参考資料

COSEL

TEST DATA OF YW1012A
(100V INPUT)

Regulated DC Power Supply

Date : Aug. 3, 1999

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コーセル株式会社

COSEL CO., LTD.

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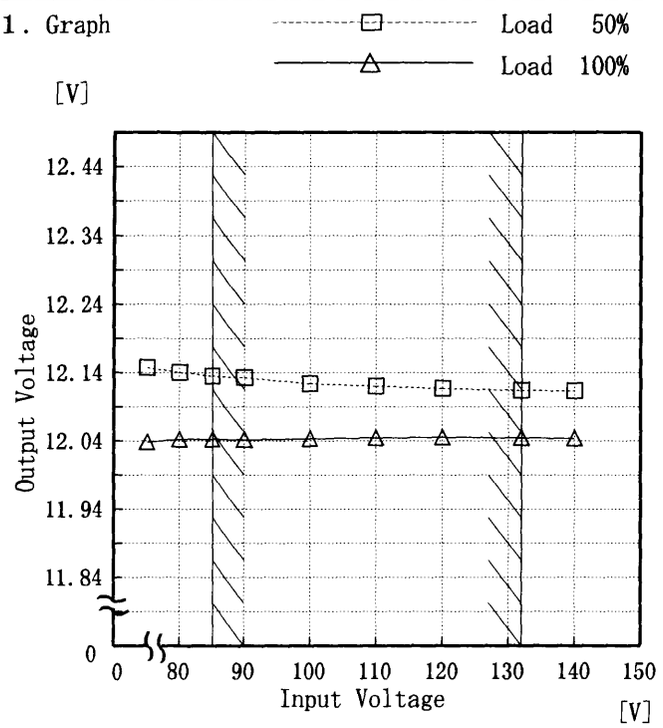
COSEL

Model	YW1012A
Item	Line Regulation 静的入力変動

Temperature 25℃
Testing Circuitry Figure A

Object +12.0V0.45A

1. Graph

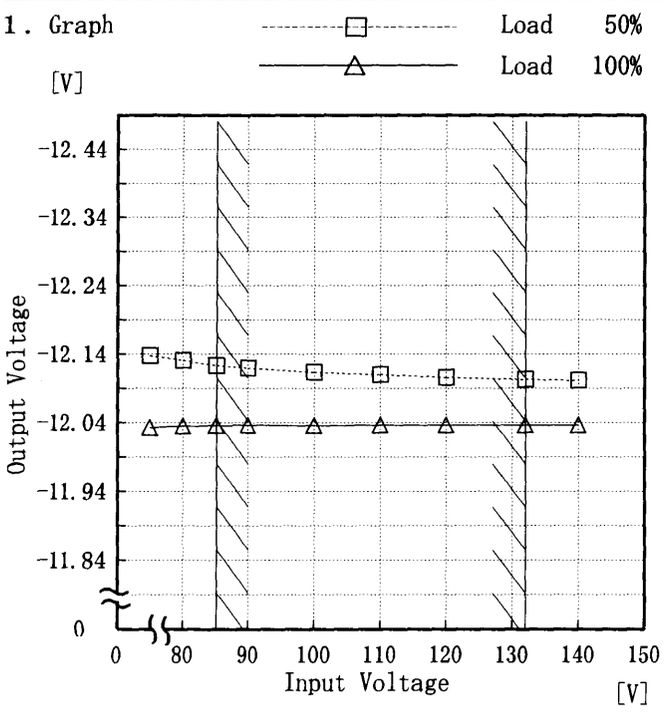


2. Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
75	12.147	12.039
80	12.140	12.043
85	12.135	12.043
90	12.133	12.042
100	12.124	12.044
110	12.120	12.045
120	12.117	12.045
132	12.114	12.045
140	12.114	12.044

Object −12.0V0.45A

1. Graph



Note: Slanted line shows the range of the rated input voltage.
(注)斜線は定格入力電圧範囲を示す。

2. Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
75	-12.138	-12.033
80	-12.131	-12.036
85	-12.124	-12.036
90	-12.120	-12.037
100	-12.114	-12.036
110	-12.110	-12.036
120	-12.106	-12.037
132	-12.104	-12.037
140	-12.102	-12.037

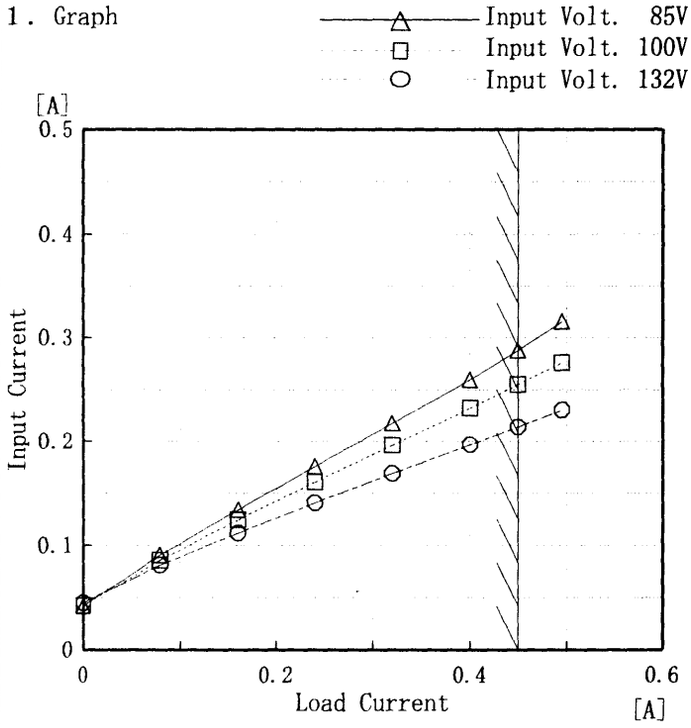
BC−3205

COSEL

Model	YW1012A
Item	Input Current (by Load Current) 入力電流（負荷特性）
Output	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

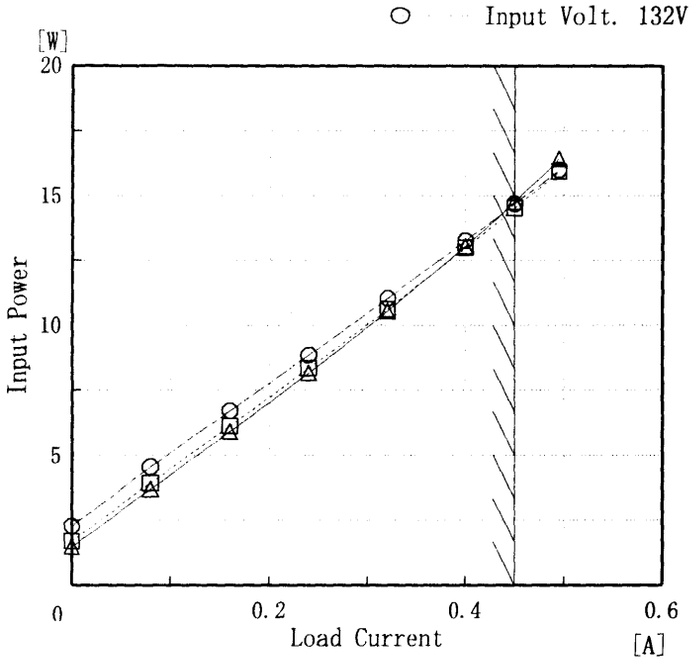
Load Current [A]	Input Current [A] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	0.041	0.042	0.045
0.080	0.091	0.086	0.081
0.160	0.134	0.124	0.112
0.240	0.176	0.161	0.141
0.320	0.218	0.196	0.169
0.400	0.260	0.232	0.197
0.450	0.288	0.255	0.214
0.495	0.316	0.276	0.230
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW1012A
Item	Input Power (by Load Current) 入力電力（負荷特性）
Output	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

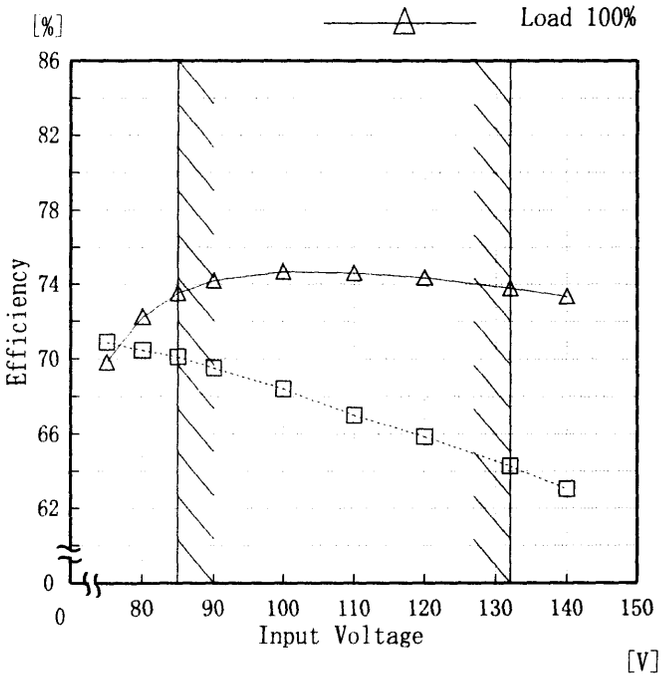
Load Current [A]	Input Power [W] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	1.46	1.68	2.26
0.080	3.71	3.94	4.57
0.160	5.91	6.13	6.71
0.240	8.17	8.34	8.85
0.320	10.55	10.62	11.04
0.400	13.05	12.98	13.26
0.450	14.75	14.51	14.69
0.495	16.43	15.93	16.00
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW1012A
Item	Efficiency 効率
Object	――――――――――――

