



# TEST DATA OF YW512A

(100V INPUT)

Regulated DC Power Supply

Oct. 2, 1999

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Design Manager

Prepared by : Yuichi Takahashi  
Design Engineer

コーセル株式会社

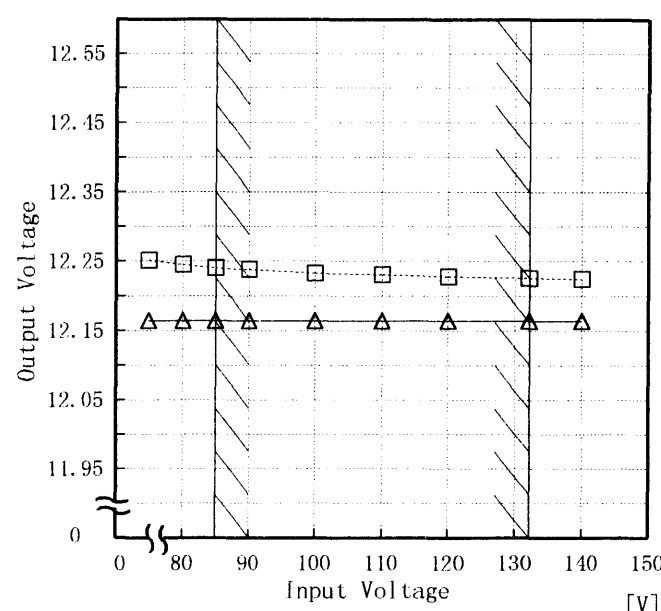
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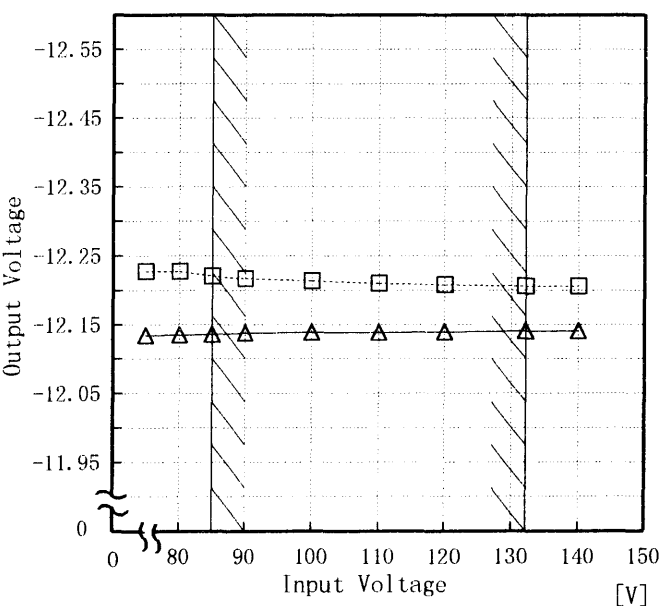
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Model		YW512A																																	
Item		Line Regulation 静の入力変動																																	
Object		+12.0V0.22A																																	
1. Graph		<div><div><div></div><div>Load 50%</div></div><div><div></div><div>Load 100%</div></div></div> <div><div>[V]</div><div></div><div>Output Voltage [V]</div><div>Input Voltage [V]</div></div>																																	
2. Values		<table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>75</td><td>12.251</td><td>12.164</td></tr><tr><td>80</td><td>12.245</td><td>12.164</td></tr><tr><td>85</td><td>12.241</td><td>12.165</td></tr><tr><td>90</td><td>12.239</td><td>12.165</td></tr><tr><td>100</td><td>12.233</td><td>12.165</td></tr><tr><td>110</td><td>12.231</td><td>12.165</td></tr><tr><td>120</td><td>12.228</td><td>12.165</td></tr><tr><td>132</td><td>12.226</td><td>12.165</td></tr><tr><td>140</td><td>12.225</td><td>12.165</td></tr></table>		Input Voltage [V]	Output Voltage [V]		Load 50%	Load 100%	75	12.251	12.164	80	12.245	12.164	85	12.241	12.165	90	12.239	12.165	100	12.233	12.165	110	12.231	12.165	120	12.228	12.165	132	12.226	12.165	140	12.225	12.165
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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		YW512A		Temperature		25°C																																																								
Item		Input Current (by Load Current) 入力電流（負荷特性）		Testing Circuitry		Figure A																																																								
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<div><div>—△—</div>Input Volt. 85V</div> <div><div>---□---</div>Input Volt. 100V</div> <div><div>---○---</div>Input Volt. 132V</div> <p>Note: Slanted line shows the range of the rated load current</p> <p>(注) 斜線は定格負荷電流範囲を示す。</p>				<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Input Current [A]</th></tr><tr><th>Input Volt. 85[V]</th><th>Input Volt. 100[V]</th><th>Input Volt. 132[V]</th></tr><tr><td>0.000</td><td>0.028</td><td>0.029</td><td>0.032</td></tr><tr><td>0.040</td><td>0.053</td><td>0.052</td><td>0.052</td></tr><tr><td>0.080</td><td>0.076</td><td>0.072</td><td>0.067</td></tr><tr><td>0.120</td><td>0.098</td><td>0.091</td><td>0.082</td></tr><tr><td>0.160</td><td>0.119</td><td>0.109</td><td>0.097</td></tr><tr><td>0.200</td><td>0.140</td><td>0.127</td><td>0.112</td></tr><tr><td>0.220</td><td>0.151</td><td>0.136</td><td>0.118</td></tr><tr><td>0.242</td><td>0.163</td><td>0.146</td><td>0.126</td></tr><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr></table>				Load Current [A]	Input Current [A]			Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]	0.000	0.028	0.029	0.032	0.040	0.053	0.052	0.052	0.080	0.076	0.072	0.067	0.120	0.098	0.091	0.082	0.160	0.119	0.109	0.097	0.200	0.140	0.127	0.112	0.220	0.151	0.136	0.118	0.242	0.163	0.146	0.126	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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Model		YW512A	
Item		Efficiency (by Input Voltage) 効率 (入力電圧特性)	
Object			

1. Graph

□

Load 50%

△

Load 100%

Efficiency [%]

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Model		YW512A	Temperature		25℃
Item		Efficiency (by Load Current) 効率（負荷特性）	Testing Circuitry		Figure A
Output		_____			

1. Graph

—△— Input Volt. 85V

- - -□- - Input Volt. 100V

- - -○- - Input Volt. 132V

Efficiency [%]

Load Current [A]

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。

2. Values

Load Current [A]	Efficiency [%]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.040	47.7	43.6	35.6
0.080	62.0	58.9	51.3
0.120	68.6	66.5	60.3
0.160	72.2	70.6	65.8
0.200	74.1	73.4	69.7
0.220	74.6	74.2	71.0
0.242	75.0	75.1	72.2
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

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Model		YW512A		Temperature		25℃																																	
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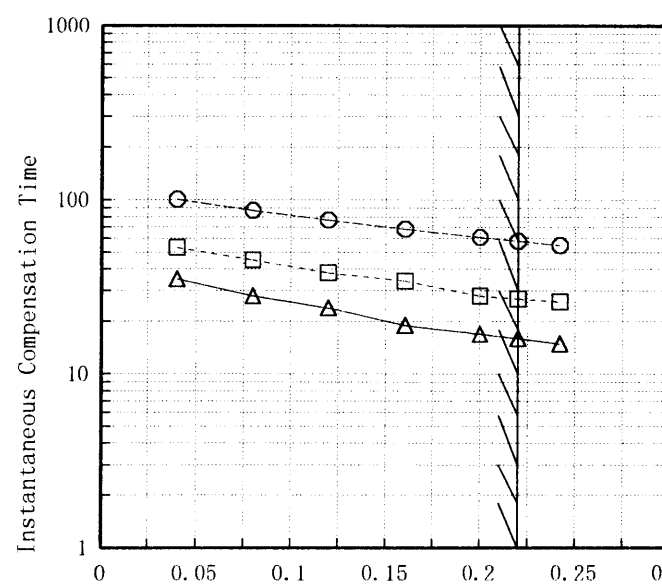
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Item	Hold-Up Time 出力保持時間																																	
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<p>1. Graph</p> <p>-----□----- Load 50%          -----△----- Load 100%</p> <p>[mS]</p> <p>Hold-Up Time</p> <p>Input Voltage [V]</p> <p>This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.</p> <p>Note: Slanted line shows the range of the rated input voltage.</p> <p>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。</p> <p>(注)斜線は定格入力電圧範囲を示す。</p>		<p>2. Values</p> <table border="1"> <thead> <tr> <th rowspan="2">Input Voltage [V]</th><th colspan="2">Hold-Up Time [mS]</th></tr> <tr> <th>Load 50%</th><th>Load 100%</th></tr> </thead> <tbody> <tr><td>75</td><td>18</td><td>11</td></tr> <tr><td>80</td><td>22</td><td>14</td></tr> <tr><td>85</td><td>26</td><td>17</td></tr> <tr><td>90</td><td>31</td><td>21</td></tr> <tr><td>100</td><td>41</td><td>29</td></tr> <tr><td>110</td><td>52</td><td>37</td></tr> <tr><td>120</td><td>64</td><td>47</td></tr> <tr><td>132</td><td>79</td><td>59</td></tr> <tr><td>140</td><td>90</td><td>68</td></tr> </tbody> </table>	Input Voltage [V]	Hold-Up Time [mS]		Load 50%	Load 100%	75	18	11	80	22	14	85	26	17	90	31	21	100	41	29	110	52	37	120	64	47	132	79	59	140	90	68
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# COSEL

