



# TEST DATA OF RMB50A-2 (100V INPUT)

Regulated DC Power Supply

Date : Mar. 5. 1999

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Design Manager

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Design Engineer

**コーセル株式会社**

**COSEL CO., LTD.**

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Model		RMB50A-2		Temperature		25°C																																										
Item		Line Regulation 静的入力変動		Testing Circuitry		Figure A																																										
Object		+5.0V 1.50A																																														
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Item		Efficiency 効率																															
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<p>The graph plots Efficiency [%] on the y-axis (0 to 86) against Input Voltage [V] on the x-axis (0 to 150). Two data series are shown: Load 50% (represented by squares and a dashed line) and Load 100% (represented by triangles and a solid line). A vertical slanted line with diagonal hatching indicates the rated input voltage range, spanning from approximately 85V to 135V. Efficiency for both loads is relatively stable within this range, with a slight downward trend as voltage increases beyond 100V.</p>																																	
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Model		RMB50A-2		Temperature		25°C																																																
Item		Load Regulation 静的負荷変動		Testing Circuitry		Figure A																																																
Object		+5.0V1.5A																																																				
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<p>Note: Slanted line shows the range of the rated load current.                  (注)斜線は定格負荷電流範囲を示す。</p>																																																						

# COSEL

Model		RMB50A-2	Temperature		25°C																																						
Item		Ripple Voltage (by Load Current) リップル電圧(負荷電流特性)	Testing Circuitry		Figure A																																						
Object		+5.0V1.50A	2.Values																																								
1. Graph		<p>□ Input Volt. 85V</p> <p>△ Input Volt. 132V</p>	<table border="1"> <thead> <tr> <th rowspan="2">Load Current [A]</th> <th>Input Volt. 85 [V]</th> <th>Input Volt. 132 [V]</th> </tr> <tr> <th>Ripple Output Volt. [mV]</th> <th>Ripple Output Volt. [mV]</th> </tr> </thead> <tbody> <tr><td>0.00</td><td>5</td><td>5</td></tr> <tr><td>0.25</td><td>5</td><td>5</td></tr> <tr><td>0.50</td><td>10</td><td>10</td></tr> <tr><td>1.00</td><td>10</td><td>10</td></tr> <tr><td>1.25</td><td>10</td><td>10</td></tr> <tr><td>1.50</td><td>10</td><td>10</td></tr> <tr><td>1.75</td><td>10</td><td>10</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> </tbody> </table>			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	—	—	—	—	—	—	—	—	—	—	—	—
Load Current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]																																									
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# COSEL

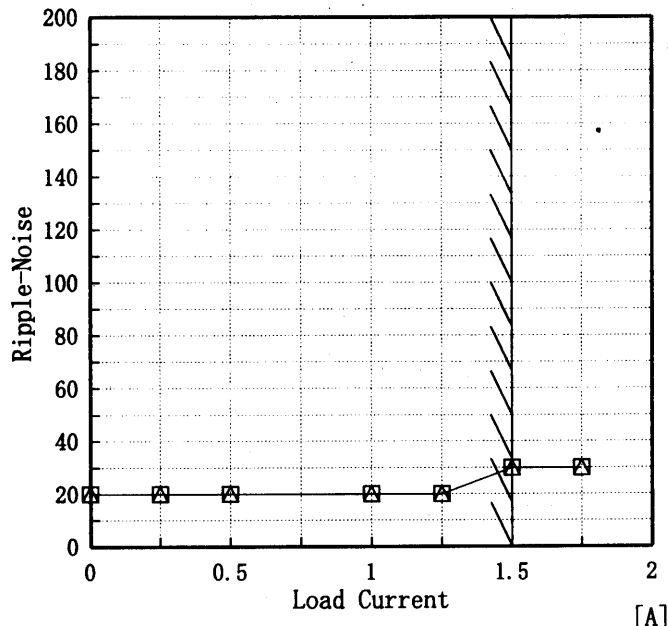
Model		RMB50A-2		Temperature		25°C																																							
Item		Ripple Voltage (by Load Current) リップル電圧(負荷電流特性)		Testing Circuitry		Figure A																																							
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Load Current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]																																											
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<p>Fig. Complex Ripple Wave Form 図 リップル波形詳細図</p>																																													



Model	RMB50A-2
Item	Ripple-Noise リップルノイズ
Object	+5.0V1.50A

Temperature 25°C  
Testing Circuitry Figure A

1. Graph  
 [mV]  
 -----□----- Input Volt. 85V  
 -----△----- Input Volt. 132V



2. Values

Load current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]
	Ripple-Noise [mV]	Ripple-Noise [mV]
0.00	20	20
0.25	20	20
0.50	20	20
1.00	20	20
1.25	20	20
1.50	30	30
1.75	30	30
—	—	—
—	—	—
—	—	—
—	—	—

Ripple-Noise is shown as p-p in the figure below.  
 Note: Slanted line shows the range of the rated load current.