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

(注)斜線は定格入力電圧範囲を示す。

2. Values

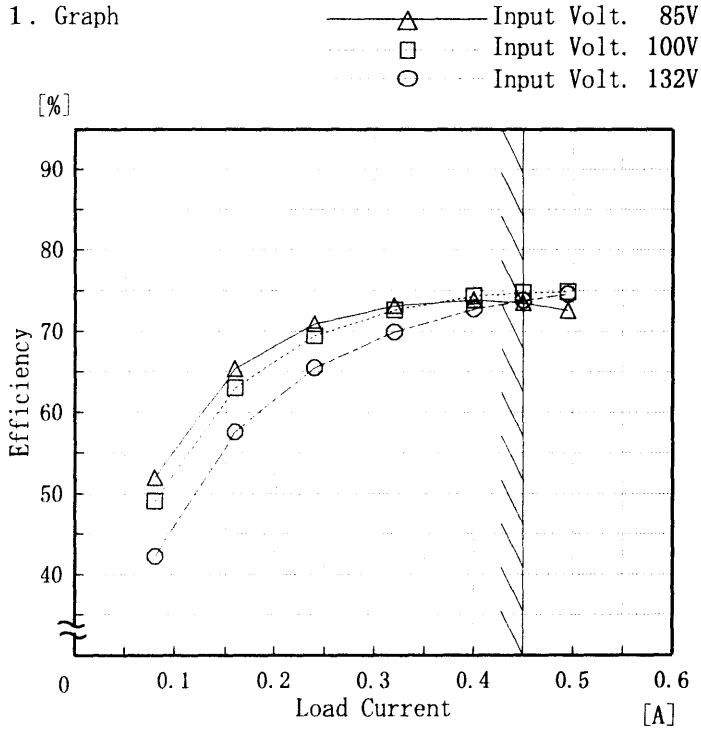
Input Voltage [V]	Efficiency [%]	
	Load 50%	Load 100%
75	70.9	69.8
80	70.4	72.2
85	70.1	73.5
90	69.5	74.2
100	68.4	74.7
110	67.0	74.6
120	65.9	74.4
132	64.3	73.8
140	63.1	73.4

COSEL

Model	YW1012A
Item	Efficiency (by Load Current) 効率 (負荷電流特性)
Output	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

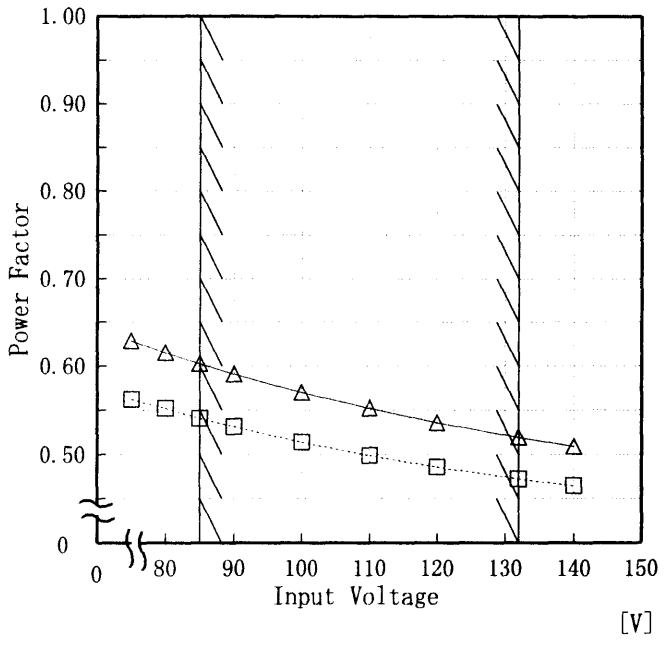
Load Current [A]	Efficiency [%] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.080	52.0	49.1	42.2
0.160	65.4	63.0	57.5
0.240	70.9	69.4	65.5
0.320	73.2	72.7	69.9
0.400	73.9	74.3	72.7
0.450	73.5	74.7	73.8
0.495	72.6	74.9	74.6
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW1012A
Item	Power Factor (by Input Voltage) 力率（入力電圧特性）
Object	――――――――――

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

(注)斜線は定格入力電圧範囲を示す。

2. Values

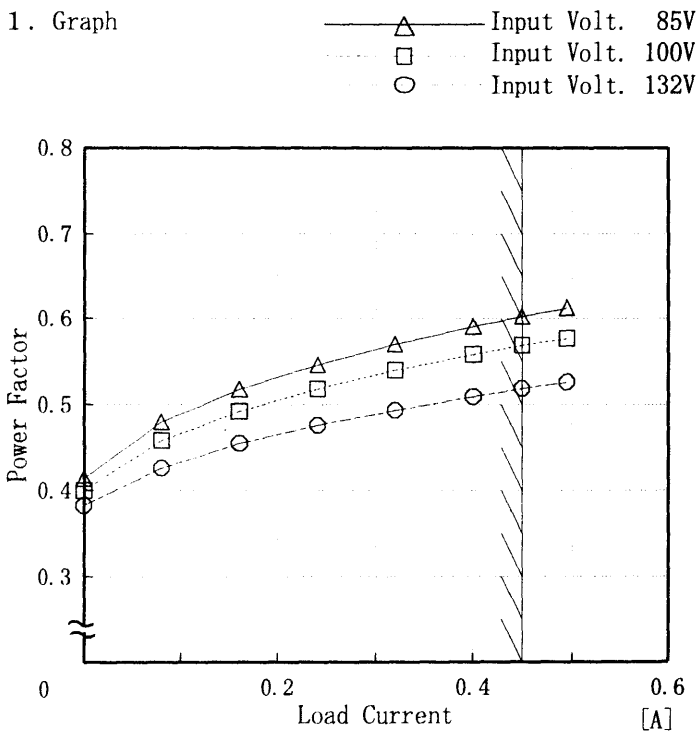
Input Voltage [V]	Power Factor	
	Load 50%	Load 100%
75	0.56	0.63
80	0.55	0.62
85	0.54	0.60
90	0.53	0.59
100	0.51	0.57
110	0.50	0.55
120	0.49	0.54
132	0.47	0.52
140	0.46	0.51

COSEL

Model	YW1012A
Item	Power Factor (by Load Current) 力率（負荷電流特性）
Output	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

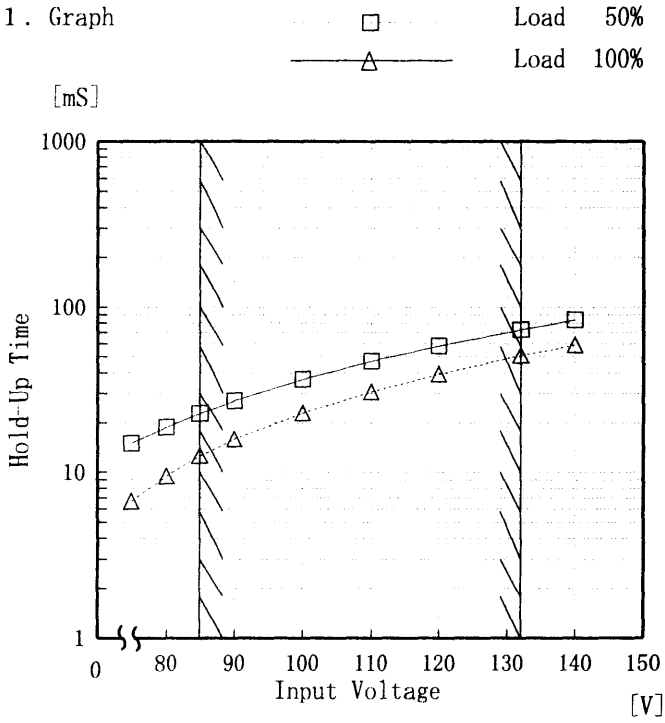
Load Current [A]	Power Factor Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	0.41	0.40	0.38
0.080	0.48	0.46	0.43
0.160	0.52	0.49	0.46
0.240	0.55	0.52	0.48
0.320	0.57	0.54	0.49
0.400	0.59	0.56	0.51
0.450	0.60	0.57	0.52
0.495	0.61	0.58	0.53
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW1012A
Item	Hold-Up Time 出力保持時間
Object	+12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

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

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

(注)斜線は定格入力電圧範囲を示す。

2. Values

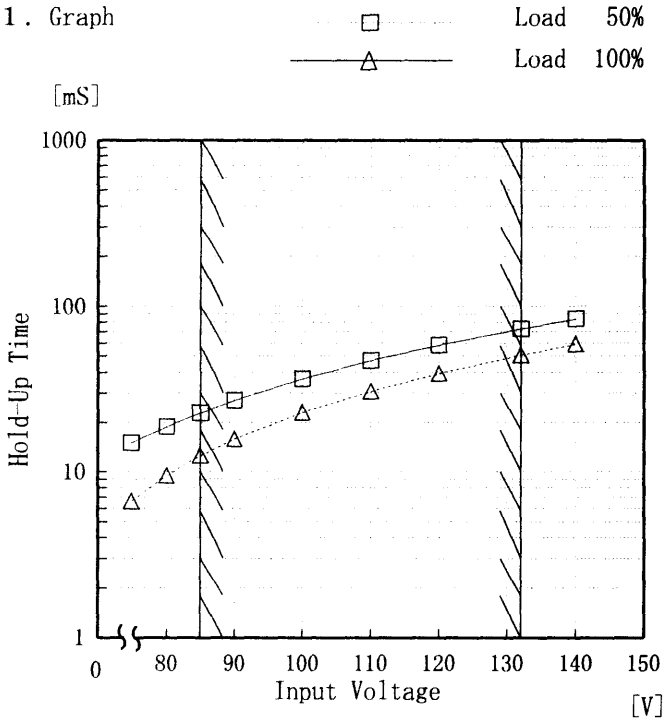
Input Voltage [V]	Hold-Up Time [mS]	
	Load 50%	Load 100%
75	15	7
80	19	10
85	23	13
90	27	16
100	37	23
110	47	31
120	58	39
132	73	51
140	84	59

COSEL

Model	YW1012A
Item	Hold-Up Time 出力保持時間
Object	−12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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

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

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

(注)斜線は定格入力電圧範囲を示す。

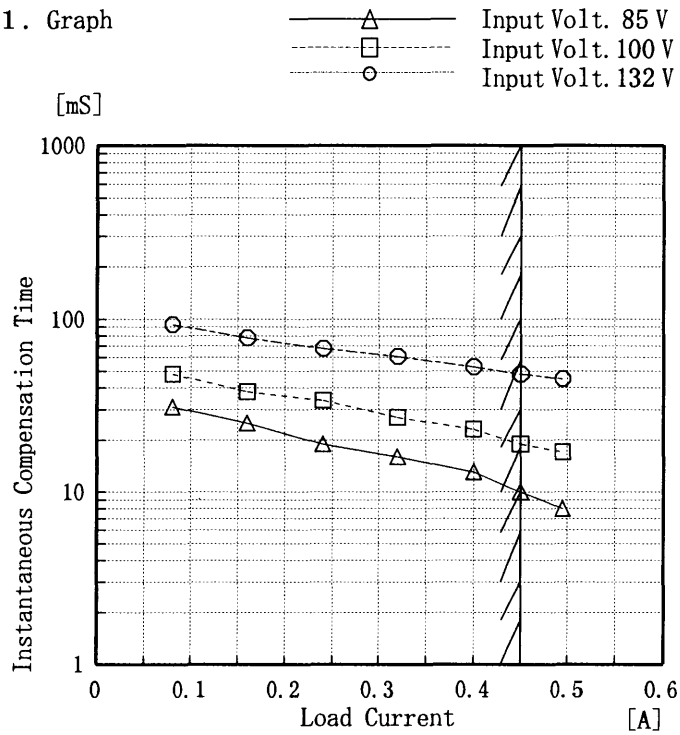
2. Values

Input Voltage [V]	Hold-Up Time [mS]	
	Load 50%	Load 100%
75	15	7
80	19	10
85	23	13
90	27	16
100	37	23
110	47	31
120	58	39
132	73	51
140	84	59

COSEL

Model	YW1012A		
Item	Instantaneous Interruption Compensation 瞬時停電保障	Temperature Testing Circuitry	25℃ Figure A
Object	+12.0V0.45A		

1. Graph



This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.
Note:Slanted line shows the range of the rated load current.