Model		YW512A	Temperature 25℃																																	
Item		Hold-Up Time 出力保持時間	Testing Circuitry Figure A																																	
Object		-12.0V 0.22A																																		
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**COSEL**

Model		YW512A		Temperature		25℃																																																				
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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。

# COSEL

Model		YW512A		Temperature		25℃	
Item		Instantaneous Interruption Compensation 瞬時停電保障		Testing Circuitry		Figure A	
Object		-12.0V0.22A					
1. Graph				2. Values			

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**COSEL**

Model		YW512A		Temperature 25℃																																																
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(注)斜線は定格負荷電流範囲を示す。																																																				

−12−

BC−3203

# COSEL

Model		YW512A	
Item		Ripple Voltage (by Load Current) リップル電圧(負荷特性)	
Object		+12.0V 0.22A	

1. Graph

—△— Input Volt. 85V

---○--- Input Volt. 132V

100

90

80

70

60

50

40

30

20

10

0

Ripple Voltage

[mV]

0

0.05

0.1

0.15

0.2

0.25

0.3

Load Current

[A]

2. Values

Load Current [A]	Ripple Output Voltage [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.000	15	10
0.040	15	10
0.080	15	10
0.120	15	10
0.160	20	10
0.200	20	10
0.220	25	10
0.242	30	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]

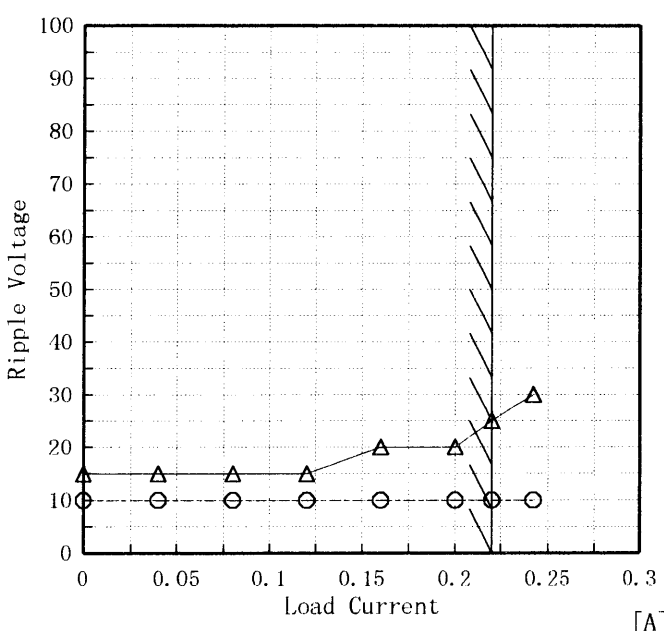
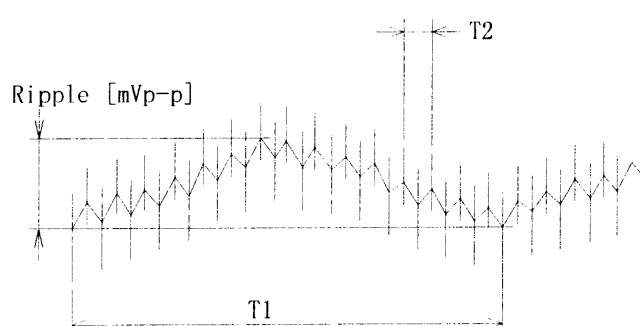
T2

T1

Fig. Complex Ripple Wave Form

図 リップル波形詳細図

# COSEL

Model	YW512A																																								
Item	Ripple Voltage (by Load Current) リップル電圧(負荷特性)	Temperature	25℃																																						
		Testing Circuitry	Figure A																																						
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図 リップル波形詳細図																																									



# COSEL

Model		YW512A		Temperature		25℃																																							
Item		Ripple-Noise リップルノイズ		Testing Circuitry		Figure A																																							
Object		+12.0V 0.22A																																											
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<div><div>□</div>Input Volt. 85V</div> <div><div>△</div>Input Volt. 132V</div> <div><div>[mV]</div><div><div>Ripple-Noise</div><div>Load Current</div><div>[A]</div></div></div>				<table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 85 [V]</th><th>Input Volt. 132 [V]</th></tr><tr><td>0.000</td><td>35</td><td>25</td></tr><tr><td>0.040</td><td>35</td><td>25</td></tr><tr><td>0.080</td><td>35</td><td>25</td></tr><tr><td>0.120</td><td>35</td><td>25</td></tr><tr><td>0.160</td><td>35</td><td>25</td></tr><tr><td>0.200</td><td>40</td><td>30</td></tr><tr><td>0.220</td><td>45</td><td>30</td></tr><tr><td>0.242</td><td>45</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></table>				Load Current [A]	Ripple-Noise [mV]		Input Volt. 85 [V]	Input Volt. 132 [V]	0.000	35	25	0.040	35	25	0.080	35	25	0.120	35	25	0.160	35	25	0.200	40	30	0.220	45	30	0.242	45	30	—	—	—	—	—	—	—	—	—
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# COSEL

Model		YW512A		Temperature		25℃																																			
Item		Ripple-Noise リップルノイズ		Testing Circuitry		Figure A																																			
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<div><div>[mV]</div><div><div><div>□</div>Input Volt. 85V</div><div><div>△</div>Input Volt. 132V</div></div><div><div><div>Ripple-Noise</div><div>Load Current</div><div>[A]</div></div></div></div> <table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 85 [V]</th><th>Input Volt. 132 [V]</th></tr><tr><td>0.000</td><td>30</td><td>20</td></tr><tr><td>0.040</td><td>30</td><td>20</td></tr><tr><td>0.080</td><td>35</td><td>25</td></tr><tr><td>0.120</td><td>35</td><td>25</td></tr><tr><td>0.160</td><td>40</td><td>25</td></tr><tr><td>0.200</td><td>40</td><td>30</td></tr><tr><td>0.220</td><td>40</td><td>30</td></tr><tr><td>0.242</td><td>45</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></table>				Load Current [A]	Ripple-Noise [mV]		Input Volt. 85 [V]	Input Volt. 132 [V]	0.000	30	20	0.040	30	20	0.080	35	25	0.120	35	25	0.160	40	25	0.200	40	30	0.220	40	30	0.242	45	30	--	--	--	--	--	--	--	--	--
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<div><div>Ripple-Noise is shown as p-p in the figure below.</div><div>Note: Slanted line shows the range of the rated load current.</div></div>																																									
<div><div>リップルノイズは、下図 p-p 値で示される。</div><div>(注)斜線は定格負荷電流範囲を示す。</div></div>																																									
<div><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><div>Ripple-Noise</div><div>[mVp-p]</div></div></div></div> <div><div>Fig. Complex Ripple Wave Form</div><div>図 リップル波形詳細図</div></div>																																									

