



TEST DATA OF RMB30A-1 (100V INPUT)

Regulated DC Power Supply

Date : July 2, 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		RMB30A-1																															
Item		Line Regulation 静的入力変動																															
Object		+5.0V1.5A																															
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Object		+12V2.00A																															
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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。

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Model		RMB30A-1	
Item		Efficiency 効率	
Object			

1. Graph

□ Load 50%

△ Load 100%

Efficiency [%]

<

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Model		RMB30A-1	
Item	Power Factor (by Input Voltage) 力率 (入力電圧特性)		Temperature 25℃ Testing Circuitry Figure A
Object			

1. Graph

□

load 50%

△

load 100%

Power Factor

1.00

0.90

0.80

0.70

0.60

0.50

0

0

80

90

100

110

120

130

140

150

Input Voltage

[V]

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% Power Factor	load 100% Power Factor
75	0.58	0.63
80	0.57	0.61
85	0.56	0.60
90	0.56	0.59
100	0.54	0.57
110	0.53	0.56
120	0.52	0.54
132	0.51	0.53
140	0.50	0.52

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Model		RMB30A-1	Temperature	25℃																																
Item		Hold-Up Time 出力保持時間	Testing Circuitry	Figure A																																
Object		+5.0V1.5A																																		
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Model		RMB30A-1	Temperature Testing Circuitry	25℃ Figure A																																										
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COSEL

Model		RMB30A-1	
Item		Ripple Voltage (by Load Current) リップル電圧 (負荷電流特性)	
Object		+5.0V1.50A	

1. Graph

□ Input Volt. 85V

△ Input Volt. 132V

[mV]

Ripple Voltage

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

Ripple [mVp-p]

T1

T2

Fig. Complex Ripple Wave Form

図 リップル波形詳細図

2.Values

Load Current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]
	Ripple Output Volt. [mV]	Ripple Output Volt. [mV]
0.0	5	5
0.3	10	5
0.6	15	5
0.9	15	10
1.2	20	10
1.5	20	10
1.7	25	15
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

Model		RMB30A-1	
Item		Ripple Voltage (by Load Current) リップル電圧 (負荷電流特性)	
Object		+12.0V2.00A	
1. Graph		2. Values	

-----□-----

Input Volt. 85V

———△———

Input Volt. 132V

150

125

100

75

50

25

0

Ripple Voltage

[mV]

0

1

2

3

4

Load Current

[A]

0.0

0.4

0.8

1.2

1.6

2.0

2.8

3.0

—

—

—

5

5

5

10

10

20

30

100

—

—

—

5

5

5

10

10

10

10

20

—

—

—

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

COSEL

Model		RMB30A-1	
Item		Ripple-Noise リップルノイズ	
Object		+5.0V1.50A	

1. Graph

□

Input Volt. 85V

△

Input Volt. 132V

[mV]

200

180

160

140

120

100

80

60

40

20

0

Ripple-Noise

0

0.5

1

1.5

2

Load Current

[A]

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

T2

Ripple-Noise

[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-Noise [mV]	Ripple-Noise [mV]
0.0	30	30
0.3	35	35
0.6	40	35
0.9	40	35
1.2	50	40
1.5	55	40
1.7	60	40
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

Model		RMB30A-1		Temperature		25℃																																																																											
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COSEL

Model		RMB30A-1		Temperature 25℃																																																								
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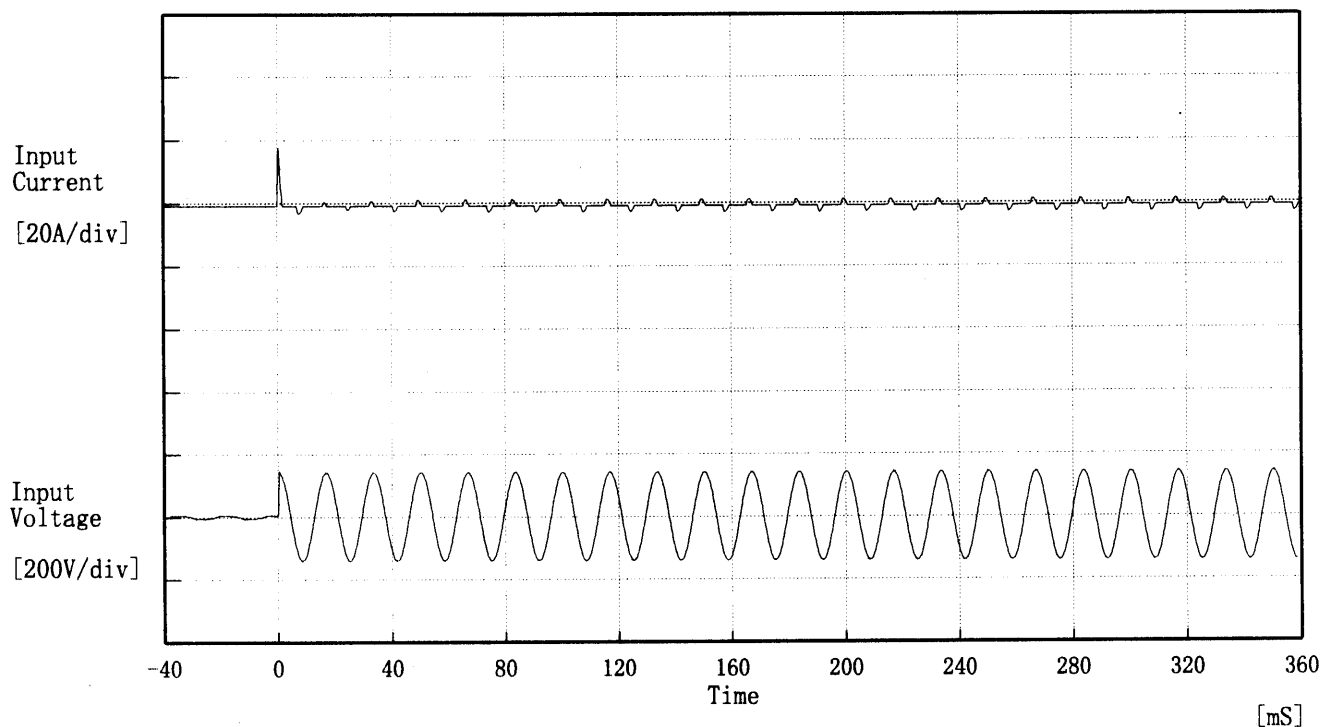
-13-

