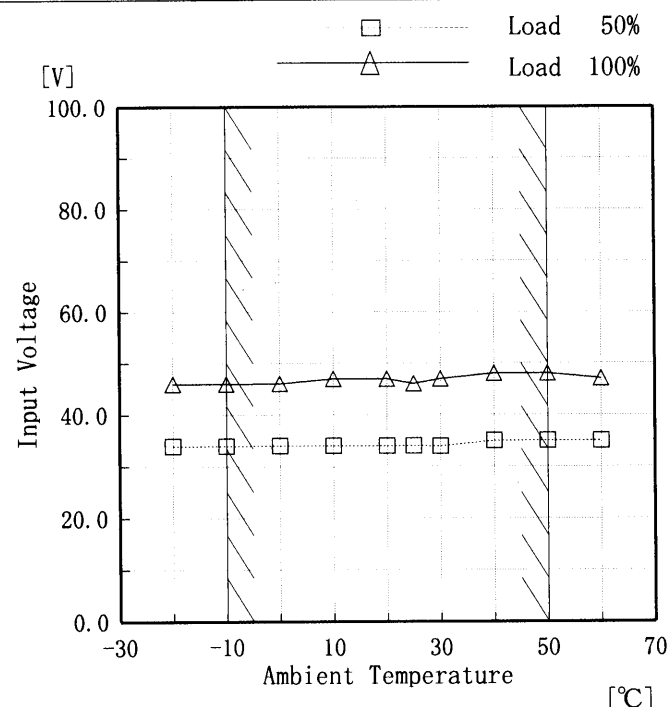


Testing Circuitry Figure A

2. Values

Ambient Temp. [°C]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]
-20	48.0	54.0
-10	48.0	54.0
0	48.0	54.0
10	48.0	55.0
20	49.0	55.0
25	49.0	55.0
30	49.0	56.0
40	50.0	56.0
50	50.0	57.0
60	51.0	57.0
—	—	—

Object +12V3.60A



2. Values

Ambient Temp. [°C]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]
-20	34.0	46.0
-10	34.0	46.0
0	34.0	46.0
10	34.0	47.0
20	34.0	47.0
25	34.0	46.0
30	34.0	47.0
40	35.0	48.0
50	35.0	48.0
60	35.0	47.0
—	—	—

Note: Slanted line shows the range of the rated ambient temperature.

(注) 斜線は定格周囲温度範囲を示す。

COSEL

Model		RMB50A-1		Testing Circuitry Figure A																																			
Item		Ripple Voltage (by Ambient Temp.) リップル電圧 (周囲温度特性)																																					
Object		+5.0V1.50A																																					
1. Graph		<div><div>□ Load 50%</div><div>△ Load 100%</div></div> <p>Input Volt. 85 V</p>		2. Values																																			
		<table><tr><th>Ambient Temp. [°C]</th><th>Load 50% Ripple Output Volt. [mV]</th><th>Load 100% Ripple Output Volt. [mV]</th></tr><tr><td>-20</td><td>20</td><td>20</td></tr><tr><td>-10</td><td>20</td><td>20</td></tr><tr><td>0</td><td>20</td><td>20</td></tr><tr><td>10</td><td>10</td><td>10</td></tr><tr><td>20</td><td>10</td><td>10</td></tr><tr><td>25</td><td>10</td><td>10</td></tr><tr><td>30</td><td>10</td><td>10</td></tr><tr><td>40</td><td>10</td><td>10</td></tr><tr><td>50</td><td>10</td><td>10</td></tr><tr><td>60</td><td>10</td><td>10</td></tr><tr><td>—</td><td>—</td><td>—</td></tr></table>		Ambient Temp. [°C]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]	-20	20	20	-10	20	20	0	20	20	10	10	10	20	10	10	25	10	10	30	10	10	40	10	10	50	10	10	60	10	10	—	—	—
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Note: Slanted line shows the range of the rated ambient temperature.
(注)斜線は定格周囲温度範囲を示す。

COSEL

COSEL		Temperature Testing Circuitry	25 °C Figure A
Model	RMB50A-1		
Item	Time Lapse Drift 経時ドリフト		
Object	+5.0V1.50A		
1. Graph		2.Values	
<div><div><div>Output Voltage [V]</div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><di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COSEL

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		Testing Circuitry Figure A
Model	RMB50A-1	
Item	Condensation 結露特性	
Object	+5V1.5A	

1. Condensation test

Testing procedure is as follows.