リップルノイズは、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

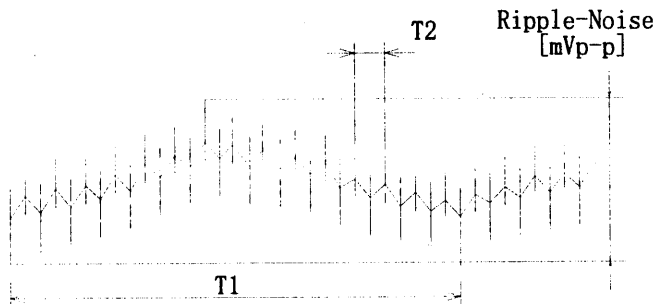


Fig. Complex Ripple Wave Form  
 図 リップル波形詳細図



Model		RMB50A-2	Temperature		25°C																																						
Item		Ripple-Noise リップルノイズ	Testing Circuitry		Figure A																																						
Object		+24V 1.80A																																									
<p>1. Graph</p> <p>□ Input Volt. 85V △ Input Volt. 132V</p> <p>Ripple-Noise is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.</p> <p>リップルノイズは、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。</p> <p>T1: Due to AC Input Line 入力商用周期 T2: Due to Switching スイッチング周期</p> <p>Fig. Complex Ripple Wave Form 図 リップル波形詳細図</p>			<p>2. Values</p> <table border="1"> <thead> <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> </thead> <tbody> <tr><td>0.00</td><td>20</td><td>20</td></tr> <tr><td>0.50</td><td>20</td><td>20</td></tr> <tr><td>1.00</td><td>20</td><td>20</td></tr> <tr><td>1.50</td><td>20</td><td>20</td></tr> <tr><td>1.80</td><td>20</td><td>20</td></tr> <tr><td>2.00</td><td>30</td><td>30</td></tr> <tr><td>2.20</td><td>30</td><td>30</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> </tbody> </table>			Load current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]	Ripple-Noise [mV]	Ripple-Noise [mV]	0.00	20	20	0.50	20	20	1.00	20	20	1.50	20	20	1.80	20	20	2.00	30	30	2.20	30	30	—	—	—	—	—	—	—	—	—	—	—	—
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Model		RMB50A-2	Temperature		25°C																																																				
Item		Overcurrent Protection 過電流保護	Testing Circuitry		Figure A																																																				
Object		+5.0V 1.50A	2. Values																																																						
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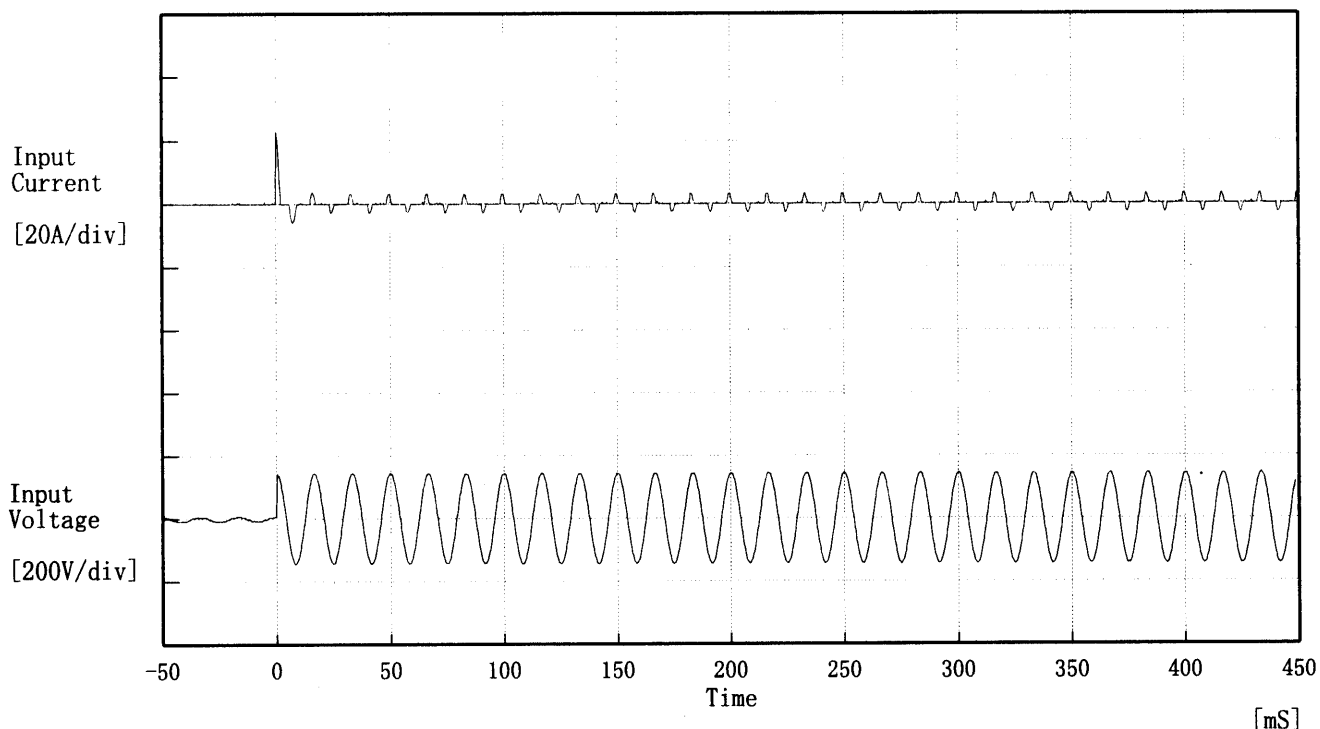


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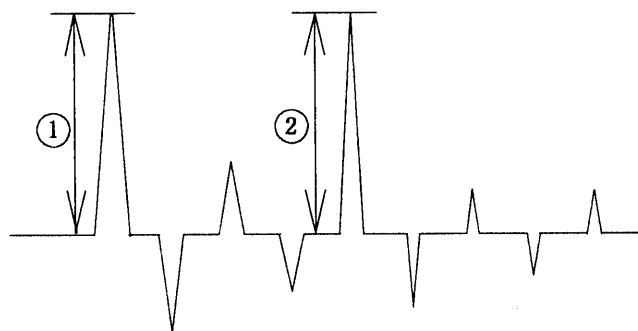




Model	RMB50A-2	Temperature 25°C Testing Circuitry Figure A
Item	Inrush Current 突入電流	
Object	_____	



Input Voltage 100 V  
 Frequency 60 Hz  
 Load 100 %  
 Inrush Current  
 ① 22.72 [A]  
 ② 3.12 [A]





Model		RMB50A-2	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

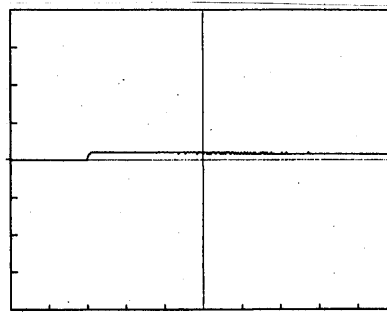
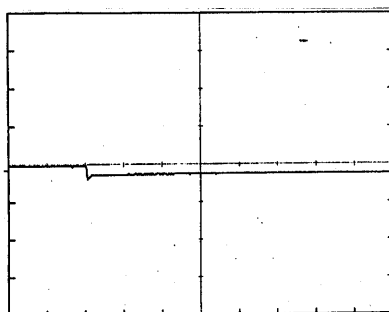
Cycle 200 mS

Load Current



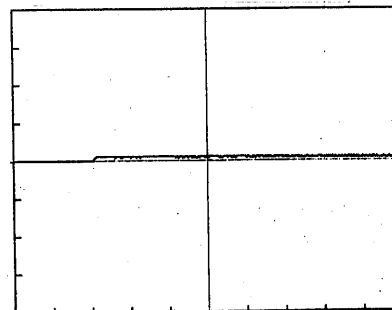
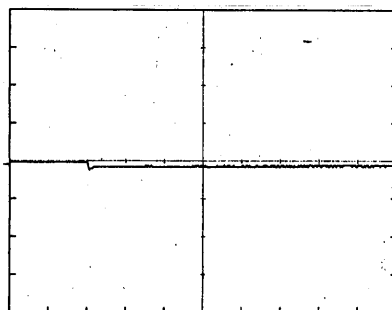
Load 0% ←→

Load 100 %



Load 0% ←→

Load 50 %



100 mV/div

10 mS/div

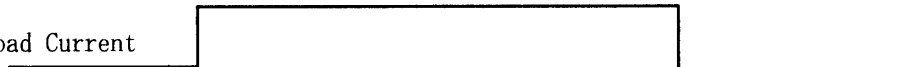


Model		RMB50A-2	Temperature		25°C
Item		Dynamic Load Responce 動的負荷変動	Testing Circuitry		Figure A
Object		+24V1.80A			

Input Volt. 100 V

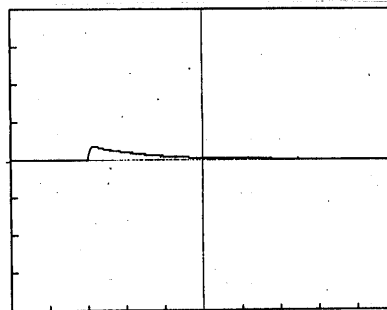
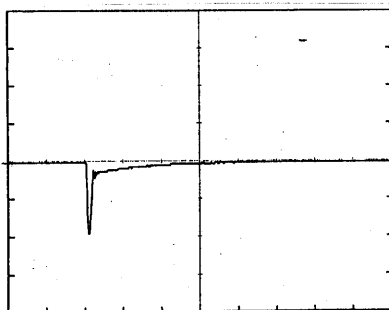
Cycle 200 mS