瞬時停電保障時間とは、出力電圧が定電圧精度の規格範囲を保持している瞬時停電時間をいう。
(注)斜線は定格負荷電流範囲を示す。

2. Values

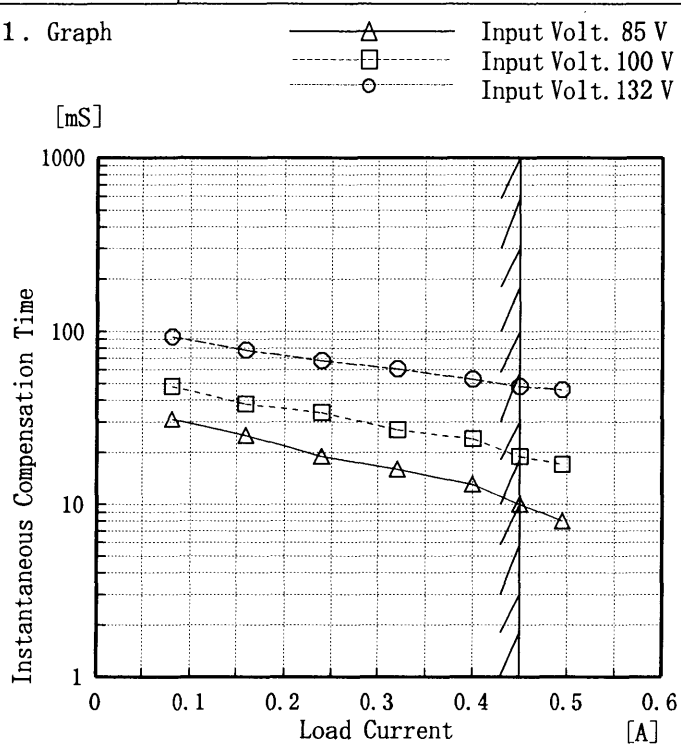
Load Current [A]	Time [mS]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	—	—	—
0.080	31	48	93
0.160	25	38	78
0.240	19	34	68
0.320	16	27	61
0.400	13	23	53
0.450	10	19	48
0.495	8	17	45
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW1012A
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	−12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.
Note:Slanted line shows the range of the rated load current.

瞬時停電保障時間とは、出力電圧が定電圧精度の規格範囲を保持している瞬時停電時間をいう。
(注)斜線は定格負荷電流範囲を示す。

2. Values

Load Current [A]	Time [mS]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	—	—	—
0.080	31	48	93
0.160	25	38	78
0.240	19	34	68
0.320	16	27	61
0.400	13	24	53
0.450	10	19	48
0.495	8	17	46
—	—	—	—
—	—	—	—
—	—	—	—

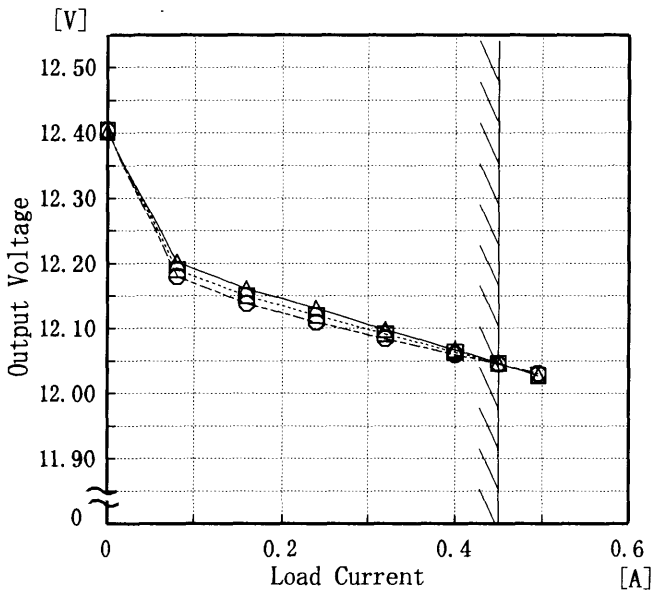
COSEL

Model	YW1012A
Item	Load Regulation 静的負荷変動

Temperature 25℃
Testing Circuitry Figure A

Object +12.0V0.45A

1. Graph

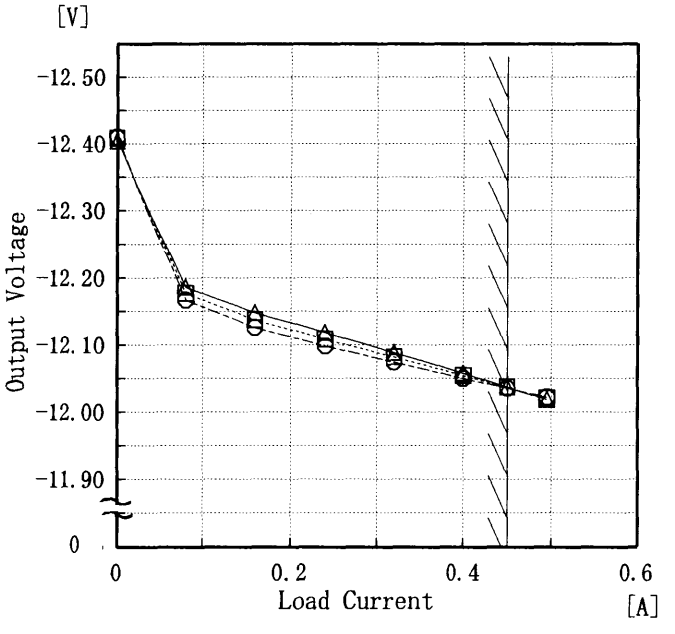


2. Values

Load Current [A]	Output Voltage [V] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	12.402	12.404	12.404
0.080	12.202	12.190	12.180
0.160	12.161	12.150	12.138
0.240	12.131	12.120	12.110
0.320	12.099	12.091	12.084
0.400	12.068	12.064	12.060
0.450	12.047	12.046	12.046
0.495	12.027	12.028	12.031
—	—	—	—
—	—	—	—

Object −12.0V0.45A

1. Graph



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

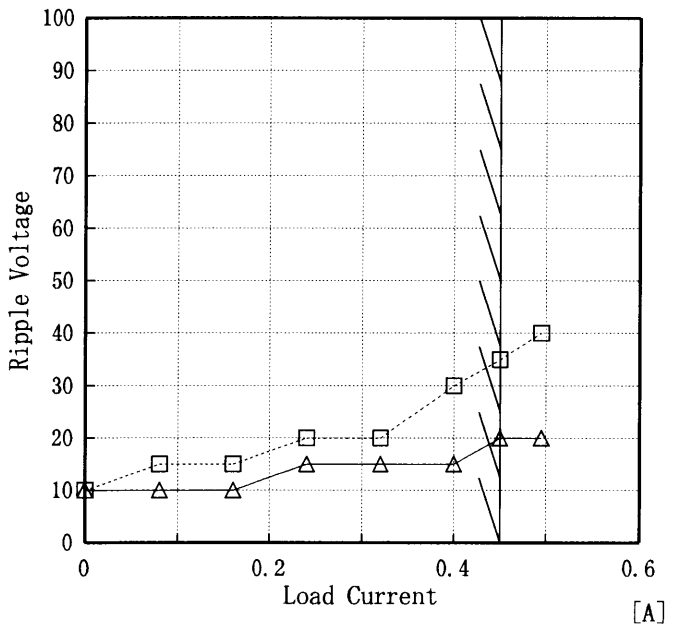
Load Current [A]	Output Voltage [V] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	-12.404	-12.409	-12.410
0.080	-12.186	-12.177	-12.167
0.160	-12.148	-12.137	-12.125
0.240	-12.118	-12.109	-12.098
0.320	-12.089	-12.082	-12.074
0.400	-12.058	-12.054	-12.050
0.450	-12.037	-12.037	-12.035
0.495	-12.019	-12.021	-12.022
—	—	—	—
—	—	—	—

COSEL

Model	YW1012A
Item	Ripple Voltage(by Load Current) リップル電圧(負荷電流特性)
Object	+12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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
ｽｲｯﾁﾝｸﾞ周期

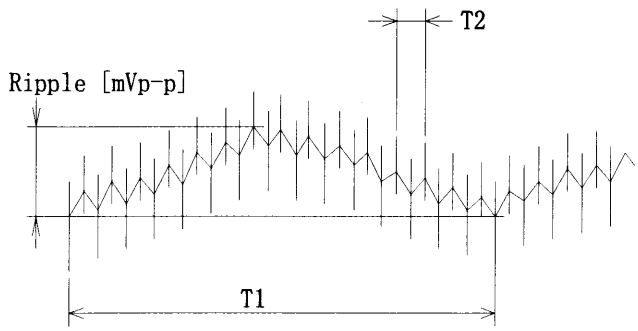


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

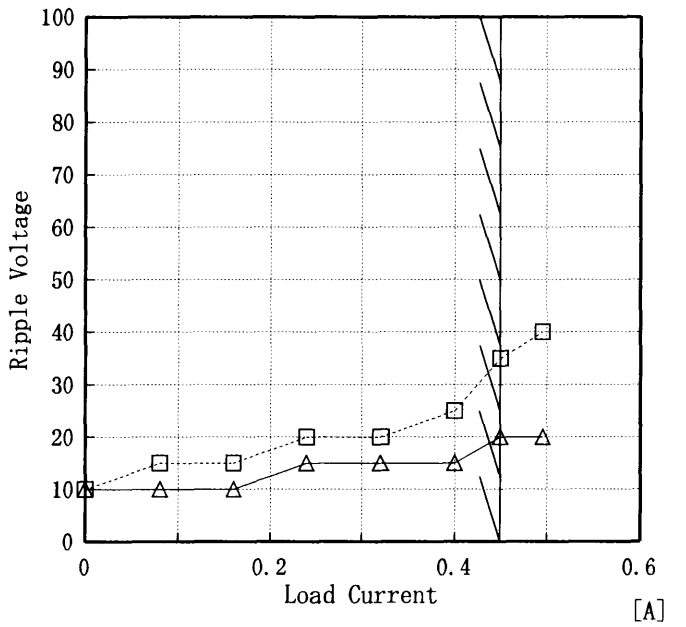
Load Current [A]	Input Volt. 85 [V] Ripple Output Volt. [mV]	Input Volt. 132 [V] Ripple Output Volt. [mV]
0.000	10	10
0.080	15	10
0.160	15	10
0.240	20	15
0.320	20	15
0.400	30	15
0.450	35	20
0.495	40	20
—	—	—
—	—	—
—	—	—