① Keeping and cooling the unit in a tank at -10℃ for an hour with the input off.

② Taking it out of the tank and dewing itself in a room where the temperature is 25℃ and the humidity is 40%RH.

③ Testing electrical characteristics of the unit to confirm there be no fault.

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1. 結露特性試験

入力を切った状態で、恒温槽で－10℃に冷却しておき、約1時間後に恒温槽から取り出し、室温25℃、湿度40%RHの状態におき結露させ、その電気的特性の測定を行い、異常のないことを確認する。

2. Values		
Item	Data	Testing Conditions
Output Voltage [V]	5.075	Input Volt.: 100V, Load Current:1.5A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:1.5A
Load Regulation [mV]	22	Input Volt.: 100V, Load Current:0.0～1.5A

COSEL

Model		RMB50A-1	Testing Circuitry	Figure A
Item		Condensation 結露特性		
Object		+12V3.6A		
1. Condensation test				
Testing procedure is as follows.				
① Keeping and cooling the unit in a tank at -10℃ for an hour with the input off.				
② Taking it out of the tank and dewing itself in a room where the temperature is 25℃ and the humidity is 40%RH.				
③ Testing electrical characteristics of the unit to confirm there be no fault.				
1. 結露特性試験				
入力を切った状態で、恒温槽で-10℃に冷却しておき、約1時間後に恒温槽から取り出し、室温25℃、湿度40%RHの状態におき結露させ、その電気的特性の測定を行い、異常のないことを確認する。				
2. Values				
Item		Data	Testing Conditions	
Output Voltage [V]		11.985	Input Volt.: 100V, Load Current:3.6A	
Line Regulation [mV]		1	Input Volt.: 85~132V, Load Current:3.6A	
Load Regulation [mV]		8	Input Volt.: 100V, Load Current:0.0~3.6A	

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BC-3215

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Model	RMB50A-1	Testing Circuitry Figure A
Item	Leakage Current 漏洩電流	
Object	_____	

1. Results

Standards	Leakage Current [mA]		
	Input Volt. 85 [V]	Input Volt. 100 [V]	Input Volt. 132 [V]
(A) DENTORI	0.23	0.27	0.36
(B) U L	0.22	0.26	0.35
(C) C S A	0.22	0.26	0.35

Standards	Leakage Current [mA]		
	Input Volt. 170 [V]	Input Volt. 220 [V]	Input Volt. 264 [V]
(D) V D E	—	—	—

2. Condition

Leakage current value is concluded after measuring both phases of AC input and by choosing the larger one.