Load Current



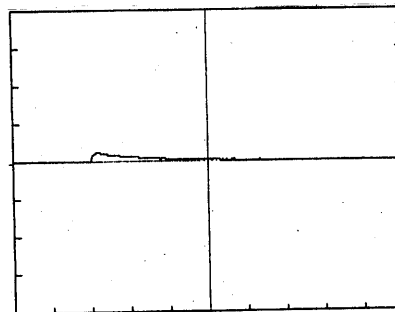
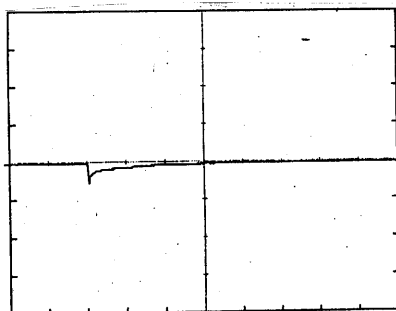
Load 0% ↔

Load 100 %



Load 0% ↔

Load 50 %



200 mV/div

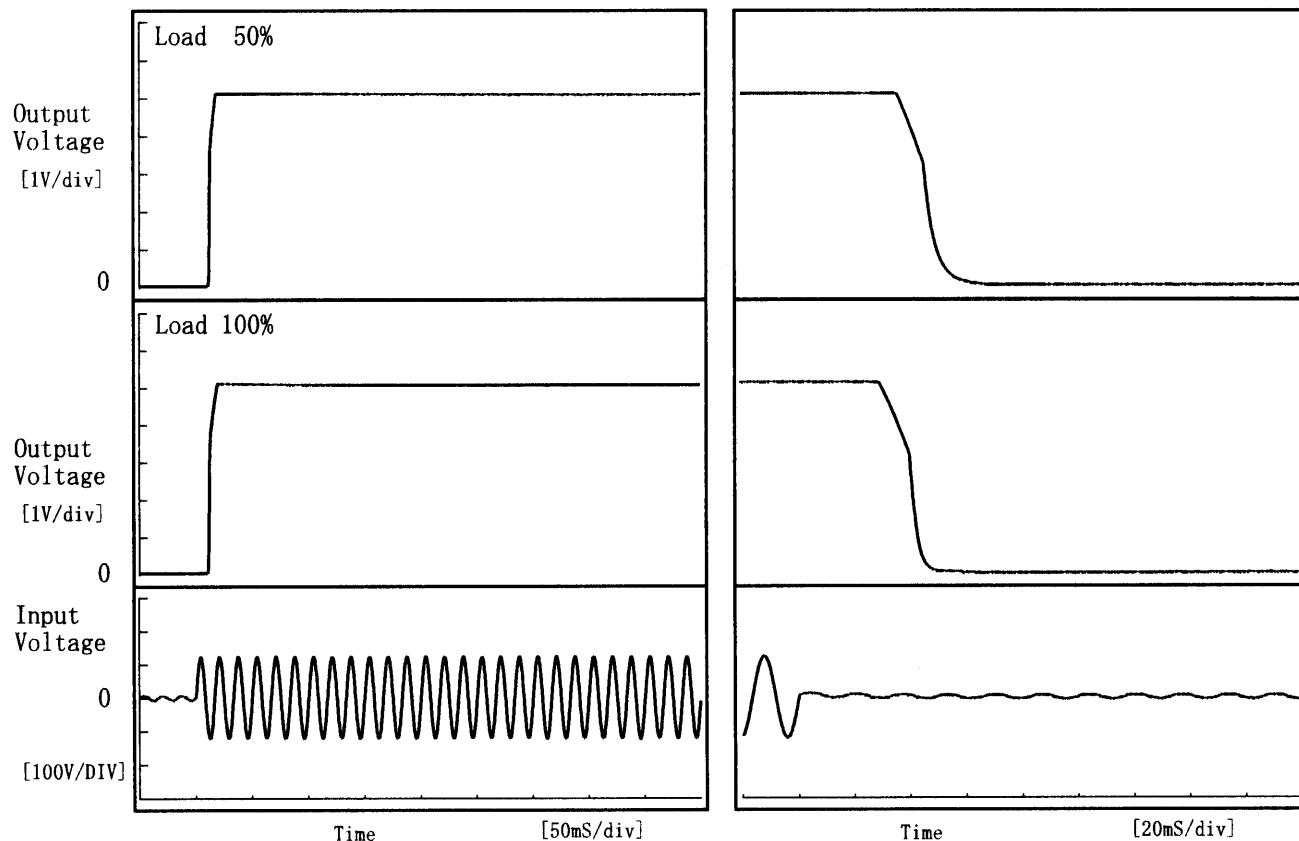
10 mS/div



Model	RMB50A-2	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

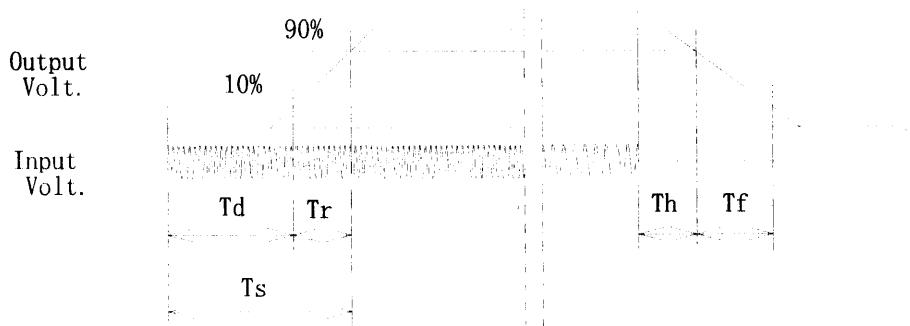
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	11.5	4.0	15.5	38.9	13.8
100 %	11.5	5.3	16.8	32.9	11.6