COSEL

Model	YW1012A
Item	Ripple Voltage(by Load Current) リップル電圧(負荷電流特性)
Object	-12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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
ｽｲｯﾁﾝｸﾞ周期

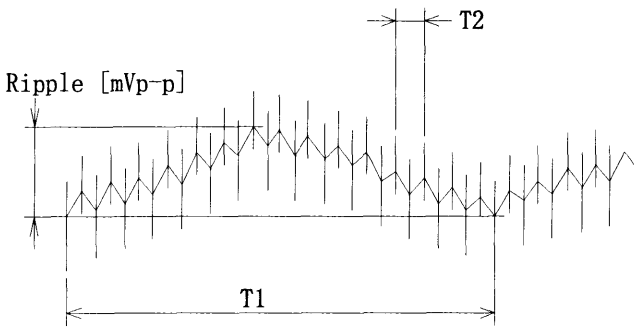


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

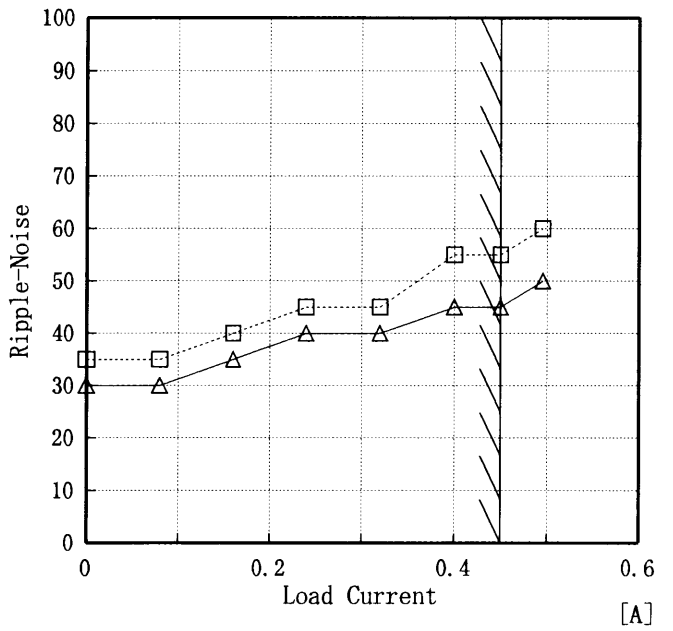
Load Current [A]	Input Volt. 85 [V] Ripple Output Volt. [mV]	Input Volt. 132 [V] Ripple Output Volt. [mV]
0.000	10	10
0.080	15	10
0.160	15	10
0.240	20	15
0.320	20	15
0.400	25	15
0.450	35	20
0.495	40	20
—	—	—
—	—	—
—	—	—

COSEL

Model	YW1012A
Item	Ripple-Noise リップルノイズ
Object	+12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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
ｽｲｯﾁﾝｸﾞ周期

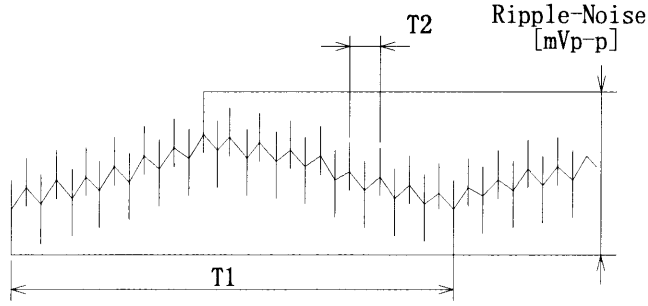


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

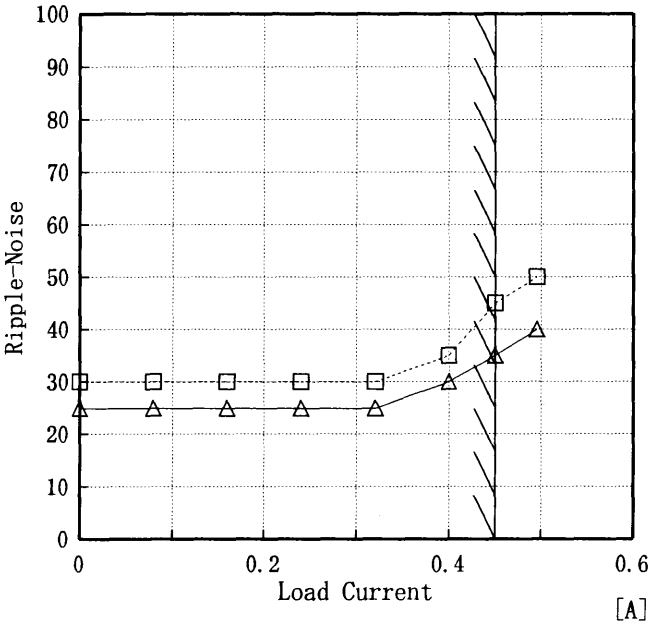
Load current [A]	Input Volt. 85 [V] Ripple-Noise [mV]	Input Volt. 132 [V] Ripple-Noise [mV]
0.000	35	30
0.080	35	30
0.160	40	35
0.240	45	40
0.320	45	40
0.400	55	45
0.450	55	45
0.495	60	50
—	—	—
—	—	—
—	—	—

COSEL

Model	YW1012A
Item	Ripple-Noise リップルノイズ
Object	-12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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。

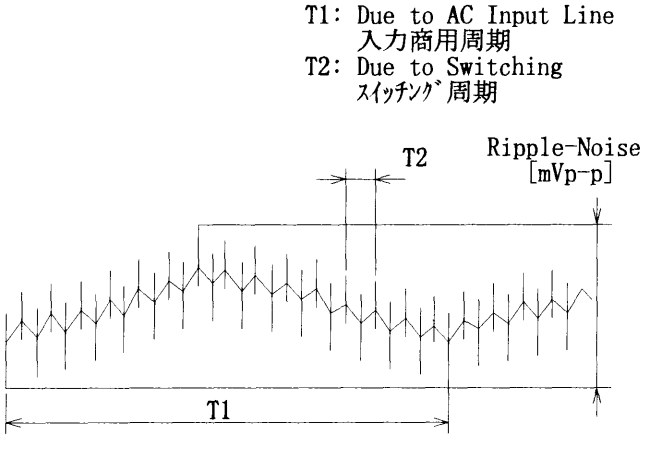


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

Load current [A]	Input Volt. 85 [V] Ripple-Noise [mV]	Input Volt. 132 [V] Ripple-Noise [mV]
0.000	30	25
0.080	30	25
0.160	30	25
0.240	30	25
0.320	30	25
0.400	35	30
0.450	45	35
0.495	50	40
—	—	—
—	—	—
—	—	—

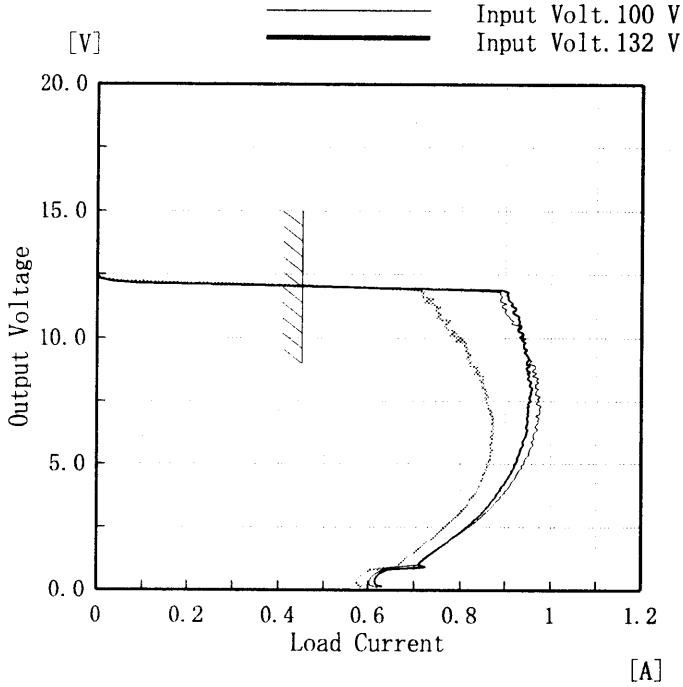
COSEL

Model	YW1012A
Item	Overcurrent Protection 過電流保護

Temperature 25℃
Testing Circuitry Figure A

Object +12.0V0.45A

1. Graph

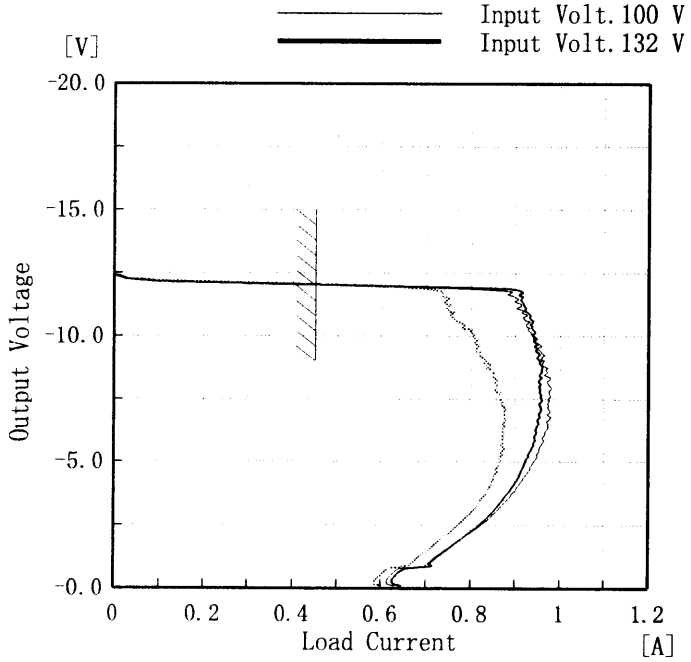


2. Values

Output Voltage [V]	Load Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
12.00	0.579	0.573	0.641
11.40	0.721	0.902	0.912
10.80	0.751	0.906	0.930
9.60	0.815	0.940	0.941
8.40	0.851	0.973	0.948
7.20	0.864	0.973	0.950
6.00	0.866	0.962	0.942
4.80	0.858	0.937	0.918
3.60	0.822	0.888	0.875
2.40	0.767	0.816	0.813
1.20	0.681	0.720	0.724
0.00	0.589	0.622	0.632