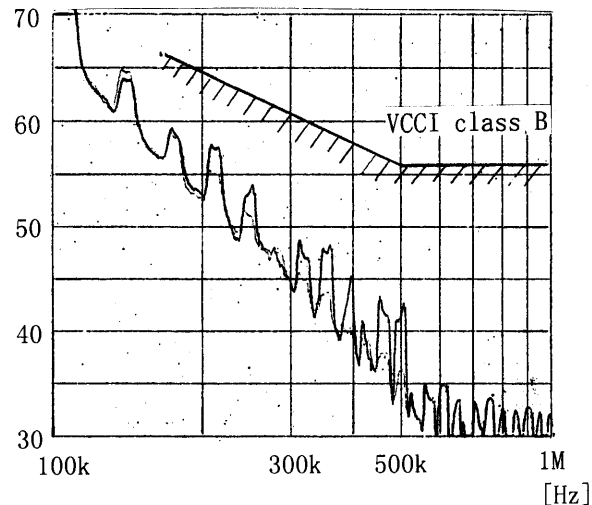
交流入力の一相について測定し、その大きい方を漏洩電流測定値とする。

COSEL

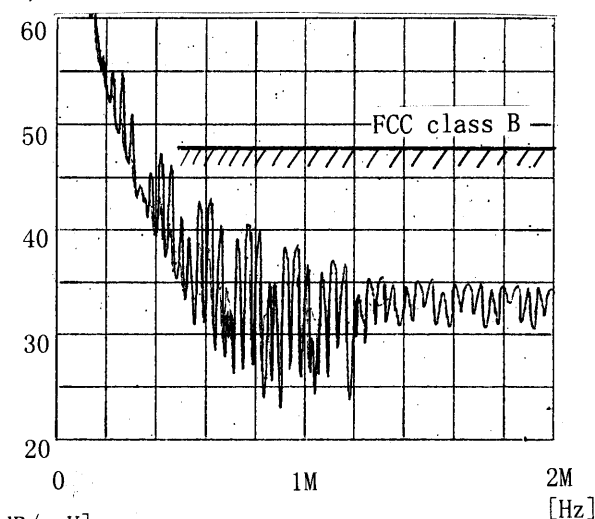
Model	RMB50A-1
Item	Conducted Emission 雑音端子電圧
Object	

Testing Circuitry Figure D

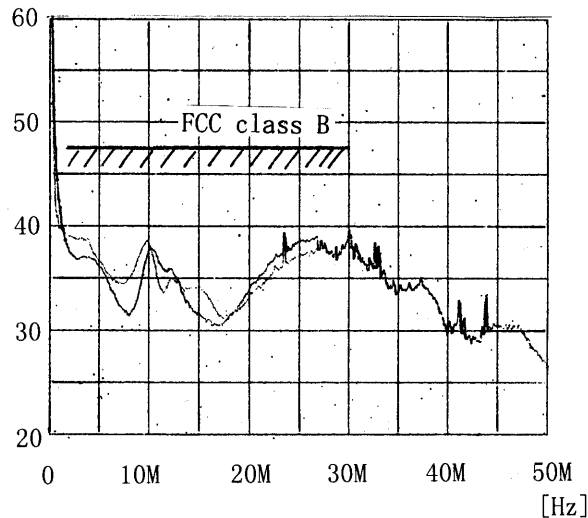
[dB/μV]



[dB/μV]



[dB/μV]



1. Graph

Remarks

Input Volt. 120 V

Load 100 %

Note: Slanted line shows the range of Tolerance.

(注) 斜線は許容値を示す。

NO	Standards	Standards Complied	Frequency [MHz]	Tolerance [dB/μV]
1	FCC class A		0.45~1.6	60
			1.6~30	69.5
2	FCC class B	○	0.45~30	48
3	VCCI class A		0.15~0.5	79
			0.5~30	73
4	VCCI class B	○	0.15~0.5	66-56
			0.5~5	56
			5~30	60
5	CISPR Pub. 22 class A (EN55022)		0.15~0.5	79
			0.5~30	73
6	CISPR Pub. 22 class B (EN55022)		0.15~0.5	66-56
			0.5~5	56
			5~30	60