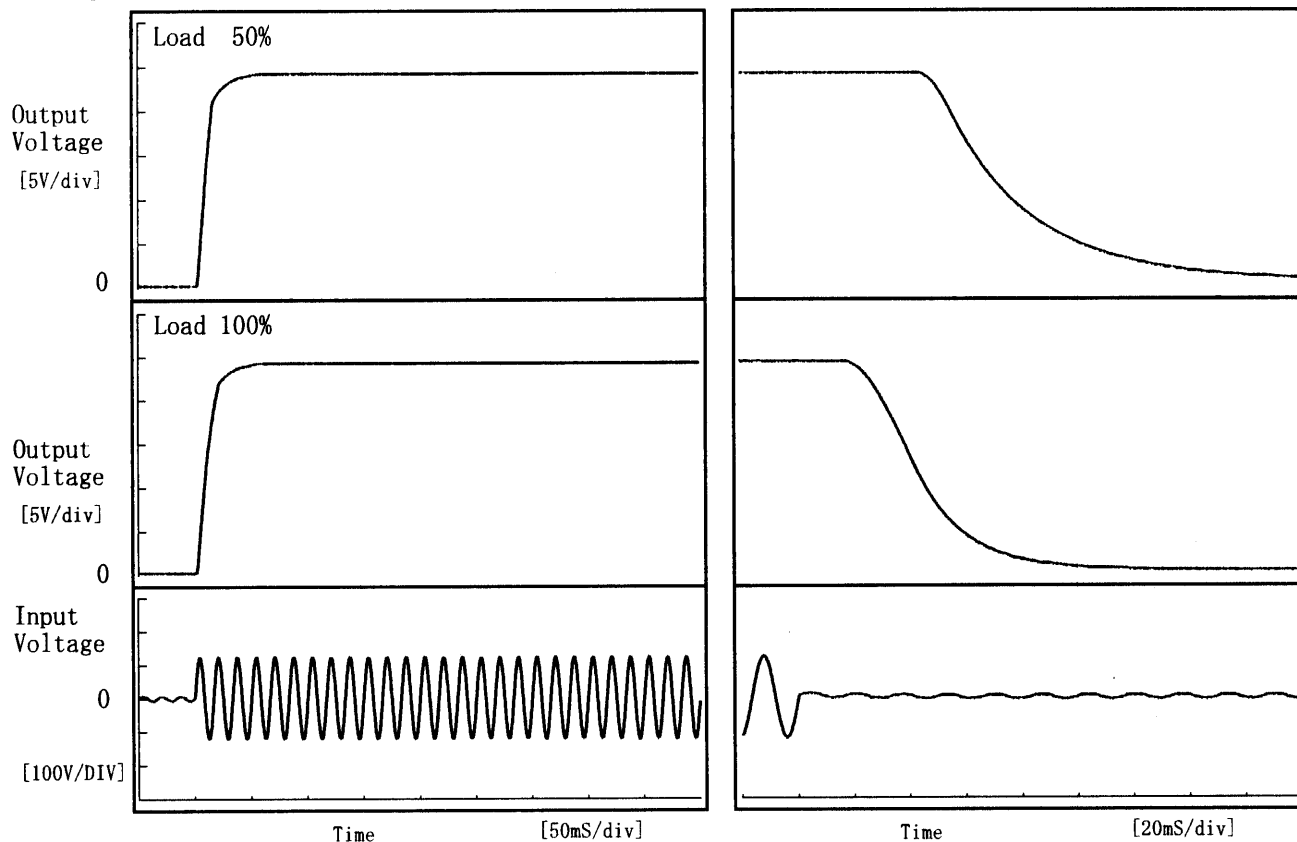




Model	RMB50A-2	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+24.0V 1.80A		

1. Graph

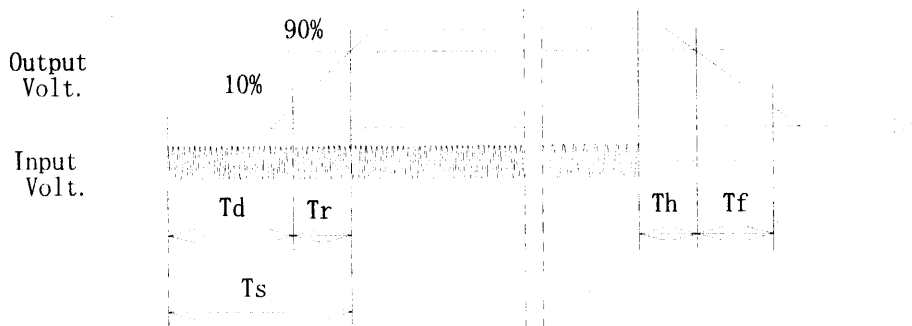
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	3.8	16.0	19.8	51.7	74.8
100 %	3.8	18.0	21.8	26.9	44.2



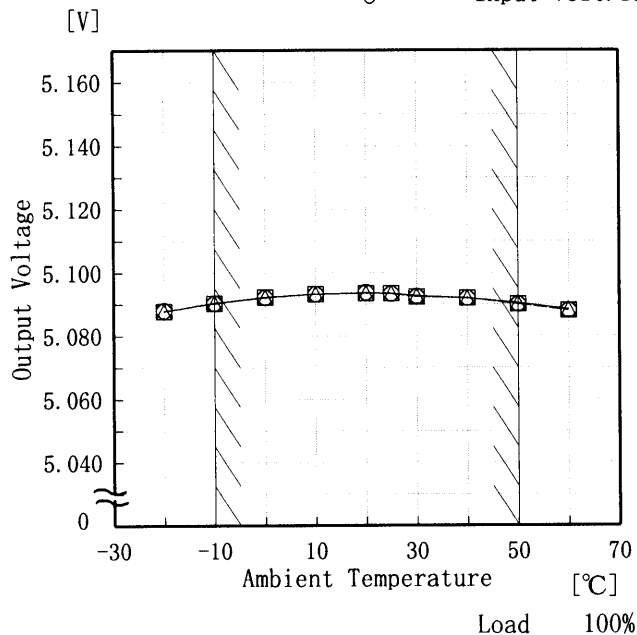


Model	RMB50A-2
Item	Ambient Temperature Drift 周囲温度変動
Object	+5.0V1.50A

Testing Circuitry Figure A

1. Graph

—△— Input Volt. 85.0V  
 - -□- - - Input Volt. 100.0V  
 - -○- - - Input Volt. 132.0V



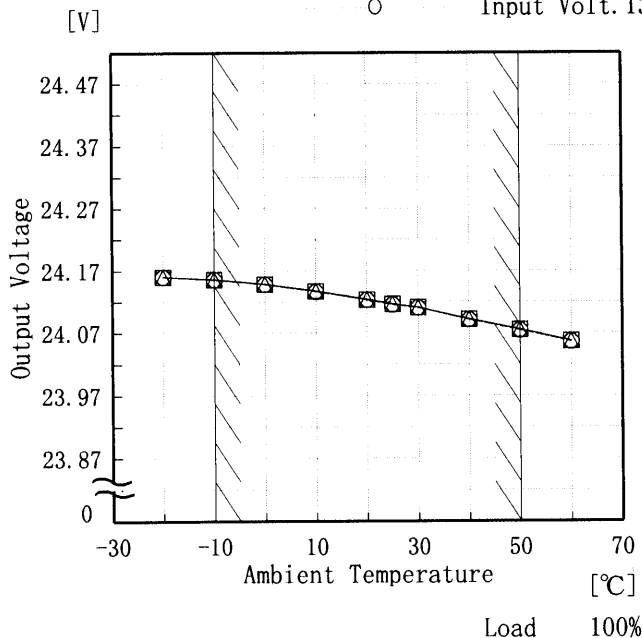
2. Values

Temperature [°C]	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]
	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]
-20	5.088	5.088	5.088
-10	5.090	5.090	5.090
0	5.092	5.092	5.092
10	5.093	5.093	5.093
20	5.093	5.093	5.094
25	5.093	5.093	5.093
30	5.093	5.092	5.092
40	5.092	5.092	5.092
50	5.090	5.090	5.090
60	5.088	5.088	5.088
—	—	—	—

Object	+24V1.80A
--------	-----------

1. Graph

—△— Input Volt. 85.0V  
 - -□- - - Input Volt. 100.0V  
 - -○- - - Input Volt. 132.0V