Object −12.0V0.45A

1. Graph



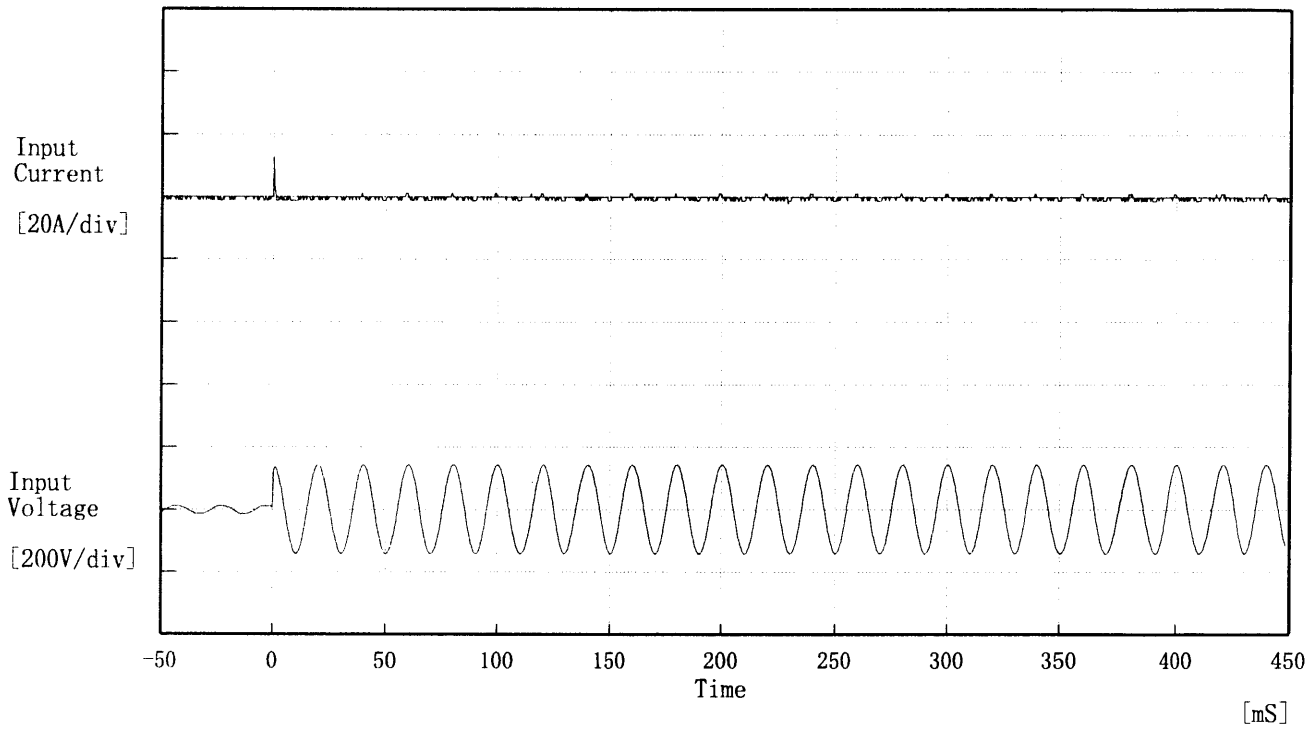
Note: Slanted line shows the range of the rated load current.
(注)斜線は定格負荷電流範囲を示す。

2. Values

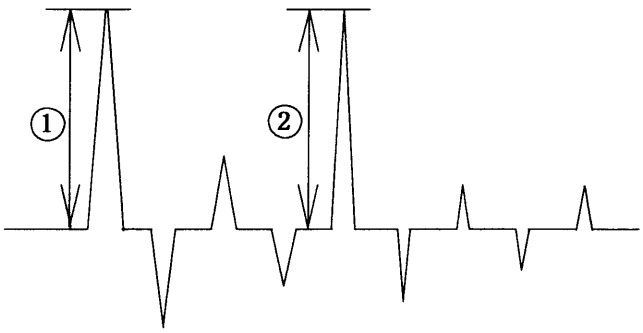
Output Voltage [V]	Load Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-12.00	0.611	0.623	0.678
-11.40	0.741	0.898	0.914
-10.80	0.754	0.929	0.934
-9.60	0.819	0.960	0.943
-8.40	0.849	0.966	0.954
-7.20	0.866	0.975	0.957
-6.00	0.873	0.964	0.943
-4.80	0.862	0.937	0.920
-3.60	0.827	0.890	0.878
-2.40	0.772	0.820	0.816
-1.20	0.683	0.722	0.726
0.00	0.599	0.632	0.647

COSEL

Model	YW1012A	Temperature 25℃
Item	Inrush Current 突入電流	Testing Circuitry Figure A
Object	――――――――	



Input Voltage 100 V
Frequency 50 Hz
Load 100 %
Inrush Current
① 12.35 [A]
② 2.23 [A]



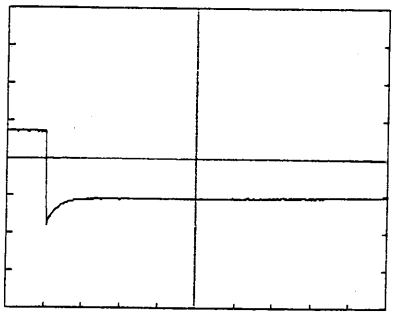
COSEL

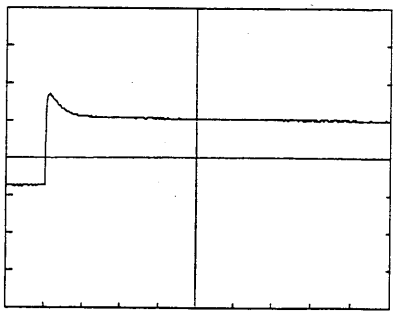
Model	YW1012A		
Item	Dynamic Load Responce 動的負荷変動	Temperature Testing Circuitry	25℃ Figure A
Object	+12.0V0.45A		

Input Volt. 100 V
Cycle 200 mS

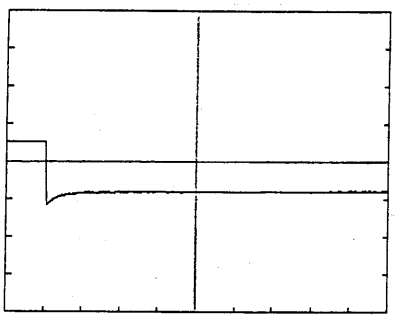
Load Current

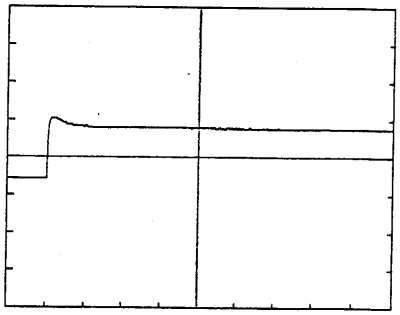
Load 0% ⟷
Load 100 %





Load 0% ⟷
Load 50 %





200 mV/div

2 mS/div

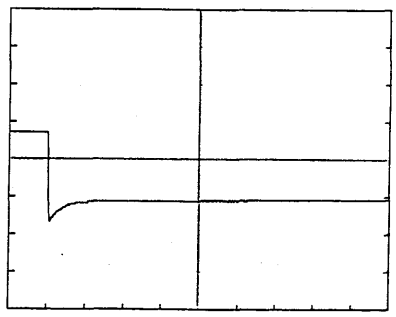
COSEL

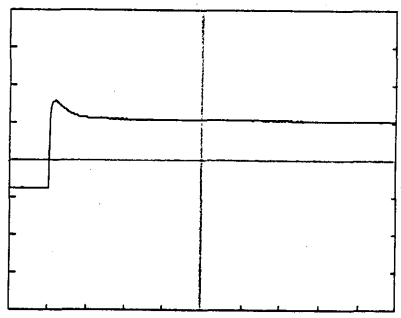
Model	YW1012A		
Item	Dynamic Load Responce 動的負荷変動	Temperature Testing Circuitry	25℃ Figure A
Object	-12.0V0.45A		