**COSEL**

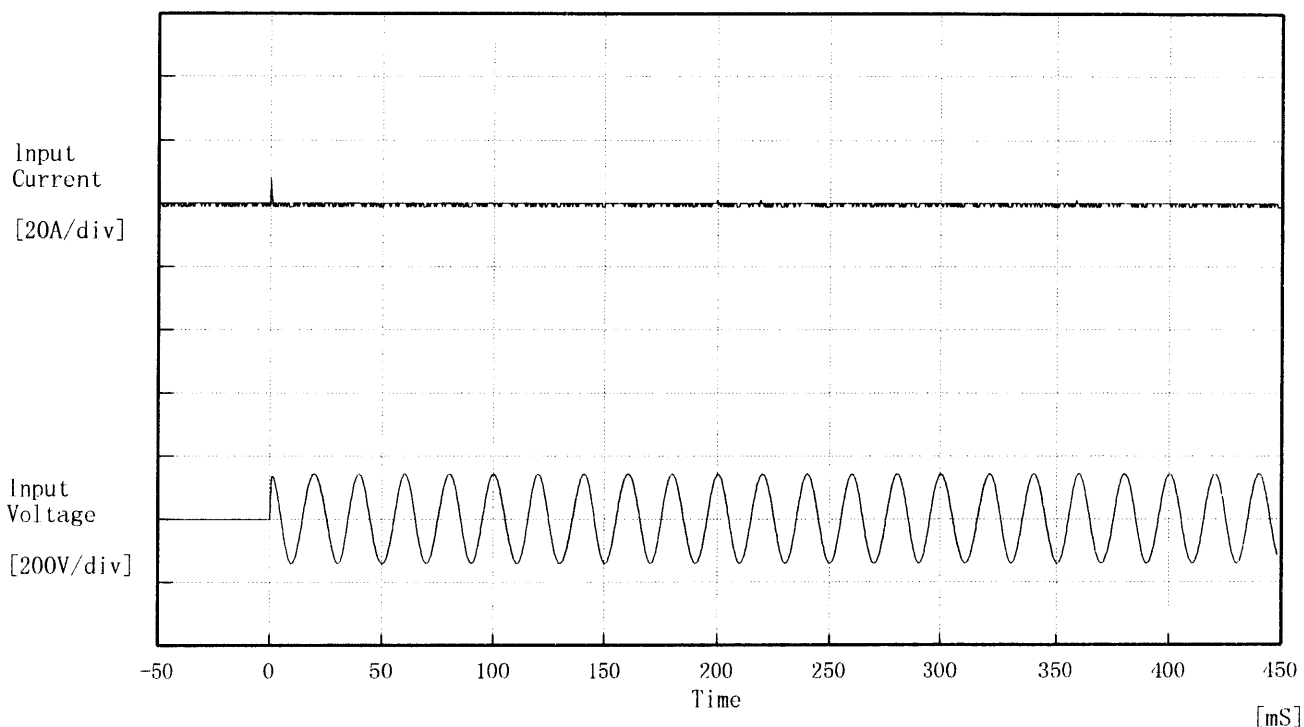
Model		YW512A		Temperature		25℃																																																								
Item		Overcurrent Protection 過電流保護		Testing Circuitry		Figure A																																																								
Object		+12.0V0.22A																																																												
1. Graph				2. Values																																																										
<div><div><div>[V]</div><div>20.0</div><div>15.0</div><div>10.0</div><div>5.0</div><div>0.0</div></div><div><div><div>Input Volt. 85 V</div><div>Input Volt. 100 V</div><div>Input Volt. 132 V</div></div><div><div>0</div><div>0.2</div><div>0.4</div><div>0.6</div></div><div>Load Current</div><div>[A]</div></div></div> <table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="3">Load Current [A]</th></tr><tr><th>Input Volt. 85 [V]</th><th>Input Volt. 100 [V]</th><th>Input Volt. 132 [V]</th></tr><tr><td>12.00</td><td>0.377</td><td>0.419</td><td>0.434</td></tr><tr><td>11.40</td><td>0.384</td><td>0.430</td><td>0.460</td></tr><tr><td>10.80</td><td>0.394</td><td>0.441</td><td>0.469</td></tr><tr><td>9.60</td><td>0.410</td><td>0.451</td><td>0.480</td></tr><tr><td>8.40</td><td>0.422</td><td>0.459</td><td>0.493</td></tr><tr><td>7.20</td><td>0.428</td><td>0.465</td><td>0.500</td></tr><tr><td>6.00</td><td>0.435</td><td>0.468</td><td>0.502</td></tr><tr><td>4.80</td><td>0.434</td><td>0.462</td><td>0.499</td></tr><tr><td>3.60</td><td>0.428</td><td>0.453</td><td>0.488</td></tr><tr><td>2.40</td><td>0.412</td><td>0.433</td><td>0.469</td></tr><tr><td>1.20</td><td>0.261</td><td>0.362</td><td>0.390</td></tr><tr><td>0.00</td><td>0.264</td><td>0.312</td><td>0.389</td></tr></table>				Output Voltage [V]	Load Current [A]			Input Volt. 85 [V]	Input Volt. 100 [V]	Input Volt. 132 [V]	12.00	0.377	0.419	0.434	11.40	0.384	0.430	0.460	10.80	0.394	0.441	0.469	9.60	0.410	0.451	0.480	8.40	0.422	0.459	0.493	7.20	0.428	0.465	0.500	6.00	0.435	0.468	0.502	4.80	0.434	0.462	0.499	3.60	0.428	0.453	0.488	2.40	0.412	0.433	0.469	1.20	0.261	0.362	0.390	0.00	0.264	0.312	0.389				
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BC-3203

**COSEL**

Model	YW512A	Temperature 25°C Testing Circuitry Figure A
Item	Inrush Current 突入電流	
Object	_____	



Input Voltage 100 V

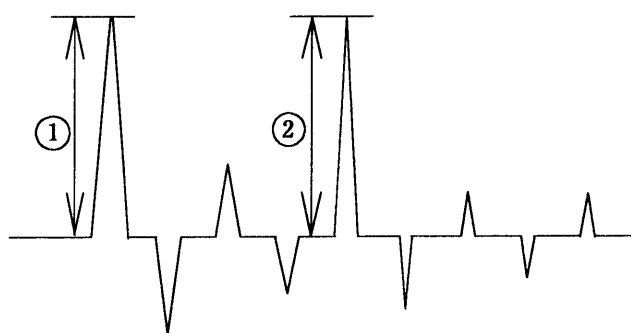
Frequency 50 Hz

Load 100 %

Inrush Current

① 7.87 [A]

② 1.14 [A]



**COSEL**

Model	YW512A	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Responce 動的負荷変動	
Object	+12.0V 0.22A	

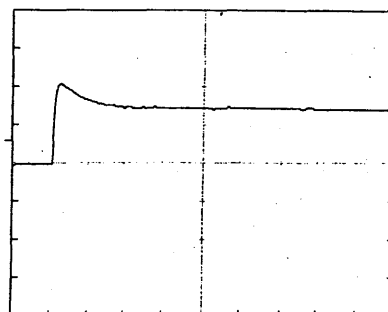
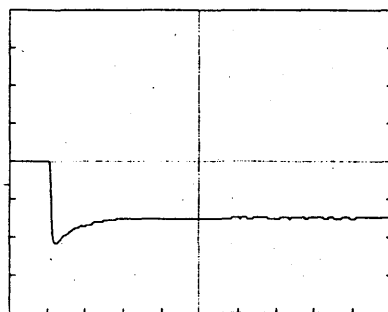
Input Volt. 100 V

Cycle 1000 mS

Load Current

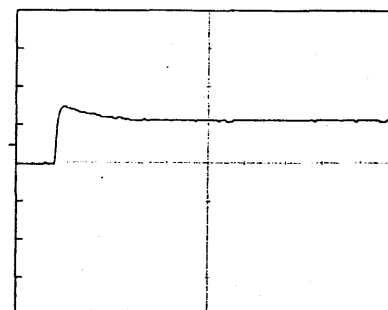
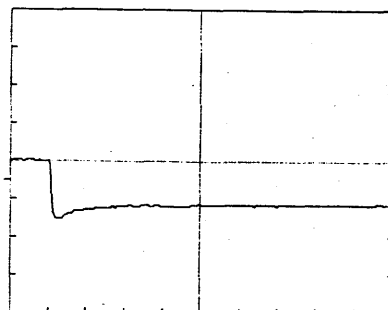
Load 0% ↔

Load 100 %



Load 0% ↔

Load 50 %



200 mV/div

1 mS/div

**COSEL**

Model	YW512A	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Responce 動的負荷変動	
Object	-12.0V 0.22A	