2. Values

Temperature [°C]	Input Volt. 85.0[V]	Input Volt. 100.0[V]	Input Volt. 132.0[V]
	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]
-20	24.160	24.160	24.160
-10	24.156	24.156	24.155
0	24.148	24.148	24.148
10	24.137	24.137	24.136
20	24.123	24.123	24.123
25	24.116	24.116	24.116
30	24.111	24.111	24.110
40	24.092	24.091	24.091
50	24.075	24.074	24.074
60	24.057	24.056	24.056
—	—	—	—

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

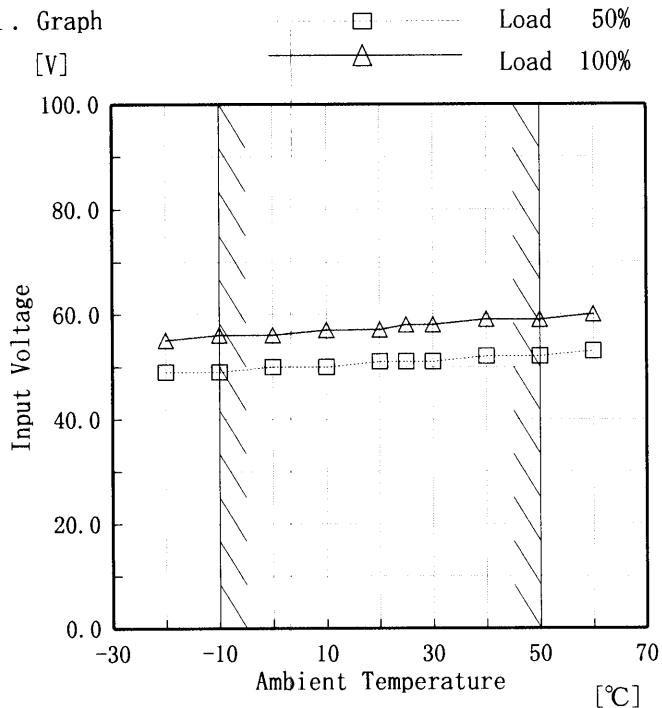
(注)斜線は定格周囲温度範囲を示す。



Model	RMB50A-2
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+5.0V1.5A

Testing Circuitry Figure A

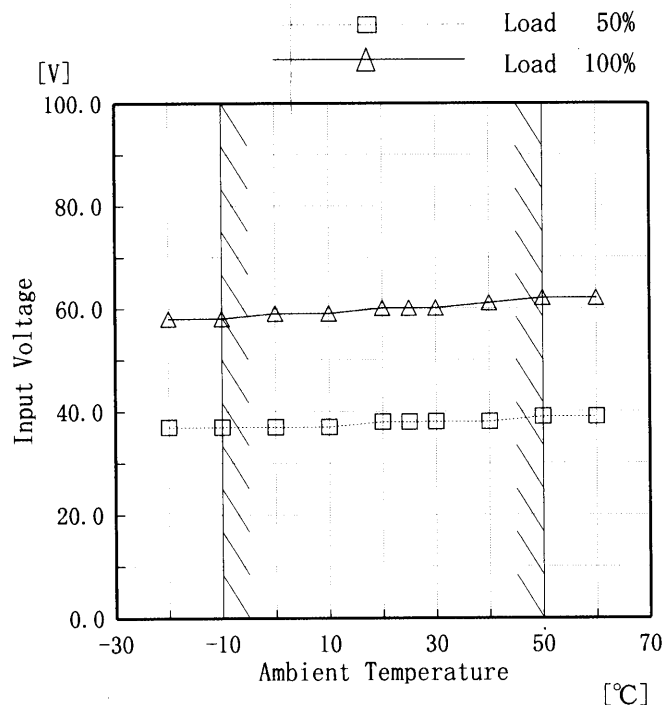
1. Graph



2. Values

Ambient Temp. [°C]	Load 50%	Load 100%
	Input Volt. [V]	Input Volt. [V]
-20	49.0	55.0
-10	49.0	56.0
0	50.0	56.0
10	50.0	57.0
20	51.0	57.0
25	51.0	58.0
30	51.0	58.1
40	52.0	59.1
50	52.0	59.0
60	53.0	60.1
—	—	—

Object	+24V1.80A
--------	-----------



2. Values

Ambient Temp. [°C]	Load 50%	Load 100%
	Input Volt. [V]	Input Volt. [V]
-20	37.0	58.0
-10	37.0	58.0
0	37.0	59.0
10	37.0	59.0
20	38.0	60.0
25	38.0	60.0
30	38.0	60.0
40	38.0	61.0
50	39.0	62.0
60	39.0	62.0
—	—	—

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。



<b>Model</b> RMB50A-2		Testing Circuitry      Figure A																																					
<b>Item</b>	Ripple Voltage (by Ambient Temp.) リップル電圧 (周囲温度特性)																																						
<b>Object</b>	+5.0V1.50A																																						
<b>1. Graph</b> <div style="float: right; margin-top: 10px;"> <span style="margin-right: 20px;">□ Load 50%</span> <span>△ Load 100%</span> </div> <p style="text-align: center;">Input Volt. 85 V</p>		<b>2. Values</b> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="padding: 5px;">Ambient Temp. [°C]</th> <th style="padding: 5px;">Load 50% Ripple Output Volt. [mV]</th> <th style="padding: 5px;">Load 100% Ripple Output Volt. [mV]</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">-20</td><td style="text-align: center;">20</td><td style="text-align: center;">20</td></tr> <tr><td style="text-align: center;">-10</td><td style="text-align: center;">20</td><td style="text-align: center;">20</td></tr> <tr><td style="text-align: center;">0</td><td style="text-align: center;">20</td><td style="text-align: center;">20</td></tr> <tr><td style="text-align: center;">10</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">20</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">25</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">30</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">40</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">50</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">60</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">—</td><td style="text-align: center;">—</td><td style="text-align: center;">—</td></tr> </tbody> </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	—	—	—	
Ambient Temp. [°C]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]																																					
-20	20	20																																					
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0	20	20																																					
10	10	10																																					
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30	10	10																																					
40	10	10																																					
50	10	10																																					
60	10	10																																					
—	—	—																																					
<b>Object</b> 24V1.8A		Testing Circuitry      Figure A																																					
<b>1. Graph</b> <div style="float: right; margin-top: 10px;"> <span style="margin-right: 20px;">□ Load 50%</span> <span>△ Load 100%</span> </div> <p style="text-align: center;">Input Volt. 85 V</p> <p style="font-size: small;">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。</p>			<b>2. Values</b> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="padding: 5px;">Ambient Temp. [°C]</th> <th style="padding: 5px;">Load 50% Ripple Output Volt. [mV]</th> <th style="padding: 5px;">Load 100% Ripple Output Volt. [mV]</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">-20</td><td style="text-align: center;">30</td><td style="text-align: center;">70</td></tr> <tr><td style="text-align: center;">-10</td><td style="text-align: center;">20</td><td style="text-align: center;">40</td></tr> <tr><td style="text-align: center;">0</td><td style="text-align: center;">20</td><td style="text-align: center;">30</td></tr> <tr><td style="text-align: center;">10</td><td style="text-align: center;">10</td><td style="text-align: center;">20</td></tr> <tr><td style="text-align: center;">20</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">25</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">30</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">40</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">50</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">60</td><td style="text-align: center;">10</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">—</td><td style="text-align: center;">—</td><td style="text-align: center;">—</td></tr> </tbody> </table>	Ambient Temp. [°C]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]	-20	30	70	-10	20	40	0	20	30	10	10	20	20	10	10	25	10	10	30	10	10	40	10	10	50	10	10	60	10	10	—	—	—
Ambient Temp. [°C]	Load 50% Ripple Output Volt. [mV]		Load 100% Ripple Output Volt. [mV]																																				
-20	30	70																																					
-10	20	40																																					
0	20	30																																					
10	10	20																																					
20	10	10																																					
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30	10	10																																					
40	10	10																																					
50	10	10																																					
60	10	10																																					
—	—	—																																					