COSEL

Model		RMB30A-1	Testing Circuitry Figure A																																																			
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		Operating Point [V]																																																				
-20	6.40	6.40	6.40																																																			
-10	6.40	6.40	6.40																																																			
0	6.40	6.40	6.40																																																			
10	6.40	6.40	6.40																																																			
20	6.33	6.33	6.33																																																			
25	6.33	6.33	6.33																																																			
30	6.33	6.33	6.33																																																			
40	6.33	6.33	6.33																																																			
50	6.33	6.33	6.33																																																			
60	6.33	6.33	6.33																																																			
—	—	—	—																																																			

COSEL

Model	RMB30A-1	Temperature	25°C
Item	Inrush Current 突入電流	Testing Circuitry	Figure A
Object	_____		



Input Voltage 100 V

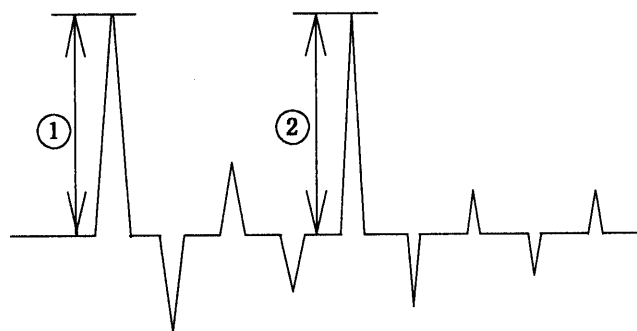
Frequency 60 Hz

Load 100 %

Inrush Current

① 17.68 [A]

② 2.83 [A]



COSEL

Model	RMB30A-1	Temperature	25°C
Item	Dynamic Load Responce 動的負荷変動	Testing Circuitry	Figure A
Object	+5.0V 1.50A		

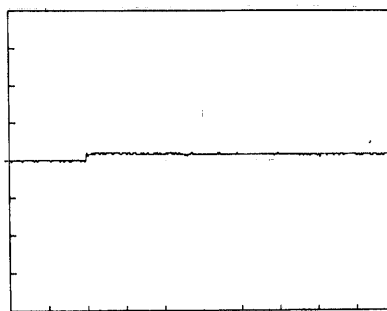
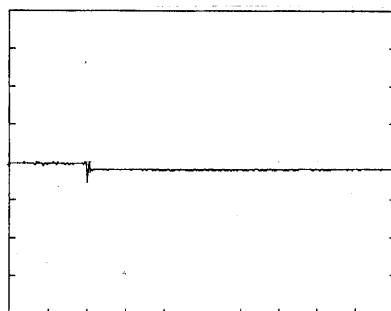
Input Volt. 100 V

Cycle 200 mS

Load Current

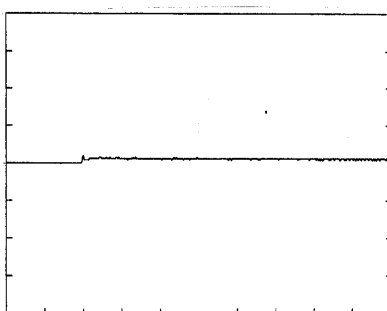
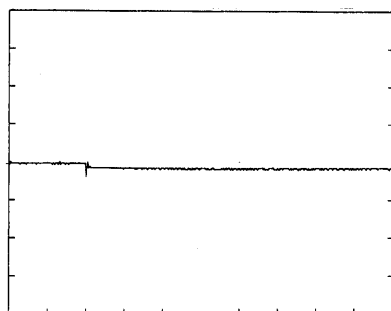
Load 0% ↔

Load 100 %



Load 0% ↔

Load 50 %



100 mV/div

10 mS/div

COSEL

Model	RMB30A-1	Temperature 25℃ Testing Circuitry Figure A
Item	Dynamic Load Responce 動的負荷変動	
Object	+12.0V2.00A	