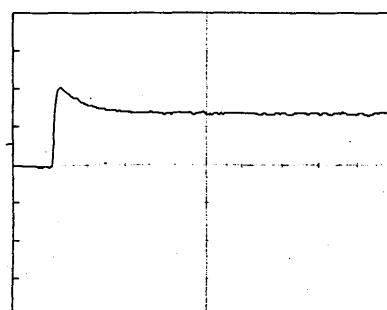
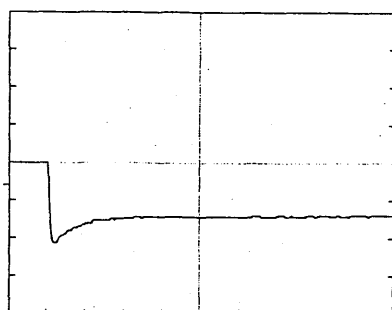
Input Volt. 100 V

Cycle 1000 mS

Load Current

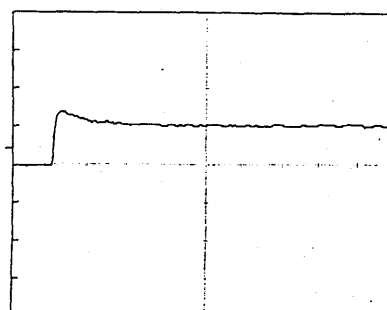
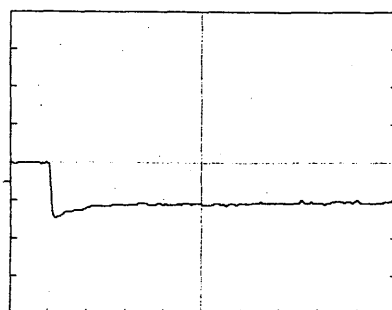
Load 0% ↔