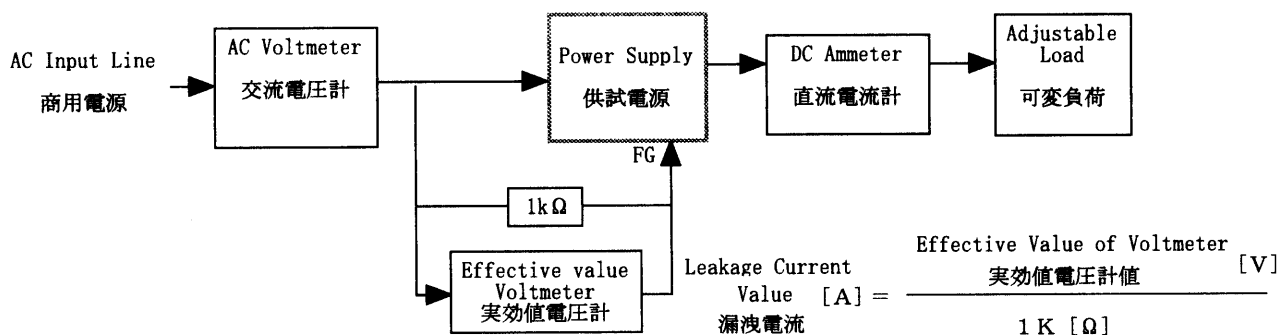
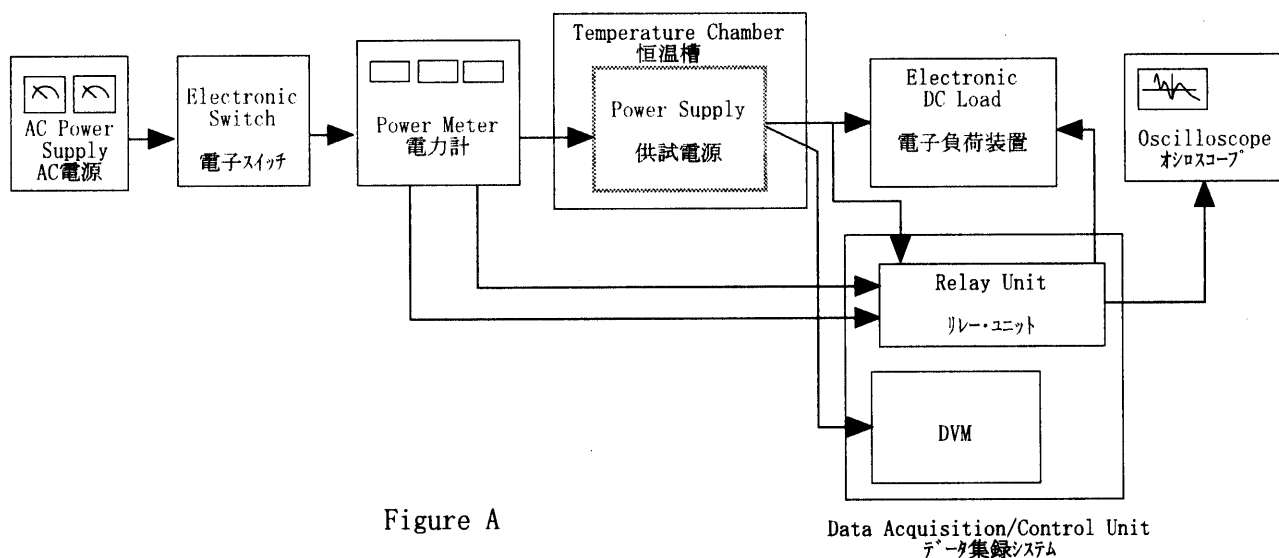


Figure B (DENTORI)