Input Volt. 100 V
Cycle 200 mS

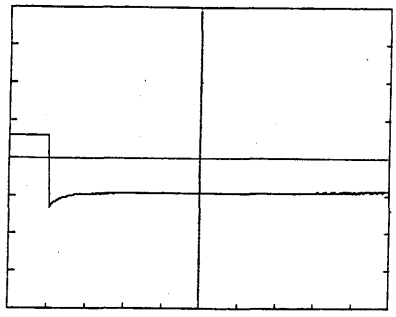
Load Current

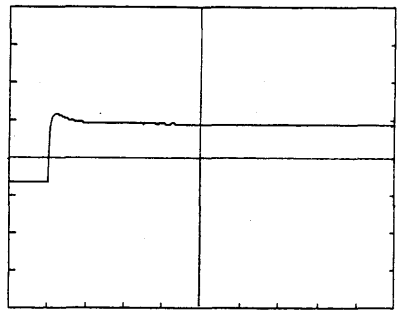
Load 0% ⟷
Load 100 %





Load 0% ⟷
Load 50 %





200 mV/div

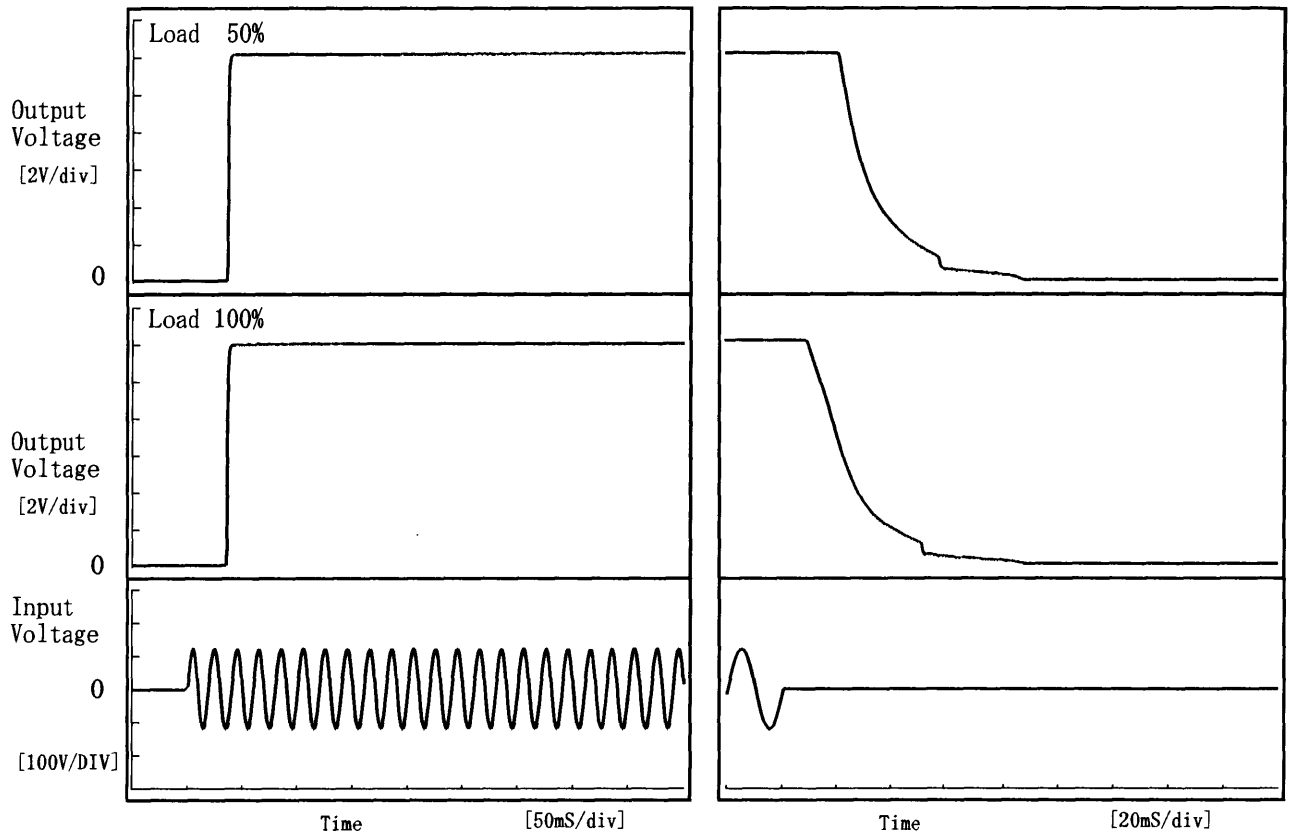
2 mS/div

COSEL

Model	YW1012A		
Item	Rise and Fall Time 立上り、立下り時間	Temperature Testing Circuitry	25℃ Figure A
Object	+12.0V0.45A		

1. Graph

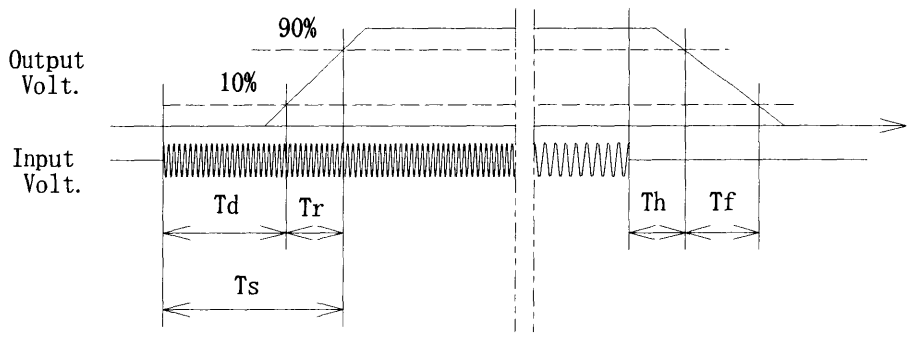
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	35.5	1.3	36.8	22.8	35.8
100 %	35.3	1.5	36.8	12.6	39.4



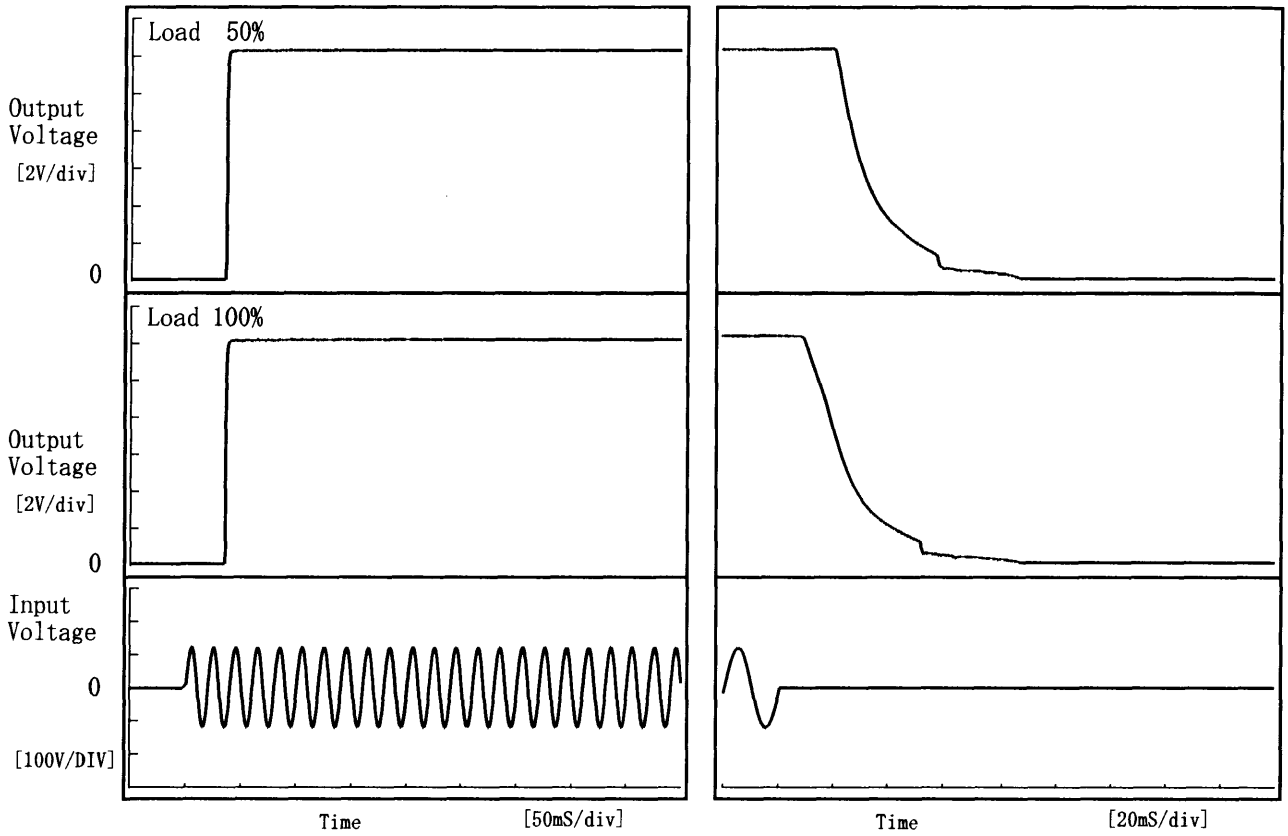
BC－3205

COSEL

Model	YW1012A		
Item	Rise and Fall Time 立上り、立下り時間	Temperature Testing Circuitry	25℃ Figure A
Object	−12.0V0.45A		

1. Graph

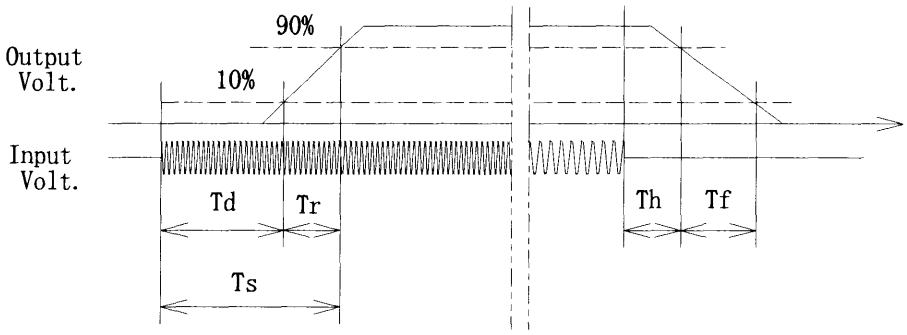
Input Volt. 85 V



2. Values

[mS]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	35.3	1.3	36.5	23.1	35.3
100 %	35.5	1.3	36.8	13.0	38.8