Load 100 %



Load 0% ↔

Load 50 %



200 mV/div

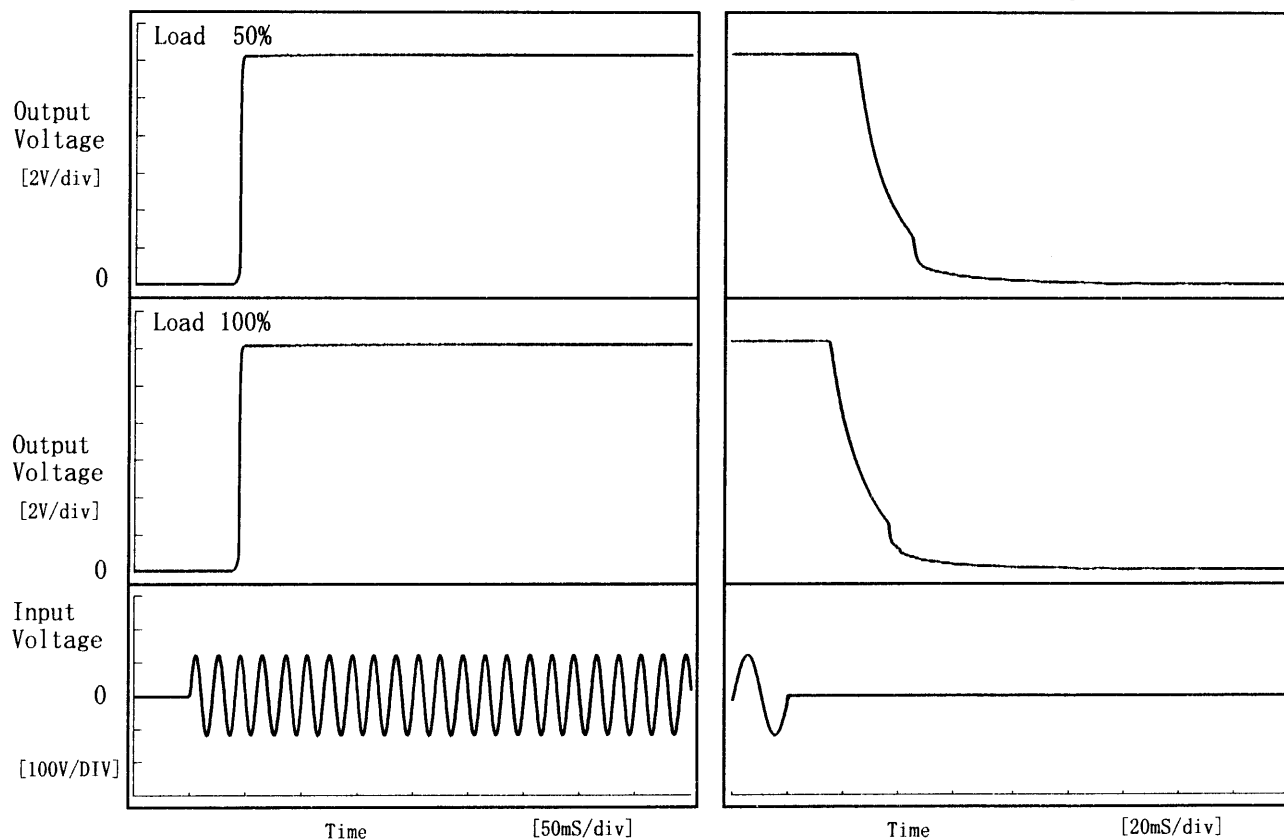
1 mS/div

**COSEL**

Model	YW512A	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+12.0V0.22A		

## 1. Graph

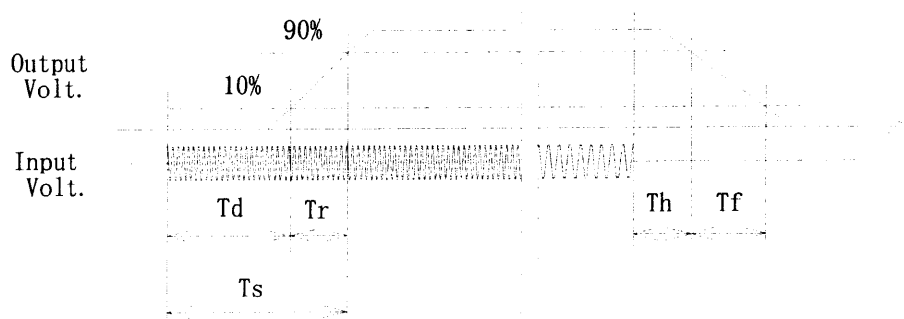
Input Volt. 85 V



## 2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	43.3	1.5	44.8	26.1	24.0
100 %	43.3	1.5	44.8	17.2	23.4

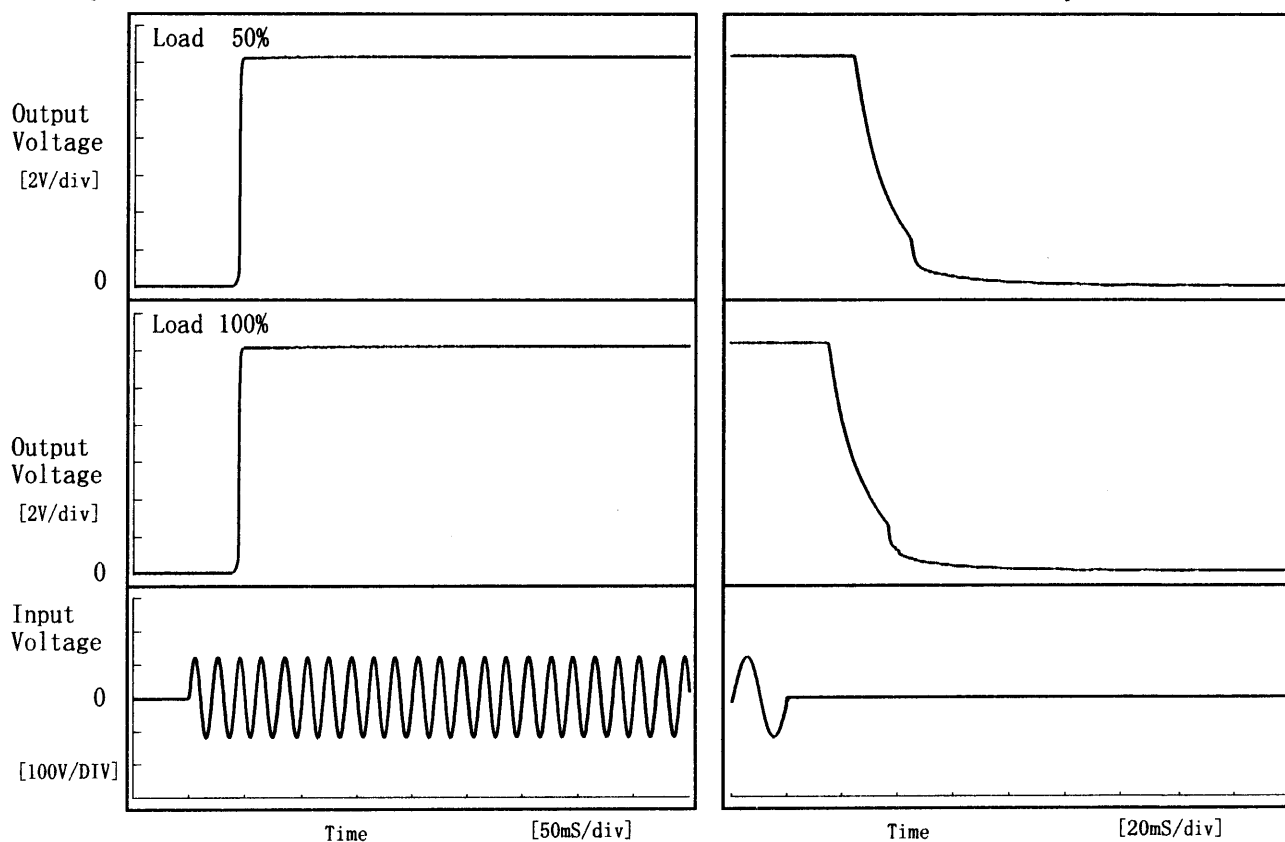


# COSEL

Model	YW512A	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+12.0V 0.22A		

## 1. Graph

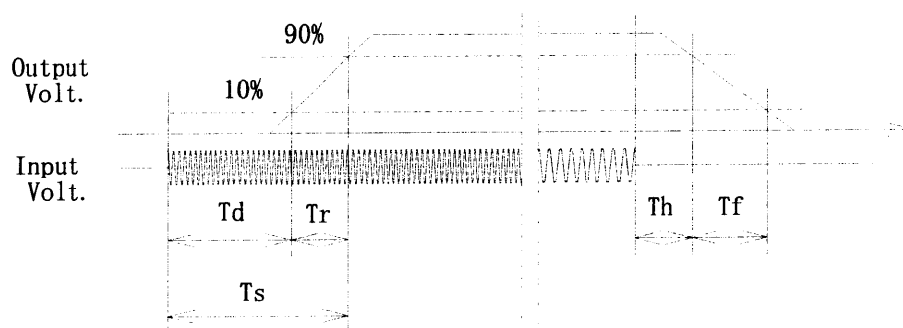
Input Volt. 85 V



## 2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	43.3	1.5	44.8	26.1	24.0
100 %	43.3	1.5	44.8	17.2	23.4



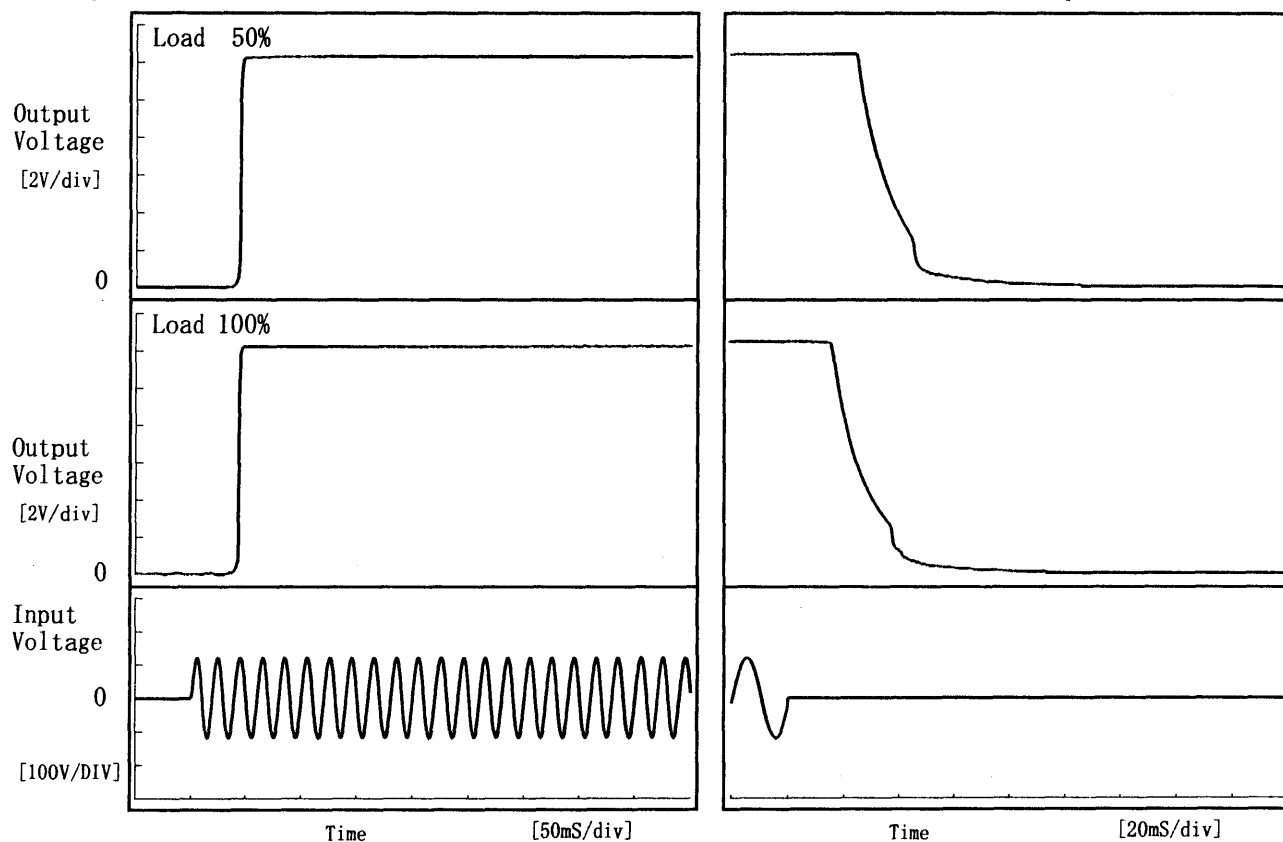


**COSEL**

Model	YW512A	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	-12.0V0.22A		

## 1. Graph

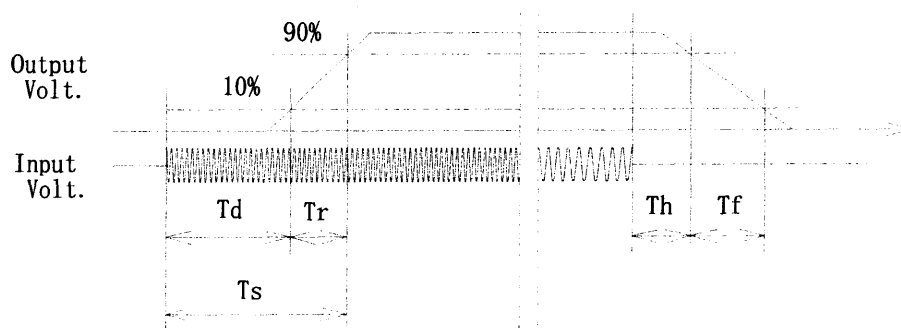
Input Volt. 85 V



## 2. Values

[mS]

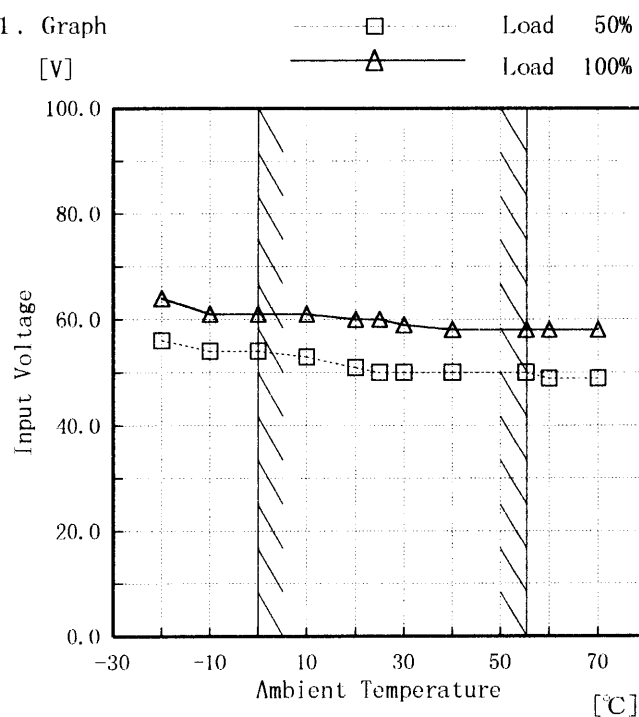
Load \ Time	T d	T r	T s	T h	T f
50 %	43.5	1.5	45.0	26.6	27.0
100 %	43.3	1.5	44.8	17.4	23.9