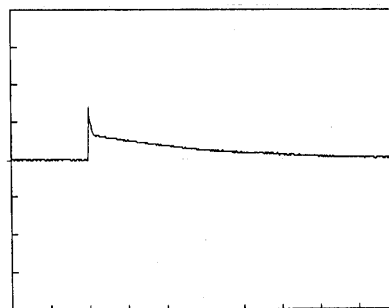
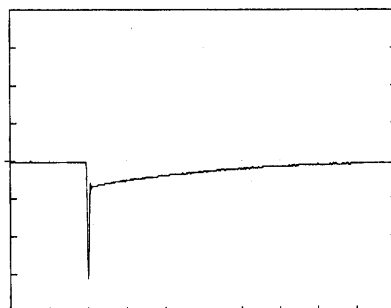
Input Volt. 100 V

Cycle 200 mS

Load Current

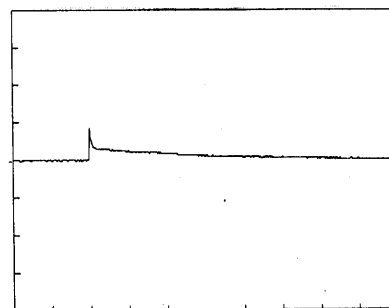
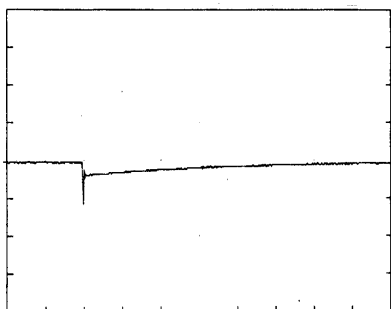
Load 0% ←→