<b>COSEL</b>																									
Model	RMB50A-2	Temperature	25 °C																						
Item	Time Lapse Drift 経時ドリフト	Testing Circuitry	Figure A																						
Object	+5.0V1.50A																								
<p>1. Graph</p> <p>Input Volt. 100.0V Load 100%</p>		<p>2. Values</p> <table border="1"> <thead> <tr> <th>Time since start [H]</th> <th>Output Voltage [V]</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>5.091</td></tr> <tr><td>0.5</td><td>5.093</td></tr> <tr><td>1.0</td><td>5.093</td></tr> <tr><td>2.0</td><td>5.093</td></tr> <tr><td>3.0</td><td>5.093</td></tr> <tr><td>4.0</td><td>5.093</td></tr> <tr><td>5.0</td><td>5.092</td></tr> <tr><td>6.0</td><td>5.092</td></tr> <tr><td>7.0</td><td>5.093</td></tr> <tr><td>8.0</td><td>5.093</td></tr> </tbody> </table>		Time since start [H]	Output Voltage [V]	0.0	5.091	0.5	5.093	1.0	5.093	2.0	5.093	3.0	5.093	4.0	5.093	5.0	5.092	6.0	5.092	7.0	5.093	8.0	5.093
Time since start [H]	Output Voltage [V]																								
0.0	5.091																								
0.5	5.093																								
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5.0	5.092																								
6.0	5.092																								
7.0	5.093																								
8.0	5.093																								
<p>Object +24V1.80A</p> <p>1. Graph</p> <p>Input Volt. 100.0V Load 100%</p>		<p>2. Values</p> <table border="1"> <thead> <tr> <th>Time since start [H]</th> <th>Output Voltage [V]</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>24.143</td></tr> <tr><td>0.5</td><td>24.130</td></tr> <tr><td>1.0</td><td>24.129</td></tr> <tr><td>2.0</td><td>24.129</td></tr> <tr><td>3.0</td><td>24.129</td></tr> <tr><td>4.0</td><td>24.129</td></tr> <tr><td>5.0</td><td>24.129</td></tr> <tr><td>6.0</td><td>24.129</td></tr> <tr><td>7.0</td><td>24.129</td></tr> <tr><td>8.0</td><td>24.129</td></tr> </tbody> </table>		Time since start [H]	Output Voltage [V]	0.0	24.143	0.5	24.130	1.0	24.129	2.0	24.129	3.0	24.129	4.0	24.129	5.0	24.129	6.0	24.129	7.0	24.129	8.0	24.129
Time since start [H]	Output Voltage [V]																								
0.0	24.143																								
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4.0	24.129																								
5.0	24.129																								
6.0	24.129																								
7.0	24.129																								
8.0	24.129																								



Model		RMB50A-2	Testing Circuitry Figure A
Item		Output Voltage Accuracy 定電圧精度	

Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -10~50 °C

Input Voltage : 85.0~132.0 V

Load Current ( AVR 1 ) : 0.00~1.50 A

( AVR 2 ) : 0.00~1.80 A

\* Output Voltage Accuracy =  $\pm (\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

$$* \text{Output Voltage Accuracy (Ration)} = \frac{\text{Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$$

定電圧精度

周囲温度、入力電圧、負荷を下記仕様内で、任意に変動させたときの出力電圧の変動をいう。

周囲温度 -10~50 °C

入力電圧 85.0~132.0 V

負荷電流 (AVR 1) 0.00~1.50 A

(AVR 2) 0.00~1.80 A

\* 定電圧精度(変動値) =  $\pm (\text{出力電圧の最高値} - \text{出力電圧の最低値}) / 2$

$$* \text{定電圧精度(変動率)} = \frac{\text{変動値}}{\text{定格出力電圧}} \times 100$$

Object +5.0V1.50A

Item	Temperature [°C]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy(Ration) [%]
Maximum Voltage	50	100.0	0.00	5.112	±20	±0.4
Minimum Voltage	-10	85.0	1.50	5.072		

Object +24V1.80A

Item	Temperature [°C]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy(Ration) [%]
Maximum Voltage	-10	85.0	0.00	24.165	±45	±0.2
Minimum Voltage	50	132.0	1.80	24.075		

# COSEL

Model		RMB50A-2	Testing Circuitry Figure A												
Item		Condensation 結露特性													
Object		+5.0V1.5A													
<p>1. Condensation test</p> <p>Testing procedure is as follows.</p> <p>① Keeping and cooling the unit in a tank at <math>-10^{\circ}\text{C}</math> for an hour with the input off.</p> <p>② Taking it out of the tank and dewing itself in a room where the temperature is <math>25^{\circ}\text{C}</math> and the humidity is 40%RH.</p> <p>③ Testing electrical characteristics of the unit to confirm there be no fault.</p> <p>1. 結露特性試験</p> <p>入力を切った状態で、恒温槽で<math>-10^{\circ}\text{C}</math>に冷却しておき、約1時間後に恒温槽から取り出し、室温<math>25^{\circ}\text{C}</math>、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。</p>															
<p>2. Values</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Data</th> <th>Testing Conditions</th> </tr> </thead> <tbody> <tr> <td>Output Voltage [V]</td> <td>5.093</td> <td>Input Volt.: 100V, Load Current:1.5A</td> </tr> <tr> <td>Line Regulation [mV]</td> <td>1</td> <td>Input Volt.: 85~100V, Load Current:1.5A</td> </tr> <tr> <td>Load Regulation [mV]</td> <td>22</td> <td>Input Volt.: 100V, Load Current:0.0~1.5A</td> </tr> </tbody> </table>				Item	Data	Testing Conditions	Output Voltage [V]	5.093	Input Volt.: 100V, Load Current:1.5A	Line Regulation [mV]	1	Input Volt.: 85~100V, Load Current:1.5A	Load Regulation [mV]	22	Input Volt.: 100V, Load Current:0.0~1.5A
Item	Data	Testing Conditions													
Output Voltage [V]	5.093	Input Volt.: 100V, Load Current:1.5A													
Line Regulation [mV]	1	Input Volt.: 85~100V, Load Current:1.5A													
Load Regulation [mV]	22	Input Volt.: 100V, Load Current:0.0~1.5A													