# COSEL

Model	YW512A
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+12.0V0.22A

## 1. Graph

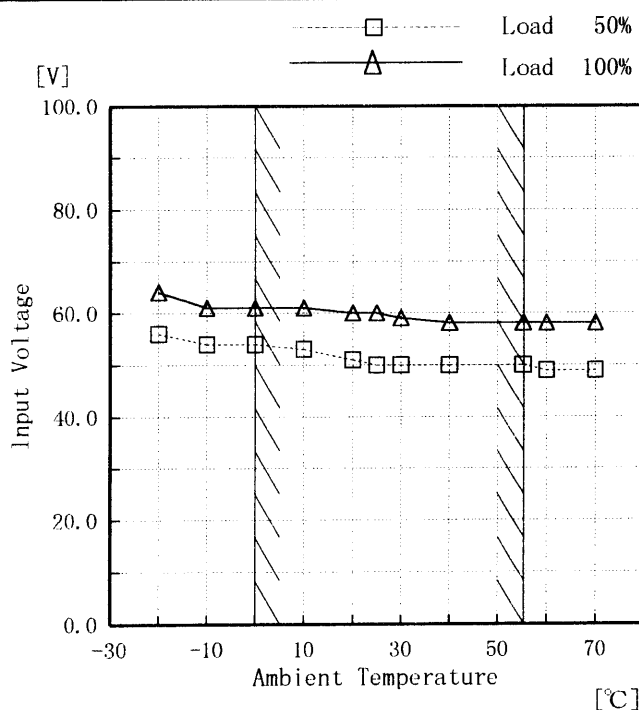


## Testing Circuitry Figure A

## 2. Values

Ambient Temperature [°C]	Input Voltage [V]	
	Load 50%	Load 100%
-20	56	64
-10	54	61
0	54	61
10	53	61
20	51	60
25	50	60
30	50	59
40	50	58
55	50	58
60	49	58
70	49	58

Object	-12.0V0.22A
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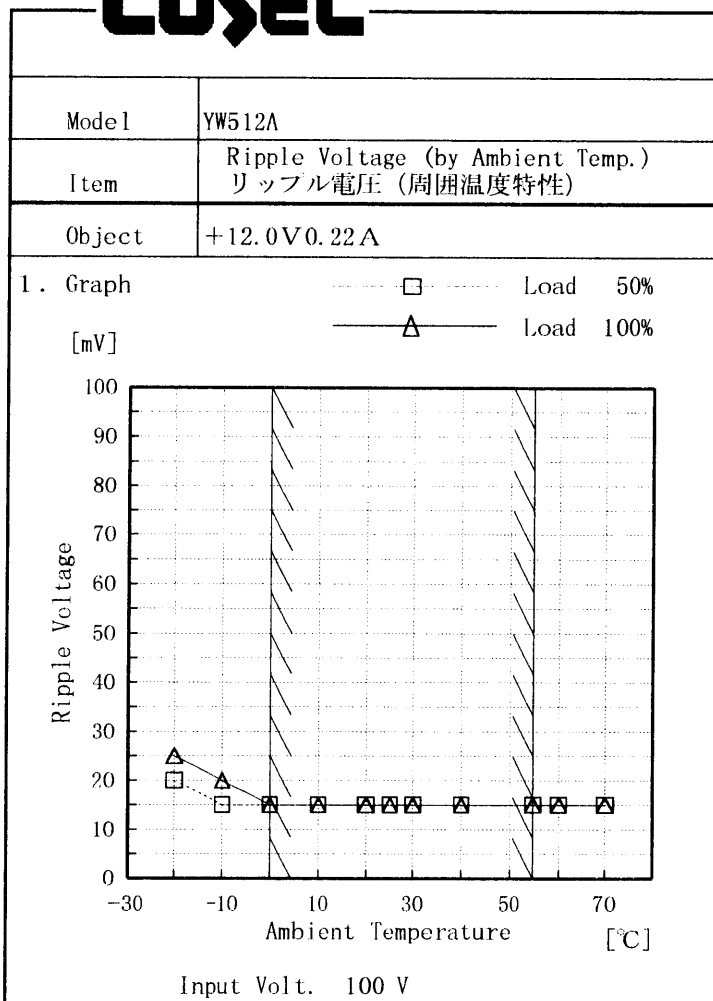


## 2. Values

Ambient Temperature [°C]	Input Voltage [V]	
	Load 50%	Load 100%
-20	56	64
-10	54	61
0	54	61
10	53	61
20	51	60
25	50	60
30	50	59
40	50	58
55	50	58
60	49	58
70	49	58

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

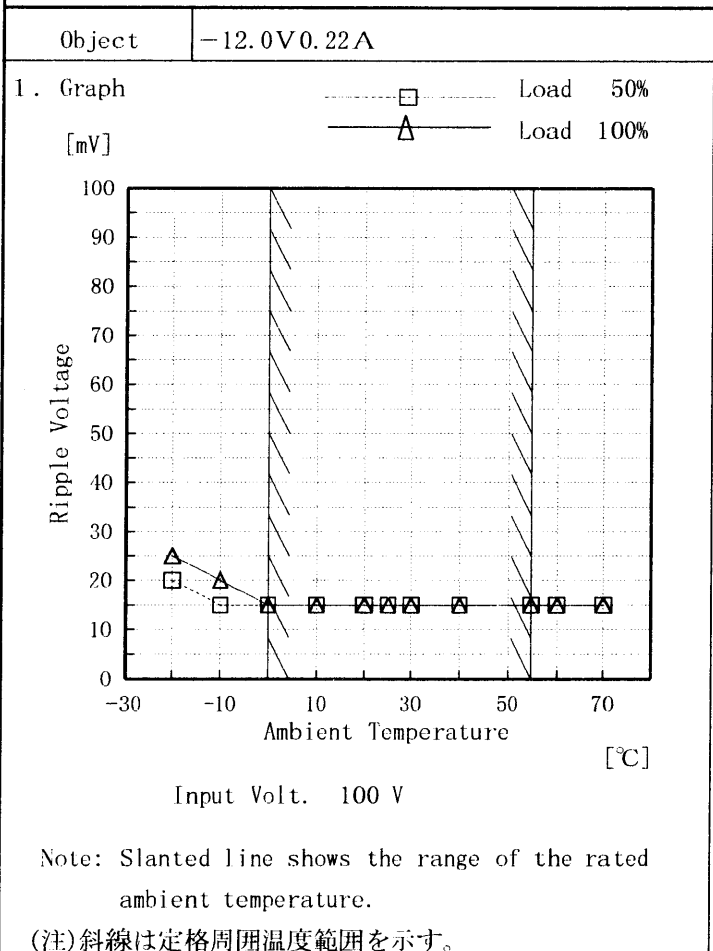
(注) 斜線は定格周囲温度範囲を示す。

**COSEL**

Testing Circuitry Figure A

## 2. Values

Ambient Temperature [°C]	Ripple Output Voltage [mV]	
	Load 50%	Load 100%
-20	20	25
-10	15	20
0	15	15
10	15	15
20	15	15
25	15	15
30	15	15
40	15	15
55	15	15
60	15	15
70	15	15



## 2. Values

Ambient Temperature [°C]	Ripple Output Voltage [mV]	
	Load 50%	Load 100%
-20	20	25
-10	15	20
0	15	15
10	15	15
20	15	15
25	15	15
30	15	15
40	15	15
55	15	15
60	15	15
70	15	15

**COSEL**

COSEL			
Model	YW512A		
Item	Time Lapse Drift 経時ドリフト	Temperature	25℃
		Testing Circuitry	Figure A
Object	+12.0V0.22A		
1. Graph		2.Values	
<div><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></div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**COSEL**