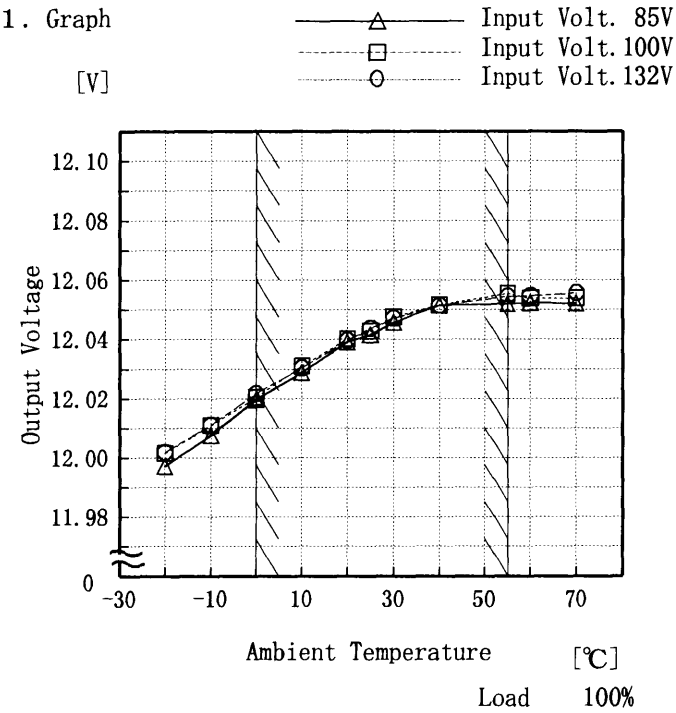
COSEL

Model	YW1012A
Item	Ambient Temperature Drift 周囲温度変動

Testing Circuitry Figure A

Object +12.0V0.45A

1. Graph

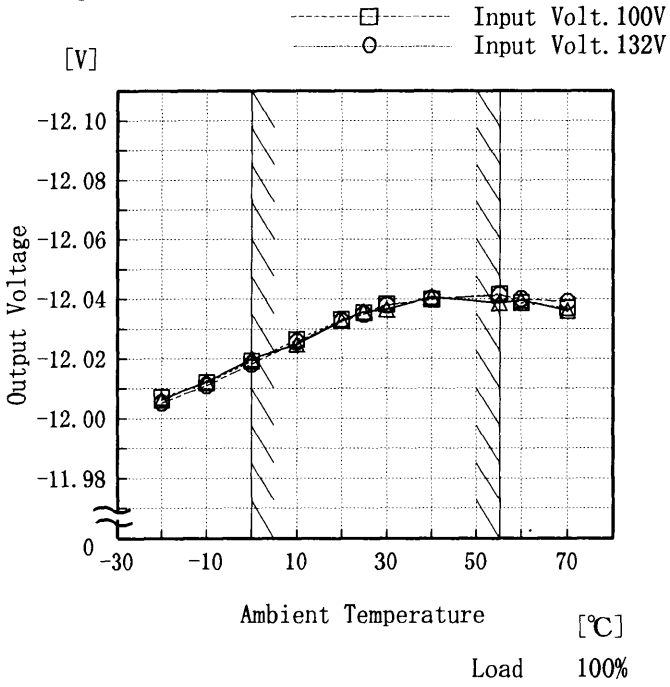


2. Values

Temperature [℃]	Output Voltage [V] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	11.997	12.002	12.002
-10	12.007	12.011	12.011
0	12.020	12.020	12.022
10	12.029	12.031	12.030
20	12.039	12.040	12.040
25	12.042	12.043	12.044
30	12.046	12.048	12.047
40	12.051	12.052	12.052
55	12.052	12.055	12.055
60	12.052	12.054	12.055
70	12.052	12.054	12.056

Object −12.0V0.45A

1. Graph



2. Values

Temperature [℃]	Output Voltage [V] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	-12.006	-12.007	-12.005
-10	-12.012	-12.012	-12.011
0	-12.020	-12.019	-12.018
10	-12.025	-12.026	-12.026
20	-12.033	-12.033	-12.033
25	-12.036	-12.035	-12.035
30	-12.037	-12.038	-12.038
40	-12.041	-12.040	-12.040
55	-12.039	-12.042	-12.041
60	-12.039	-12.039	-12.040
70	-12.036	-12.037	-12.039

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

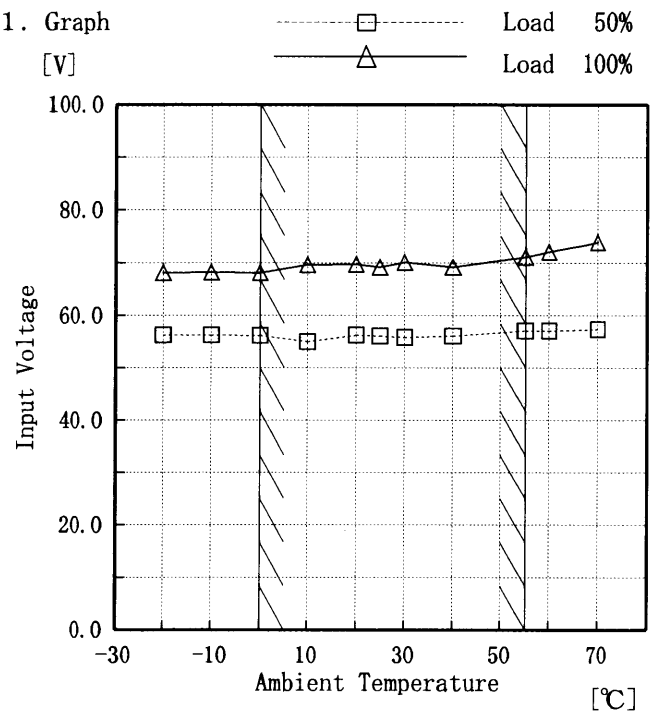
(注)斜線は定格周囲温度範囲を示す。

COSEL

Model	YW1012A
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+12.0V0.45A

Testing Circuitry Figure A

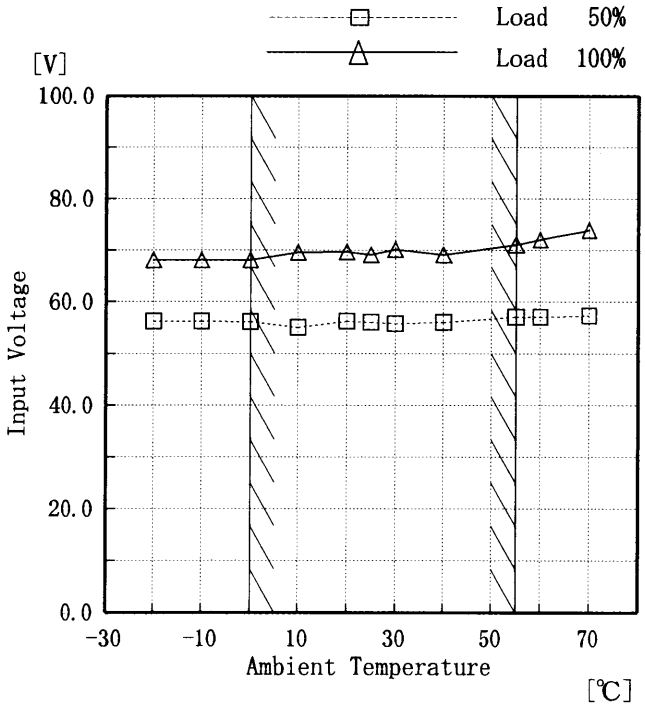
1. Graph



2. Values

Ambient Temperature [℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	56.3	68.1
-10	56.2	68.1
0	56.2	68.1
10	55.0	69.6
20	56.2	69.7
25	56.0	69.1
30	55.8	70.1
40	56.0	69.1
55	57.1	71.1
60	57.0	72.1
70	57.4	73.9

Object	−12.0V0.45A



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。

2. Values

Ambient Temperature [℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	56.3	68.1
-10	56.2	68.1
0	56.2	68.1
10	55.0	69.6
20	56.2	69.7
25	56.0	69.1
30	55.8	70.1
40	56.0	69.1
55	57.1	71.1
60	57.0	72.1
70	57.4	73.9

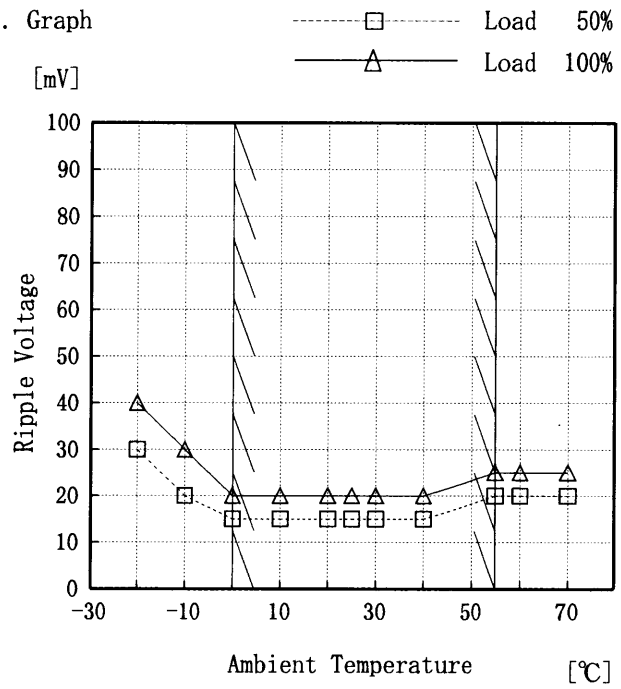
COSEL

Model	YW1012A
Item	Ripple Voltage (by Ambient Temp.) リップル電圧（周囲温度特性）

Testing Circuitry　Figure A

Object　+12.0V0.45A

1. Graph



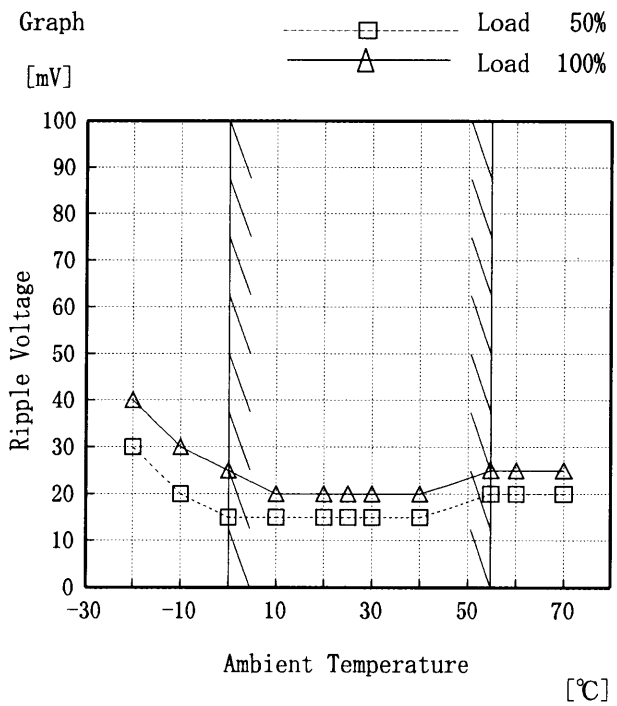
Input Volt.　100 V

2. Values

Ambient Temp. [℃]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]
-20	30	40
-10	20	30
0	15	20
10	15	20
20	15	20
25	15	20
30	15	20
40	15	20
55	20	25
60	20	25
70	20	25