Load 100 %



Load 0% ←→

Load 50 %



100 mV/div

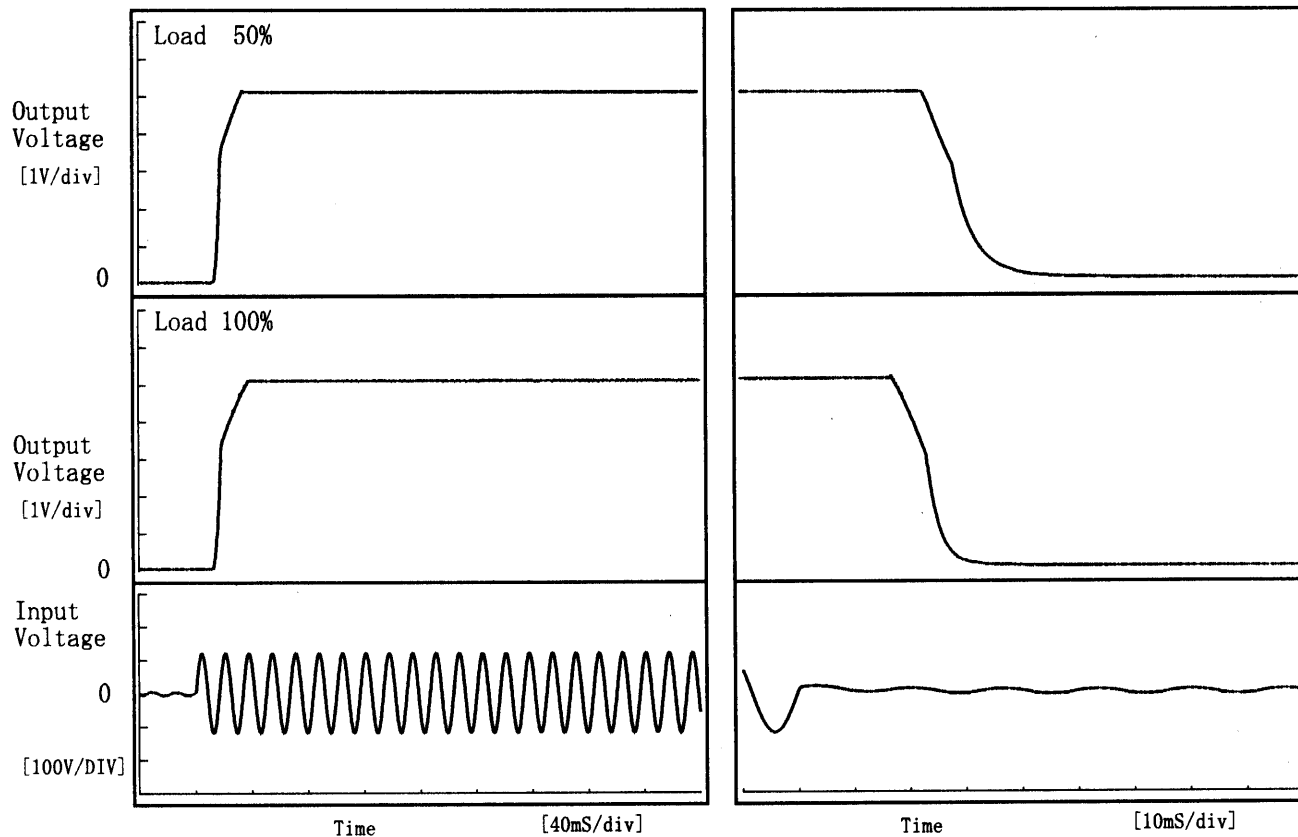
10 mS/div

COSEL

Model	RMB30A-1	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+5.0V 1.50A		

1. Graph

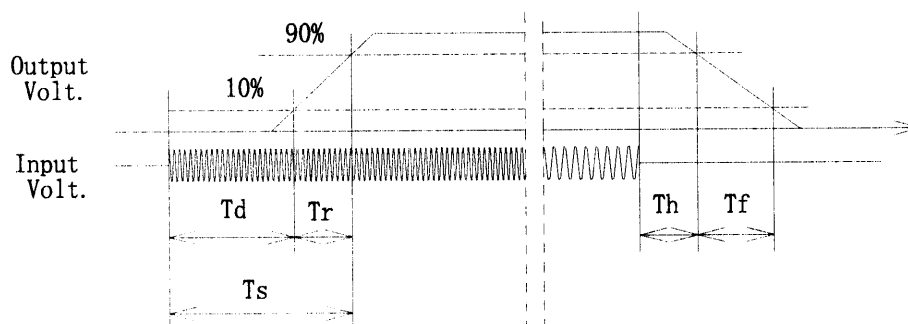
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	14.4	12.4	26.8	24.1	11.8
100 %	14.4	15.6	30.0	19.1	8.4