Model	YW512A																																																					
Item	Oscillator Frequency 発振周波数	Temperature	25°C																																																			
Object	+12.0V0.22A	Testing Circuitry	Figure A																																																			
<p>1. Graph</p> <p>—△— Input Volt. 85 V  —□— Input Volt. 100 V  —○— Input Volt. 132 V</p> <p>Oscillator Frequency [KHz]</p> <p>Load Current [A]</p> <p>Note: Slanted line shows the range of the rated load current.</p> <p>(注) 斜線は定格負荷電流範囲を示す。</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. 100[V]</th><th>Input Volt. 132[V]</th></tr> <tr> <th colspan="3">Oscillator Frequency [KHz]</th></tr> </thead> <tbody> <tr><td>0.000</td><td>891</td><td>912</td><td>913</td></tr> <tr><td>0.040</td><td>716</td><td>749</td><td>789</td></tr> <tr><td>0.080</td><td>586</td><td>623</td><td>674</td></tr> <tr><td>0.120</td><td>498</td><td>535</td><td>586</td></tr> <tr><td>0.160</td><td>432</td><td>467</td><td>514</td></tr> <tr><td>0.200</td><td>382</td><td>413</td><td>464</td></tr> <tr><td>0.220</td><td>355</td><td>389</td><td>435</td></tr> <tr><td>0.242</td><td>335</td><td>365</td><td>415</td></tr> <tr><td>—</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>—</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>—</td><td>—</td><td>—</td><td>—</td></tr> </tbody> </table>		Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]	Oscillator Frequency [KHz]			0.000	891	912	913	0.040	716	749	789	0.080	586	623	674	0.120	498	535	586	0.160	432	467	514	0.200	382	413	464	0.220	355	389	435	0.242	335	365	415	—	—	—	—	—	—	—	—	—	—	—	—
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Model		YW512A	Testing Circuitry    Figure A												
Item		Condensation    結露特性													
<div>1. Condensation test</div> <div>Testing procedure is as follows.</div> <div>① Keeping and cooling the unit in a tank at -10℃ for an hour with the input off.</div> <div>② Taking it out of the tank and dewing itself in a room where the temperature is 25℃ and the humidity is 40%RH.</div> <div>③ Testing electrical characteristics of the unit to confirm there be no fault.</div> <div>1. 結露特性試験</div> <div>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。</div> <div>2. Values</div>															
Object		+12.0V0.22A													
<table><tr><td>Item</td><td>Data</td><td>Testing Conditions</td></tr><tr><td>Output Voltage [V]</td><td>12.165</td><td>Input Volt.: 100V, Load Current:0.22A</td></tr><tr><td>Line Regulation [mV]</td><td>1</td><td>Input Volt.: 85~132V, Load Current:0.22A</td></tr><tr><td>Load Regulation [mV]</td><td>301</td><td>Input Volt.: 100V, Load Current:0~0.22A</td></tr></table>				Item	Data	Testing Conditions	Output Voltage [V]	12.165	Input Volt.: 100V, Load Current:0.22A	Line Regulation [mV]	1	Input Volt.: 85~132V, Load Current:0.22A	Load Regulation [mV]	301	Input Volt.: 100V, Load Current:0~0.22A
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Model	YW512A																												
Item	Leakage Current 漏洩電流	Temperature	25℃																										
Object	_____	Testing Circuitry	Figure B																										
<p>1. Results</p> <table border="1"> <thead> <tr> <th rowspan="2">Standards</th><th colspan="3">Leakage Current [mA]</th></tr> <tr> <th>Input Volt. 85 [V]</th><th>Input Volt. 100 [V]</th><th>Input Volt. 132 [V]</th></tr> </thead> <tbody> <tr> <td>(A) DENTORI</td><td>0.16</td><td>0.19</td><td>0.25</td></tr> <tr> <td>(B) IEC60950</td><td>0.15</td><td>0.19</td><td>0.25</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th rowspan="2">Standards</th><th colspan="3">Leakage Current [mA]</th></tr> <tr> <th>Input Volt. 170 [V]</th><th>Input Volt. 230 [V]</th><th>Input Volt. 264 [V]</th></tr> </thead> <tbody> <tr> <td>(B) IEC60950</td><td>—</td><td>—</td><td>—</td></tr> </tbody> </table>				Standards	Leakage Current [mA]			Input Volt. 85 [V]	Input Volt. 100 [V]	Input Volt. 132 [V]	(A) DENTORI	0.16	0.19	0.25	(B) IEC60950	0.15	0.19	0.25	Standards	Leakage Current [mA]			Input Volt. 170 [V]	Input Volt. 230 [V]	Input Volt. 264 [V]	(B) IEC60950	—	—	—
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		<p>2. Condition</p> <p>Leakage current value is concluded after measuring both phases of AC input and by choosing the larger one.</p> <p>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。</p>																											



**COSEL**

Model		YW512A		Temperature		25°C	
Item		Line Noise Tolerance 入力雑音耐量		Testing Circuitry		Figure C	
Object		+12.0V0.22A					
1. Results							
Pulse Width [n S]	MODE	No protection failure should occur 保護回路の誤動作がない	DC-like Regulation of Output Voltage 出力電圧の直流的変動	Conditions			
50	COMMON	OK	no fluctuation	Input Voltage :100 V			
	NORMAL	OK	no fluctuation	Pulse Voltage :2000 V			
1000	COMMON	OK	no fluctuation	Pulse Cycle :10 mS			
	NORMAL	OK	no fluctuation	Pulse Input Duration:1 min. or more			
				Load :100 %			

Object		-12.0V0.22A					
1. Results							
Pulse Width [n S]	MODE	No protection failure should occur 保護回路の誤動作がない	DC-like Regulation of Output Voltage 出力電圧の直流的変動	Conditions			
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	NORMAL	OK	no fluctuation	Pulse Input Duration:1 min. or more			
				Load :100 %			

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BC-3203

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Model	YW512A	Testing Circuitry Figure D
Item	Conducted Emission 雑音端子電圧	
Object	_____	

## 1. Graph

## Remarks

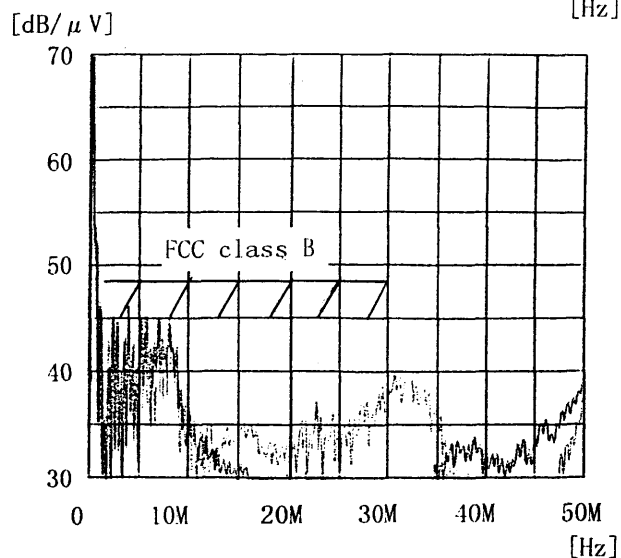
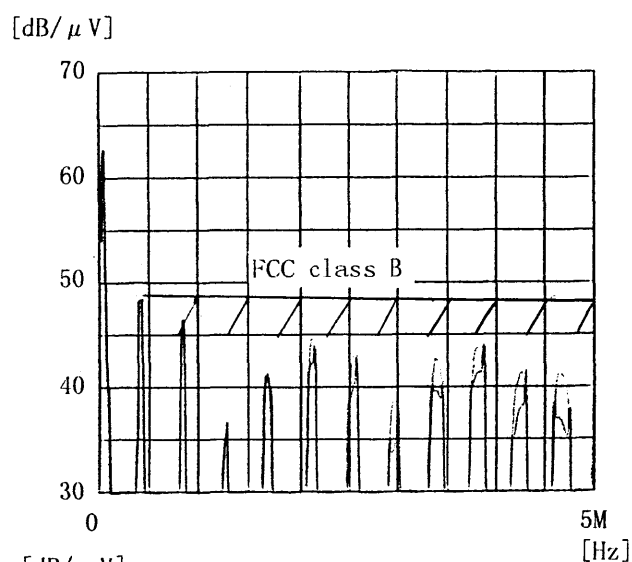
Input Volt. 120 V