# COSEL

Model		RMB50A-2	Testing Circuitry Figure A												
Item		Condensation 結露特性													
Object		+24V1.8A													
<p>1. Condensation test</p> <p>Testing procedure is as follows.</p> <p>① Keeping and cooling the unit in a tank at -10°C for an hour with the input off.</p> <p>② Taking it out of the tank and dewing itself in a room where the temperature is 25°C and the humidity is 40%RH.</p> <p>③ Testing electrical characteristics of the unit to confirm there be no fault.</p> <p>1. 結露特性試験</p> <p>入力を切った状態で、恒温槽で-10°C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°C、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。</p>															
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<table border="1"> <thead> <tr> <th>Item</th> <th>Data</th> <th>Testing Conditions</th> </tr> </thead> <tbody> <tr> <td>Output Voltage [V]</td> <td>24.114</td> <td>Input Volt. : 100V, Load Current:1.8A</td> </tr> <tr> <td>Line Regulation [mV]</td> <td>1</td> <td>Input Volt. : 85~132V, Load Current:1.8A</td> </tr> <tr> <td>Load Regulation [mV]</td> <td>7</td> <td>Input Volt. : 100V, Load Current:0.0~1.8A</td> </tr> </tbody> </table>				Item	Data	Testing Conditions	Output Voltage [V]	24.114	Input Volt. : 100V, Load Current:1.8A	Line Regulation [mV]	1	Input Volt. : 85~132V, Load Current:1.8A	Load Regulation [mV]	7	Input Volt. : 100V, Load Current:0.0~1.8A
Item	Data	Testing Conditions													
Output Voltage [V]	24.114	Input Volt. : 100V, Load Current:1.8A													
Line Regulation [mV]	1	Input Volt. : 85~132V, Load Current:1.8A													
Load Regulation [mV]	7	Input Volt. : 100V, Load Current:0.0~1.8A													



Model		RMB50A-2	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) UL	0.22	0.26	0.35
(C) CSA	0.22	0.26	0.35

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

2. Condition

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

交流入力 of 両相について測定し、その大きい方を漏洩電流測定値とする。



Model	RMB50A-2
Item	Conducted Emission 雑音端子電圧
Object	_____

Testing Circuitry Figure D

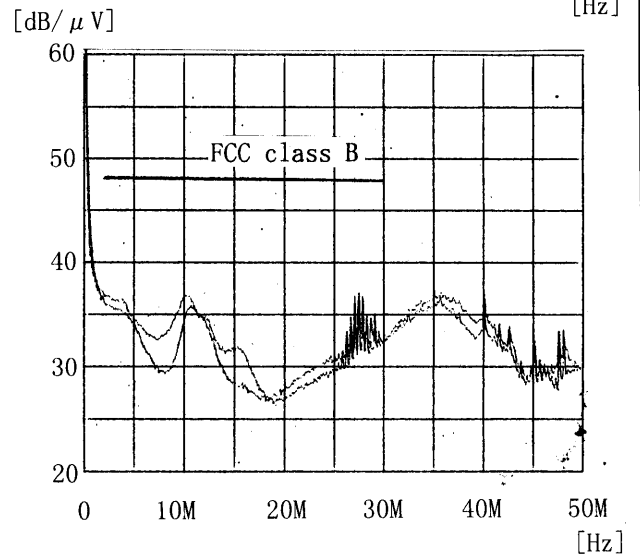
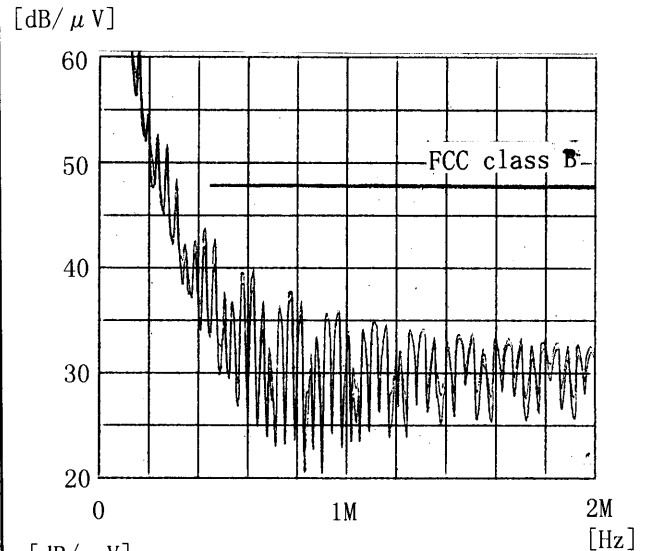
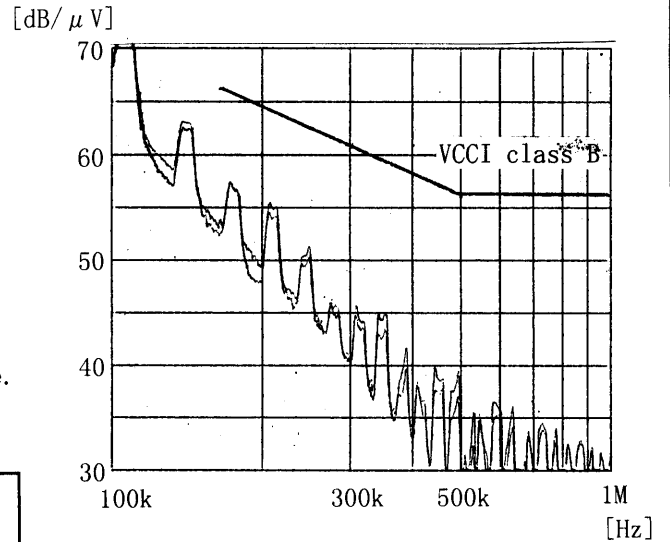
1. Graph