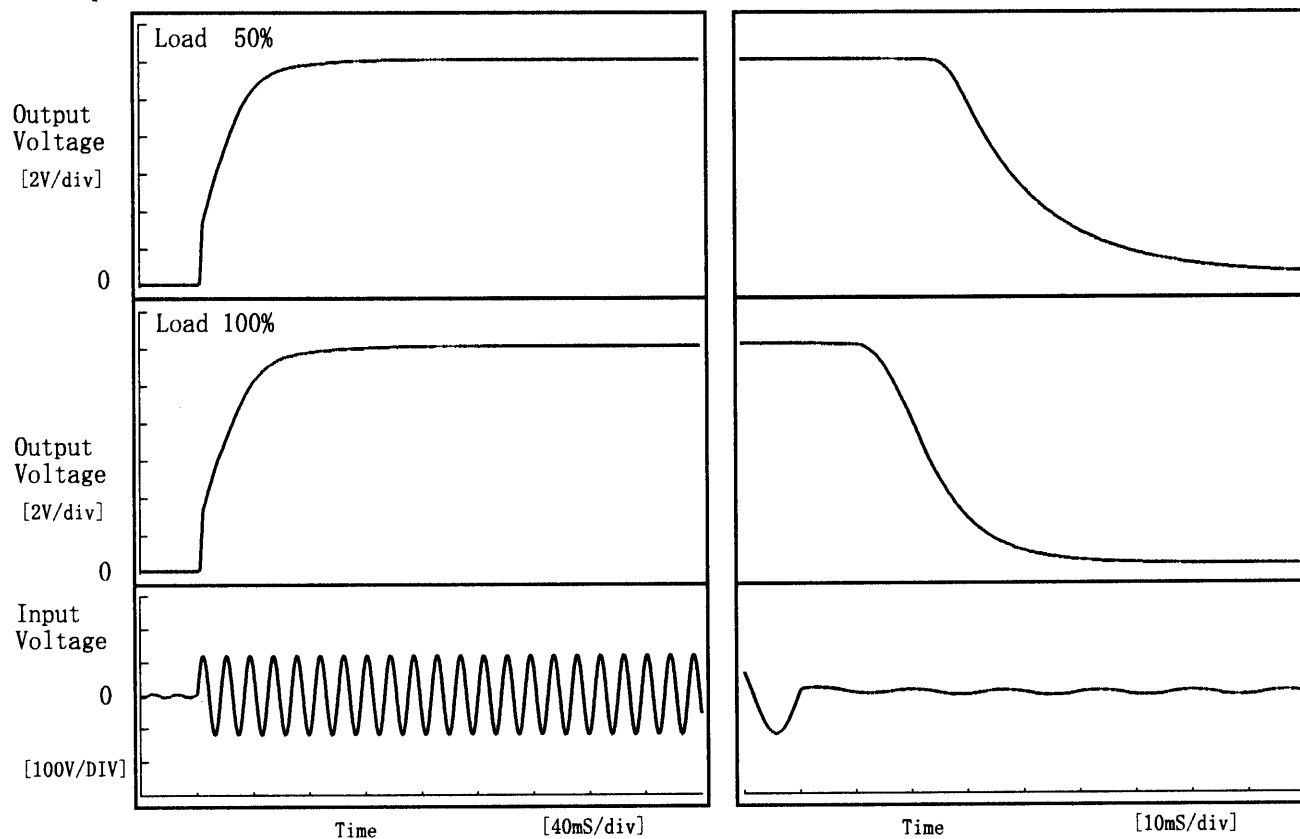


COSEL

Model	RMB30A-1	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+12.0V2.00A		

1. Graph

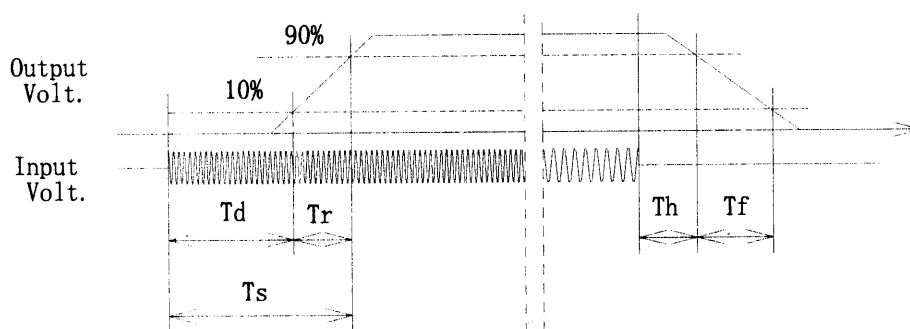
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	3.0	41.8	44.8	28.6	40.3
100 %	3.0	45.4	48.4	15.6	23.0



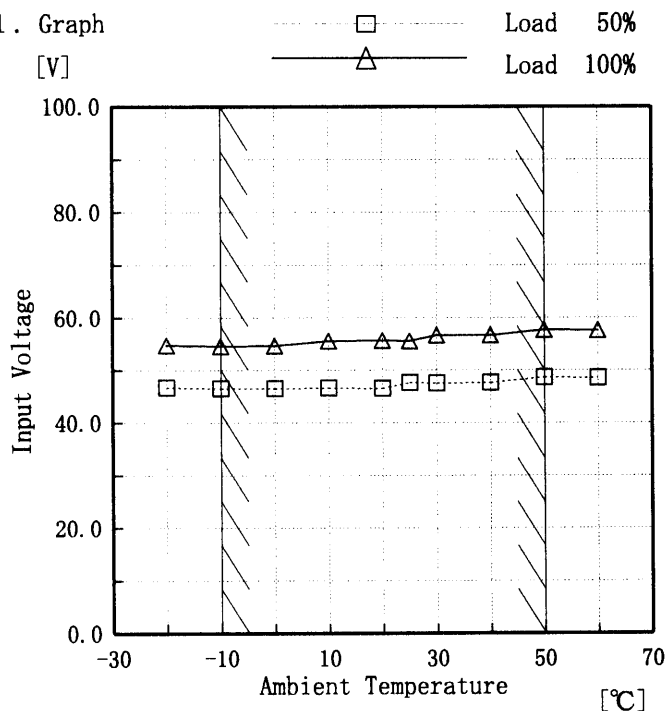
COSEL

Model		RMB30A-1		Testing Circuitry Figure A																																																			
Item		Ambient Temperature Drift 周囲温度変動																																																					
Object		+5.0V1.50A																																																					
1. Graph		<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>		2. Values																																																			
		<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>5.102</td><td>5.102</td><td>5.101</td></tr><tr><td>-10</td><td>5.099</td><td>5.099</td><td>5.099</td></tr><tr><td>0</td><td>5.096</td><td>5.096</td><td>5.095</td></tr><tr><td>10</td><td>5.092</td><td>5.092</td><td>5.091</td></tr><tr><td>20</td><td>5.088</td><td>5.087</td><td>5.087</td></tr><tr><td>25</td><td>5.085</td><td>5.085</td><td>5.084</td></tr><tr><td>30</td><td>5.081</td><td>5.081</td><td>5.081</td></tr><tr><td>40</td><td>5.076</td><td>5.076</td><td>5.075</td></tr><tr><td>50</td><td>5.070</td><td>5.069</td><td>5.069</td></tr><tr><td>60</td><td>5.063</td><td>5.063</td><td>5.062</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	5.102	5.102	5.101	-10	5.099	5.099	5.099	0	5.096	5.096	5.095	10	5.092	5.092	5.091	20	5.088	5.087	5.087	25	5.085	5.085	5.084	30	5.081	5.081	5.081	40	5.076	5.076	5.075	50	5.070	5.069	5.069	60	5.063	5.063	5.062	—	—	—	—
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	5.102	5.102	5.101																																																				
-10	5.099	5.099	5.099																																																				
0	5.096	5.096	5.095																																																				
10	5.092	5.092	5.091																																																				
20	5.088	5.087	5.087																																																				
25	5.085	5.085	5.084																																																				
30	5.081	5.081	5.081																																																				
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60	5.063	5.063	5.062																																																				
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Object		+12V2.00A																																																					
1. Graph		<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>				2. Values																																																	
		<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>12.106</td><td>12.106</td><td>12.106</td></tr><tr><td>-10</td><td>12.106</td><td>12.106</td><td>12.107</td></tr><tr><td>0</td><td>12.106</td><td>12.106</td><td>12.106</td></tr><tr><td>10</td><td>12.104</td><td>12.104</td><td>12.104</td></tr><tr><td>20</td><td>12.101</td><td>12.101</td><td>12.101</td></tr><tr><td>25</td><td>12.099</td><td>12.099</td><td>12.099</td></tr><tr><td>30</td><td>12.097</td><td>12.097</td><td>12.097</td></tr><tr><td>40</td><td>12.092</td><td>12.092</td><td>12.092</td></tr><tr><td>50</td><td>12.087</td><td>12.087</td><td>12.087</td></tr><tr><td>60</td><td>12.083</td><td>12.083</td><td>12.083</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	12.106	12.106	12.106	-10	12.106	12.106	12.107	0	12.106	12.106	12.106	10	12.104	12.104	12.104	20	12.101	12.101	12.101	25	12.099	12.099	12.099	30	12.097	12.097	12.097	40	12.092	12.092	12.092	50	12.087	12.087	12.087	60	12.083	12.083	12.083	—	—
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	12.106	12.106	12.106																																																				
-10	12.106	12.106	12.107																																																				
0	12.106	12.106	12.106																																																				
10	12.104	12.104	12.104																																																				
20	12.101	12.101	12.101																																																				
25	12.099	12.099	12.099																																																				
30	12.097	12.097	12.097																																																				
40	12.092	12.092	12.092																																																				
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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