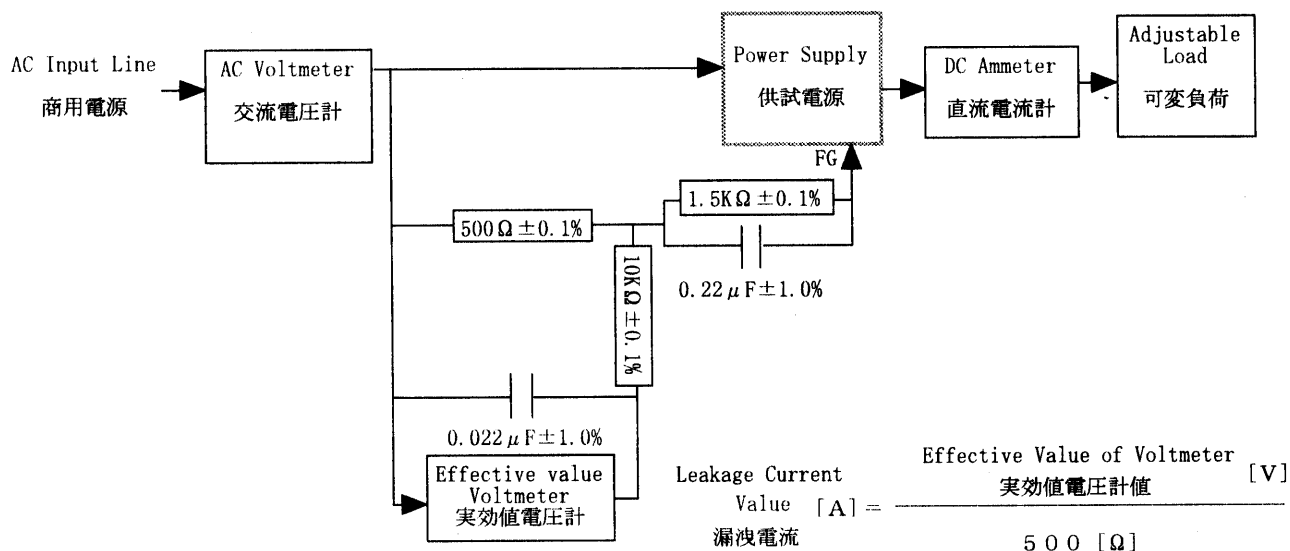


Figure B (UL, CSA, VDE)

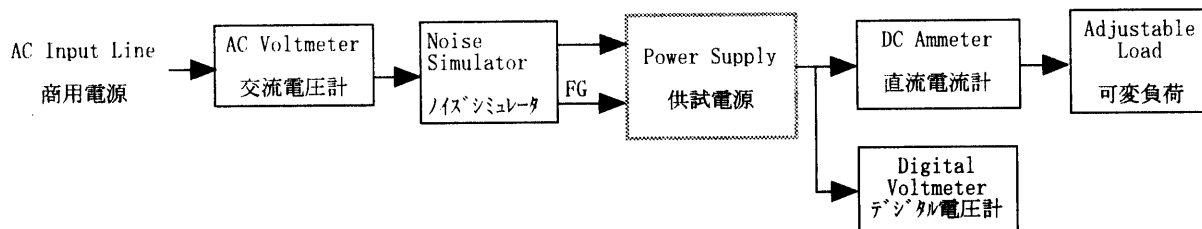


Figure C

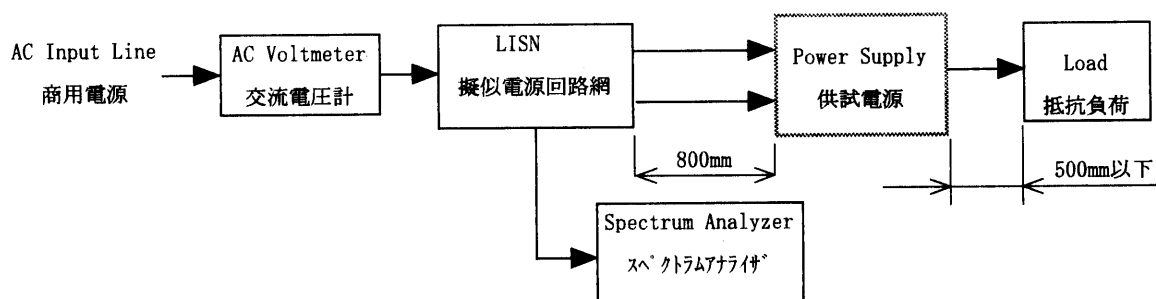


Figure D

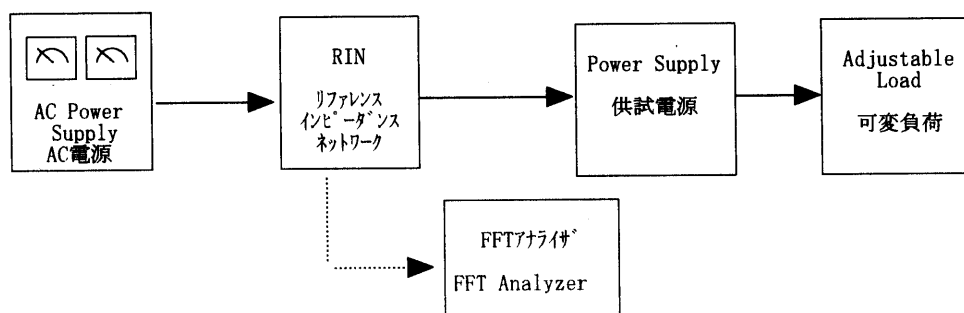


Figure E