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



# COSEL

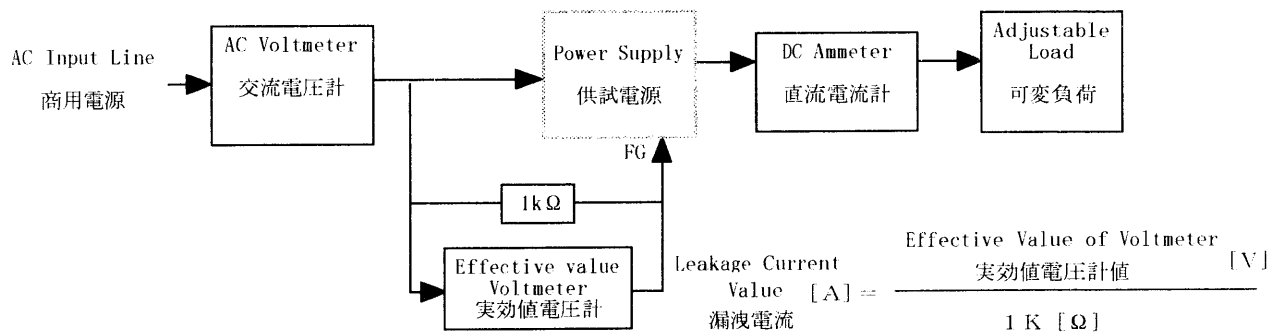
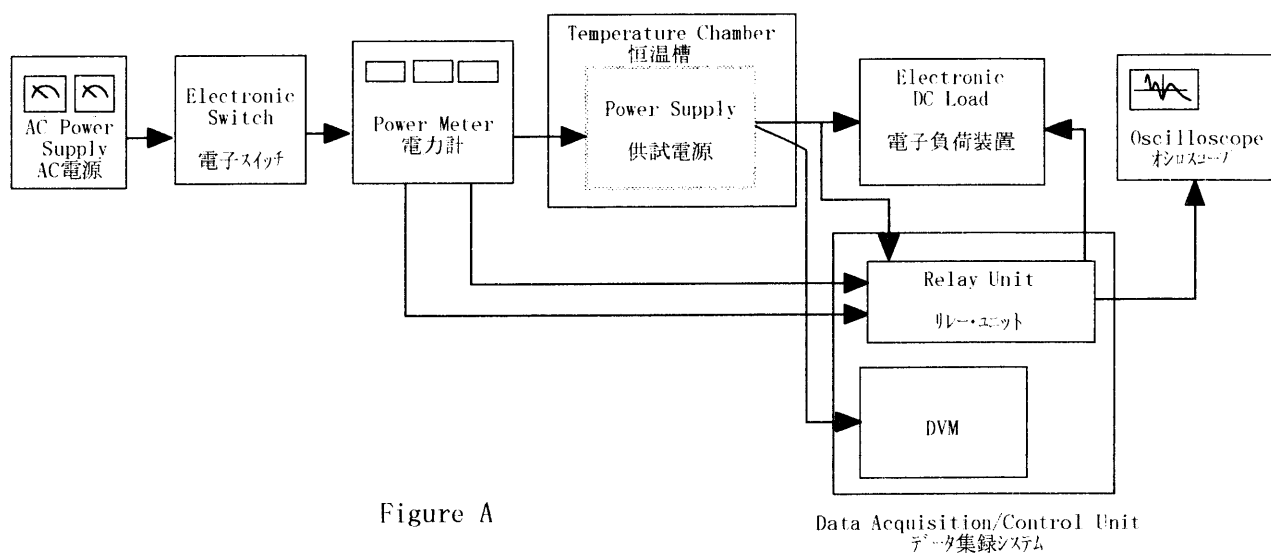


Figure B (DENTOR1)

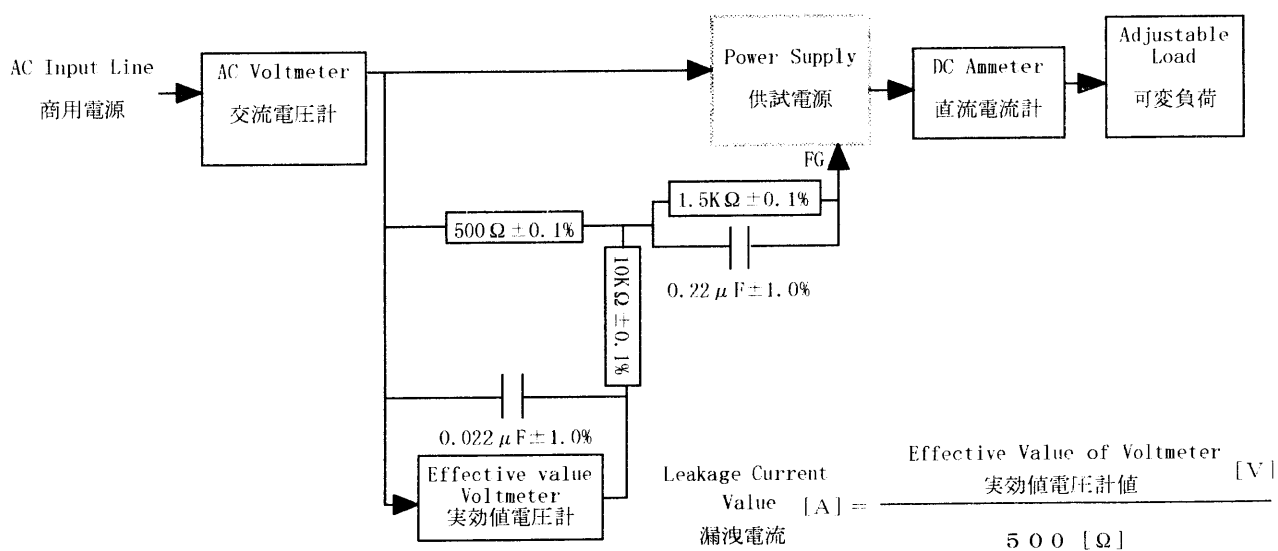


Figure B (IEC 60950)

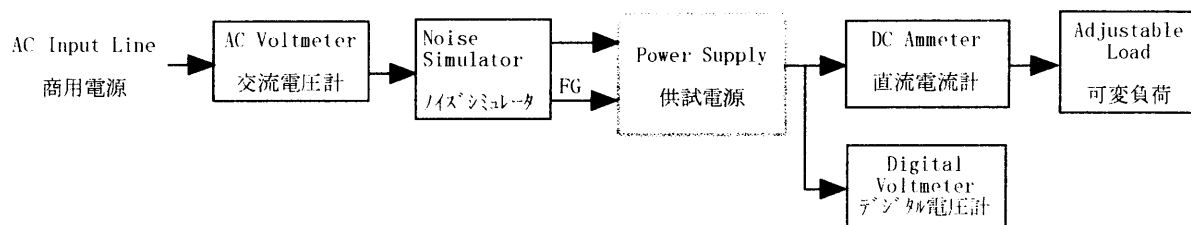


Figure C

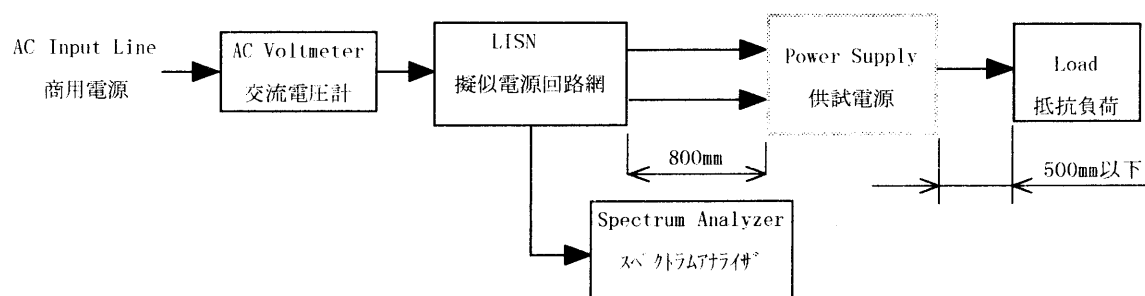


Figure D

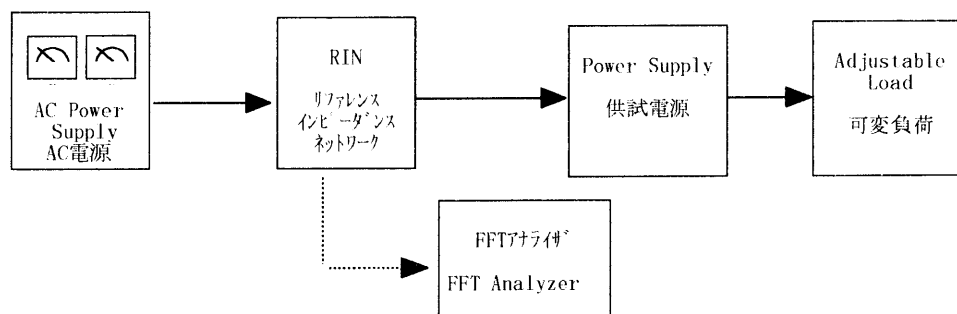


Figure E