Model	RMB30A-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

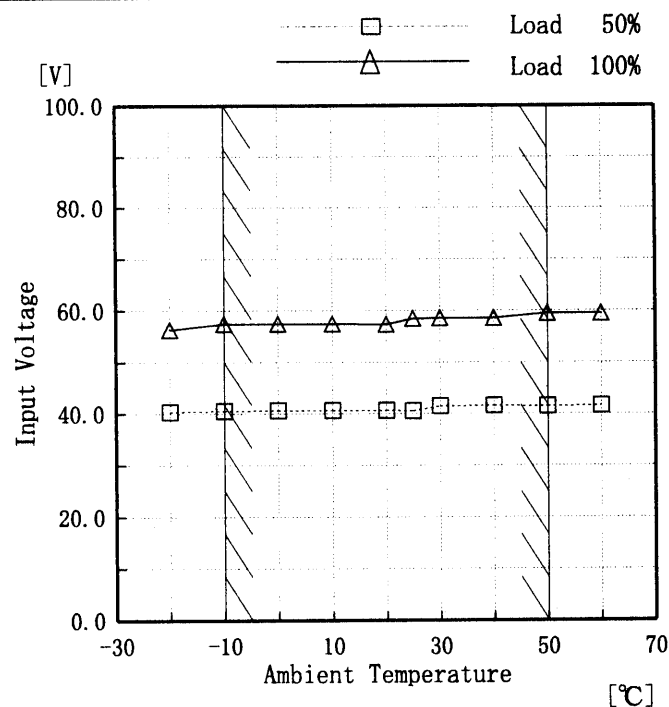


Testing Circuitry Figure A

2. Values

Ambient Temp. [°C]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]
-20	46.7	54.7
-10	46.5	54.5
0	46.5	54.6
10	46.6	55.5
20	46.5	55.6
25	47.6	55.5
30	47.5	56.6
40	47.6	56.6
50	48.6	57.6
60	48.5	57.5
—	—	—

Object +12V2.00A



2. Values

Ambient Temp. [°C]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]
-20	40.4	56.4
-10	40.5	57.5
0	40.6	57.5
10	40.6	57.5
20	40.6	57.4
25	40.5	58.5
30	41.5	58.6
40	41.6	58.6
50	41.5	59.5
60	41.6	59.5
—	—	—

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		RMB30A-1																																					
Item	Ripple Voltage (by Ambient Temp.) リップル電圧 (周囲温度特性)																																						
Object	+5.0V1.50A																																						
1. Graph		2. Values																																					
<div><div>□ Load 50%</div><div>△ Load 100%</div></div> <div><p>[mV]</p><p>Ripple Voltage</p><p>Ambient Temperature [°C]</p><p>Input Volt. 100 V</p></div>		<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>30</td><td>50</td></tr><tr><td>-10</td><td>30</td><td>40</td></tr><tr><td>0</td><td>30</td><td>30</td></tr><tr><td>10</td><td>20</td><td>30</td></tr><tr><td>20</td><td>15</td><td>20</td></tr><tr><td>25</td><td>10</td><td>15</td></tr><tr><td>30</td><td>10</td><td>15</td></tr><tr><td>40</td><td>10</td><td>15</td></tr><tr><td>50</td><td>5</td><td>10</td></tr><tr><td>60</td><td>5</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	30	50	-10	30	40	0	30	30	10	20	30	20	15	20	25	10	15	30	10	15	40	10	15	50	5	10	60	5	10	—	—	—
Ambient Temp. [°C]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]																																					
-20	30	50																																					
-10	30	40																																					
0	30	30																																					
10	20	30																																					
20	15	20																																					
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Object		+12V2.00A																																					
1. Graph		2. Values																																					
<div><div>□ Load 50%</div><div>△ Load 100%</div></div> <div><p>Ripple Voltage</p><p>Ambient Temperature [°C]</p><p>Input Volt. 100 V</p></div>		<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>40</td><td>90</td></tr><tr><td>-10</td><td>30</td><td>50</td></tr><tr><td>0</td><td>20</td><td>30</td></tr><tr><td>10</td><td>10</td><td>20</td></tr><tr><td>20</td><td>10</td><td>15</td></tr><tr><td>25</td><td>10</td><td>15</td></tr><tr><td>30</td><td>10</td><td>15</td></tr><tr><td>40</td><td>5</td><td>10</td></tr><tr><td>50</td><td>5</td><td>10</td></tr><tr><td>60</td><td>5</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	40	90	-10	30	50	0	20	30	10	10	20	20	10	15	25	10	15	30	10	15	40	5	10	50	5	10	60	5	10	—	—	—
Ambient Temp. [°C]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]																																					
-20	40	90																																					
-10	30	50																																					
0	20	30																																					
10	10	20																																					
20	10	15																																					
25	10	15																																					
30	10	15																																					
40	5	10																																					
50	5	10																																					
60	5	10																																					
—	—	—																																					
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			
Model	RMB30A-1		
Item	Time Lapse Drift 経時ドリフト	Temperature	25 ℃
Object	+5.0V1.50A	Testing Circuitry	Figure A
1. Graph		2.Values	
<div><div><div>Output Voltage</div><div>[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><d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COSEL