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



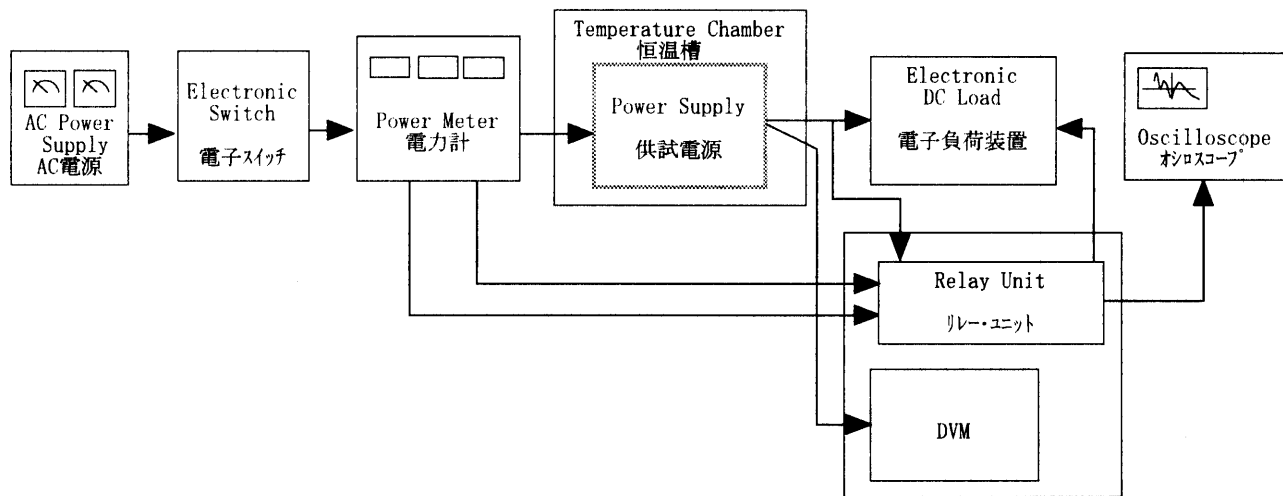


Figure A

Data Acquisition/Control Unit  
データ集録システム

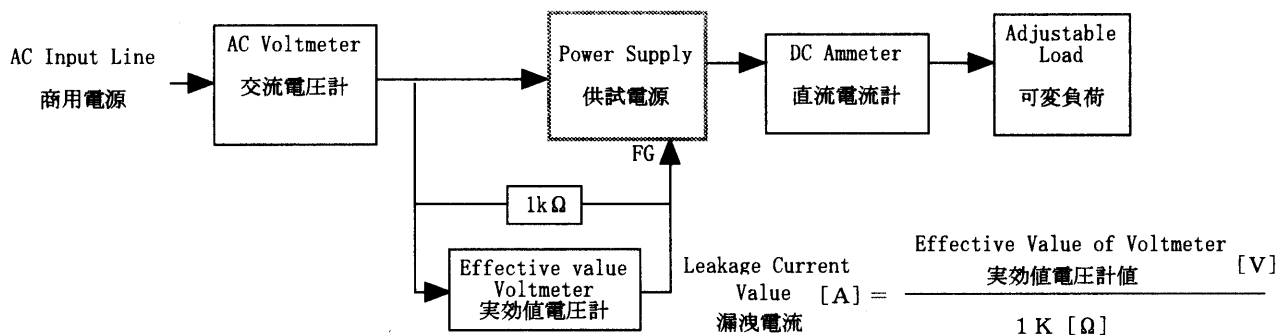


Figure B (DENTORI)

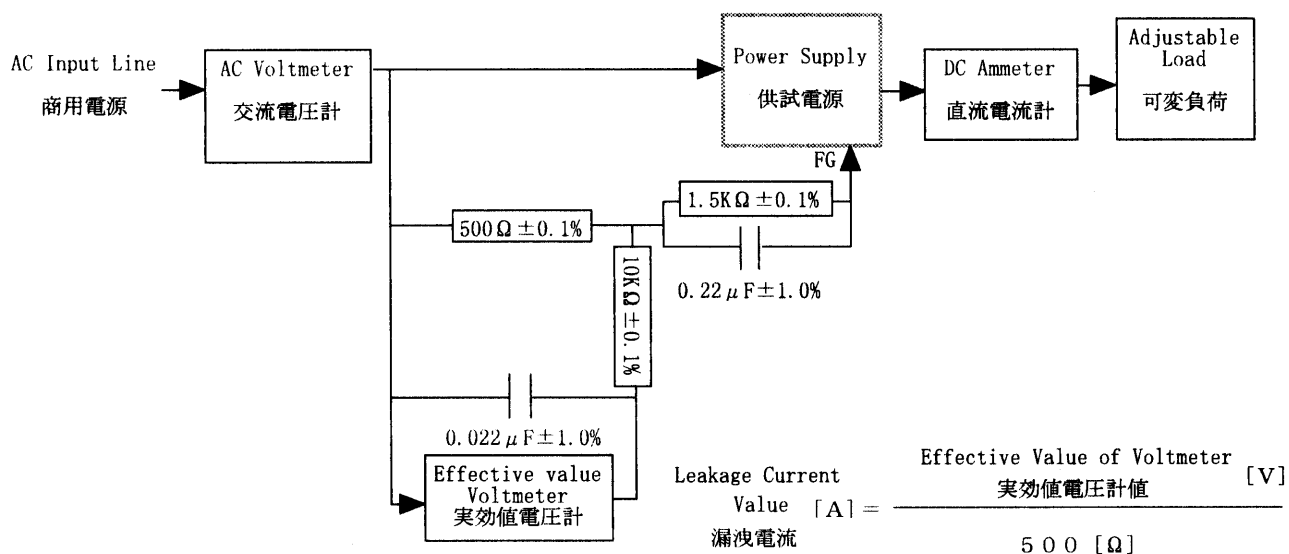


Figure B (UL, CSA, VDE)

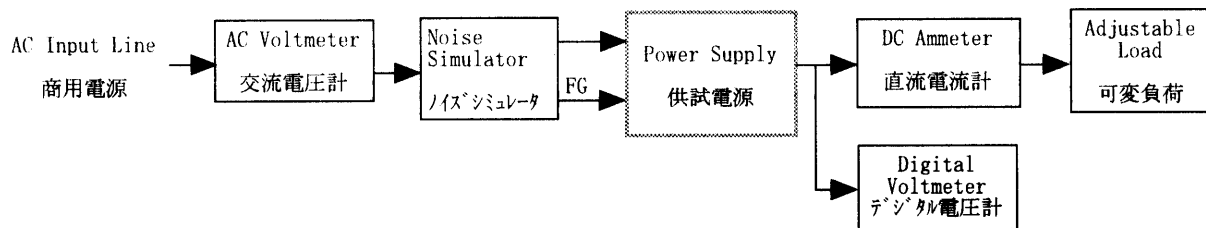


Figure C

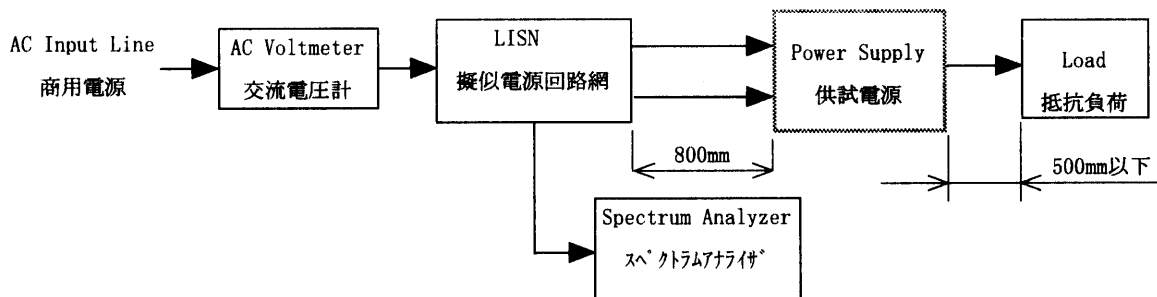


Figure D

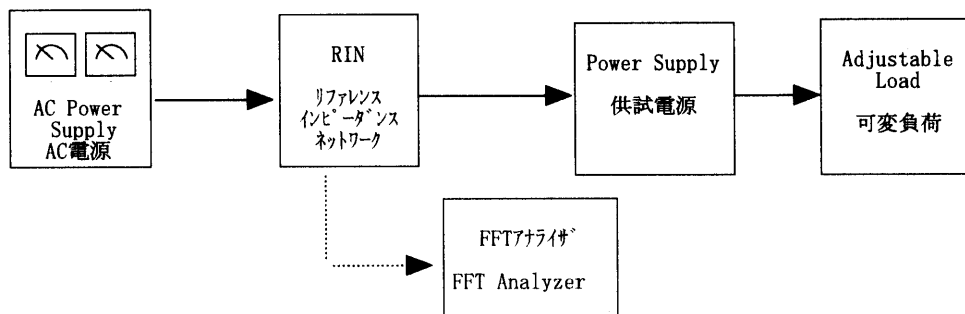


Figure E