Model		RMB30A-1				
Item		Output Voltage Accuracy 定電圧精度			Testing Circuitry Figure A	

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 : 85~132 V

Load Current (AVR 1) : 0~1.5 A

(AVR 2) : 0~2 A

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

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

定電圧精度

周囲温度、入力電圧、負荷電流を下記仕様内で、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 85~132 V

負荷電流 (AVR 1) 0~1.5 A

(AVR 2) 0~2 A

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

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

Object	+5.0V1.5A					
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Item	Temperature [°C]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ratio) [%]
Maximum Voltage	-10	132	0.0	5.115	±24	±0.5
Minimum Voltage	50	132	1.5	5.068		

Object	+12.0V2.0A					
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Item	Temperature [°C]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ratio) [%]
Maximum Voltage	-10	85	0	12.111	±12	±0.1
Minimum Voltage	50	100	2	12.087		

COSEL

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Model		RMB30A-1	Testing Circuitry	Figure A
Item		Condensation 結露特性		
Object		+5.0V1.5A		

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.

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]	5.082	Input Volt.: 100V, Load Current:1.5A
Line Regulation [mV]	1	Input Volt.: 85~132V, Load Current:1.5A
Load Regulation [mV]	18	Input Volt.: 100V, Load Current:0.0~1.5A

COSEL

LOREL

		Testing Circuitry Figure A
Model	RMB30A-1	
Item	Condensation 結露特性	
Object	+12.0V2A	

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]	12.98	Input Volt.: 100V, Load Current:2A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:2A
Load Regulation [mV]	5	Input Volt.: 100V, Load Current:0～2A

COSEL

Model		RMB30A-1	Temperature Testing Circuitry	25℃ 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	0.18	0.22	0.29
(B) IEC60950	0.18	0.22	0.30

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。

Standards	Leakage Current [mA]		
	Input Volt. 170 [V]	Input Volt. 230 [V]	Input Volt. 264 [V]
(B) IEC60950	—	—	—

COSEL

Model		RMB30A-1
Item		Conducted Emission 雑音端子電圧
Object		

1. Graph

Remarks

Input Volt.120 V (VCCI:100V)

Load100 %

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

Testing Circuitry

Figure D

[dB/μV]

70

60

50

40

30

100K

500K

1M

[Hz]

VCCI class B

[dB/μV]

60

50

40

30

20

0

1M

2M

[Hz]

FCC class B

[dB/μV]

60

50

40

30

20

0

10M

20M

30M

40M

50M

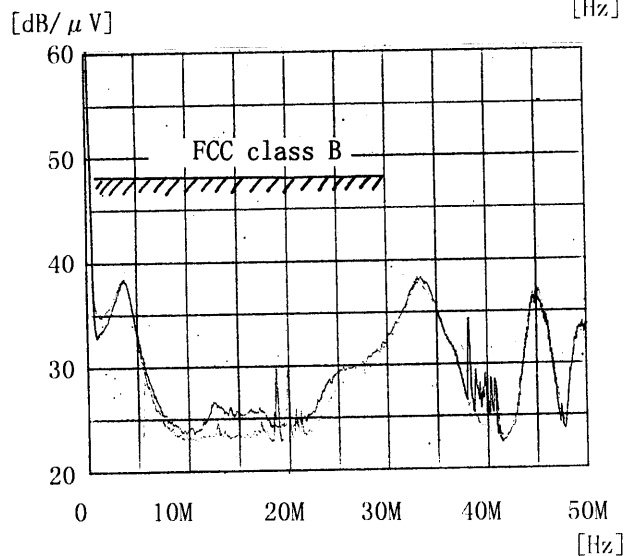
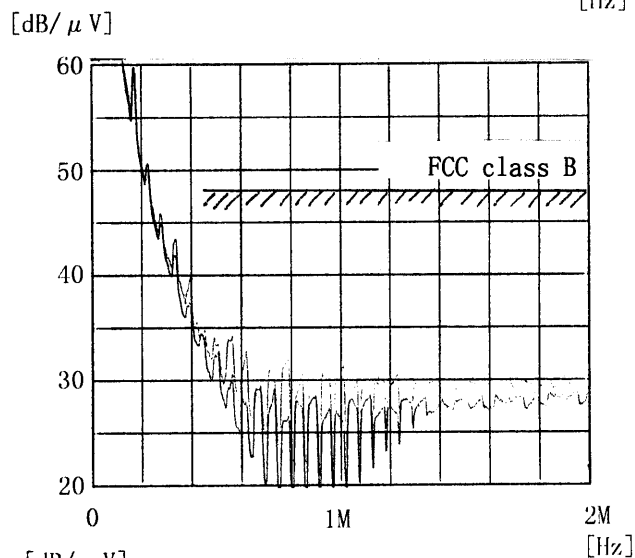
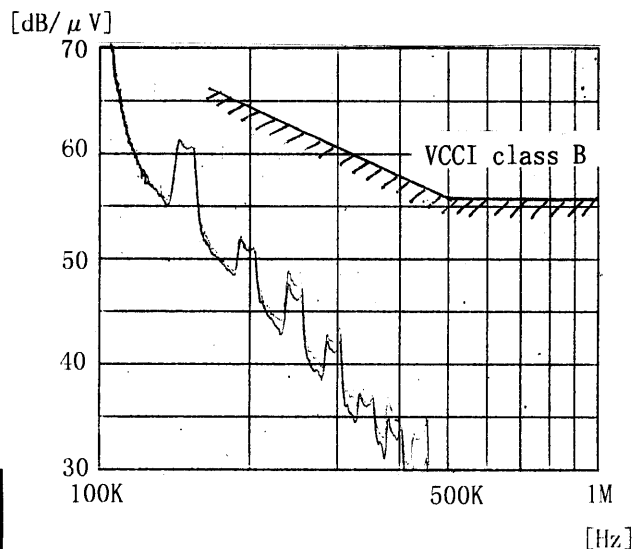
[Hz]

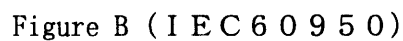
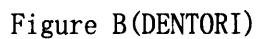
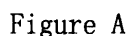
FCC class B

—28—

BC-3240

Testing Circuitry Figure D





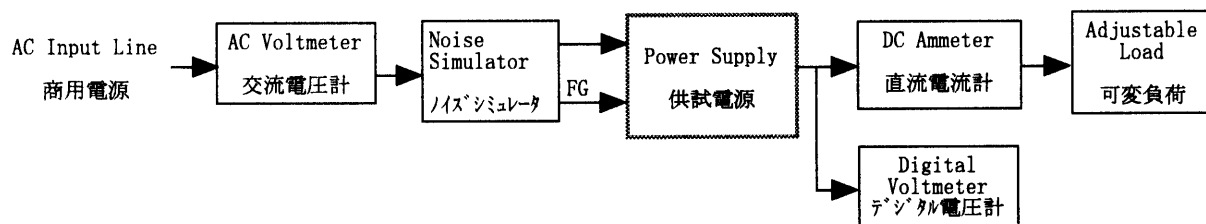


Figure C

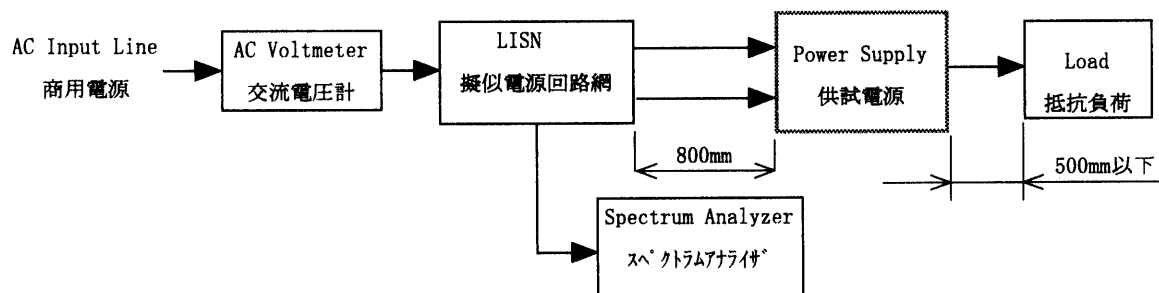


Figure D

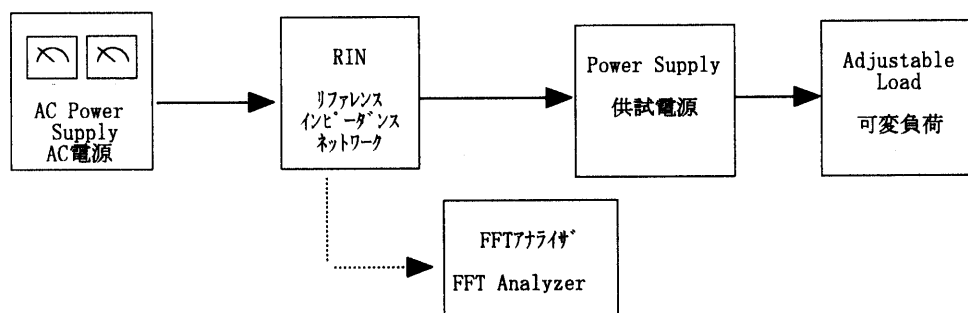


Figure E