Object　−12V0.45A

1. Graph



Input Volt.　100 V

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。

2. Values

Ambient Temp. [℃]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]
-20	30	40
-10	20	30
0	15	25
10	15	20
20	15	20
25	15	20
30	15	20
40	15	20
55	20	25
60	20	25
70	20	25

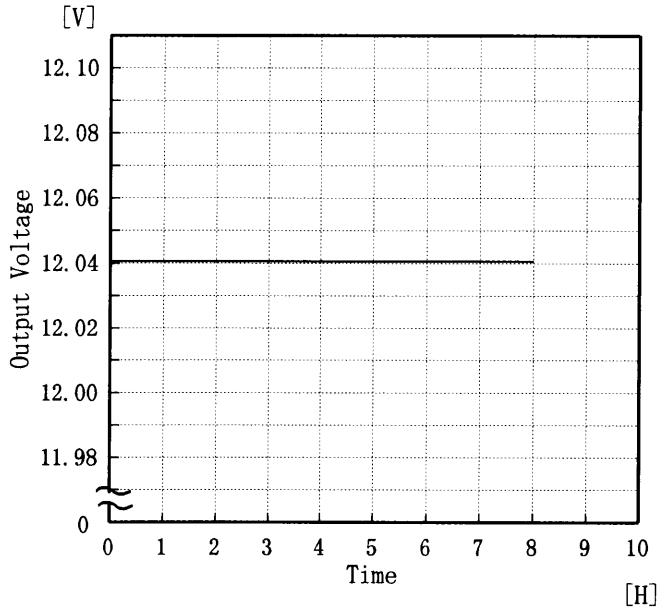
COSEL

Model	YW1012A
Item	Time Lapse Drift 経時ドリフト

Temperature 25 ℃
Testing Circuitry Figure A

Object	+12.0V0.45A

1. Graph



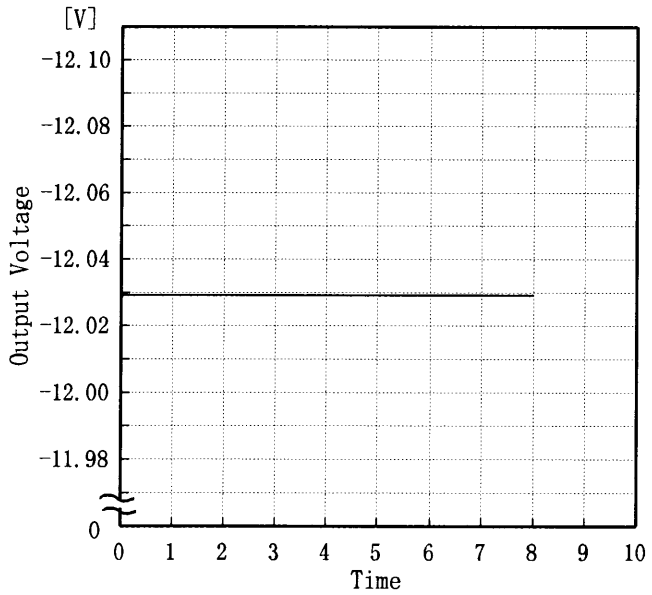
Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	12.036
0.5	12.041
1.0	12.041
2.0	12.041
3.0	12.041
4.0	12.041
5.0	12.041
6.0	12.041
7.0	12.041
8.0	12.041

Object	−12.0V0.45A

1. Graph



Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	-12.028
0.5	-12.029
1.0	-12.029
2.0	-12.029
3.0	-12.029
4.0	-12.029
5.0	-12.029
6.0	-12.029
7.0	-12.029
8.0	-12.029

BC−3205

COSEL

Model	YW1012A	
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 : 0～55 ℃

Input Voltage : 85～132 V

Load Current (AVR 1) : 0～0.45 A

(AVR 2) : 0～0.45 A

* Output Voltage Accuracy = ±(Maximum of Output Voltage − Minimum of Output Voltage)／2

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

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 0～55 ℃

入力電圧 85～132 V

負荷電流 (AVR 1) 0～0.45 A

(AVR 2) 0～0.45 A

* 定電圧精度(変動値) ＝ ±(出力電圧の最高値－出力電圧の最低値)／2

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

Object +12.0V0.45A

Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	55	132	0.00	12.405	±193	±1.7
Minimum Voltage	0	85	0.45	12.020		

Object −12.0V0.45A

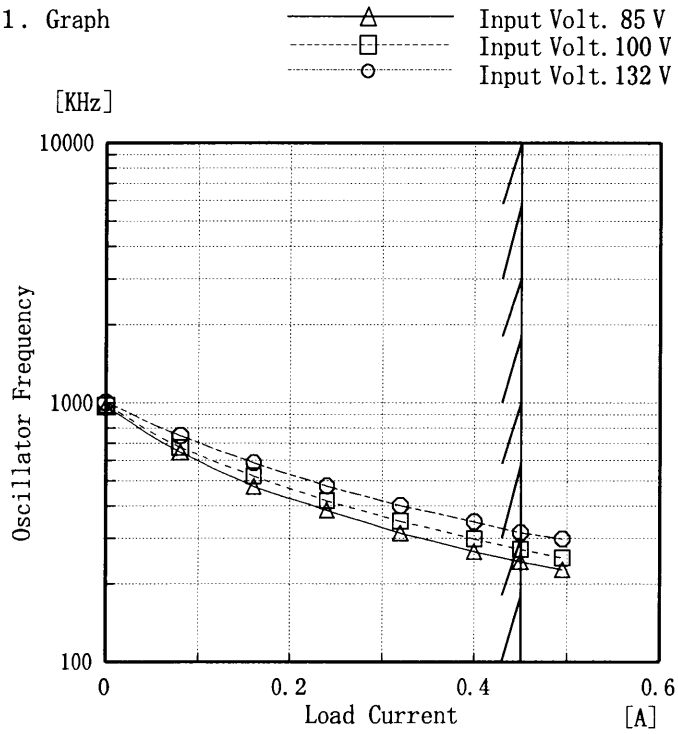
Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	55	132	0.00	-12.411	±197	±1.7
Minimum Voltage	0	132	0.45	-12.018		

COSEL

Model	YW1012A
Item	Oscillator Frequency 発振周波数
Object	+12.0V0.45A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



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]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Oscillator Frequency [KHz]		
0.000	962	980	1005
0.080	645	673	749
0.160	475	521	587
0.240	385	419	478
0.320	315	350	401
0.400	267	299	348
0.450	244	272	316
0.495	227	253	299
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW1012A	
Item	Condensation 結露特性	Testing Circuitry Figure A
Object	+12.0V0.45A	

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]	12.044	Input Volt.: 100V, Load Current:0.45A
Line Regulation [mV]	2	Input Volt.: 85～132V, Load Current:0.45A
Load Regulation [mV]	358	Input Volt.: 100V, Load Current:0.00～0.45A

COSEL

Model	YW1012A
Item	Condensation 結露特性
Object	−12.0V0.45A

Testing Circuitry Figure A

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]	-12.036	Input Volt.: 100V, Load Current:0.45A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:0.45A
Load Regulation [mV]	372	Input Volt.: 100V, Load Current:0.00～0.45A

COSEL

Model	YW1012A		
Item	Leakage Current 漏洩電流	Temperature Testing Circuitry	25℃ Figure B
Object	――――――		

1. Results

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	0.16	0.19	0.26

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

2. Condition

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

交流入力の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。

COSEL

Model	YS1012A		
Item	Line Noise Tolerance 入力雑音耐量	Temperature Testing Circuitry	25℃ Figure C
Object	————		

1. Results

Pulse Width [nS]	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
50	COMMON	OK	no fluctuation
	NORMAL	OK	no fluctuation
1000	COMMON	OK	no fluctuation
	NORMAL	OK	no fluctuation

Conditions

Input Voltage :100 V
Pulse Voltage :2000 V
Pulse Cycle :10 mS
Pulse Input Duration:1 min. or more
Load :100 %

COSEL

Model	YW1012A	
Item	Conducted Emission 雑音端子電圧	Testing Circuitry　Figure D
Object	――――――	

1. Graph

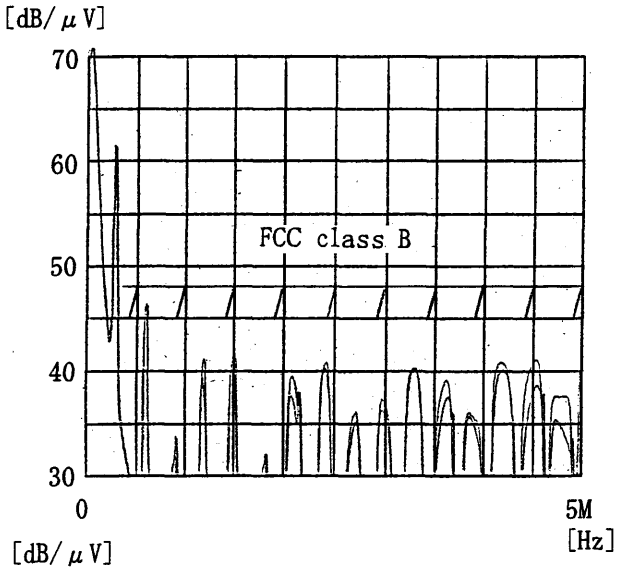
Remarks

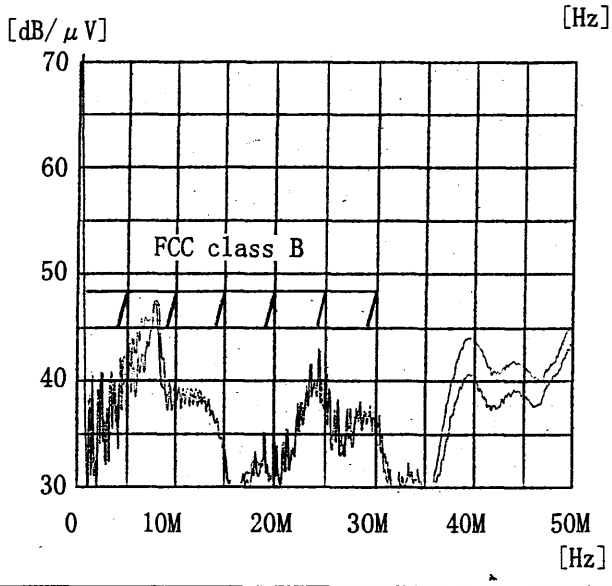
Input Volt.　120 V

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

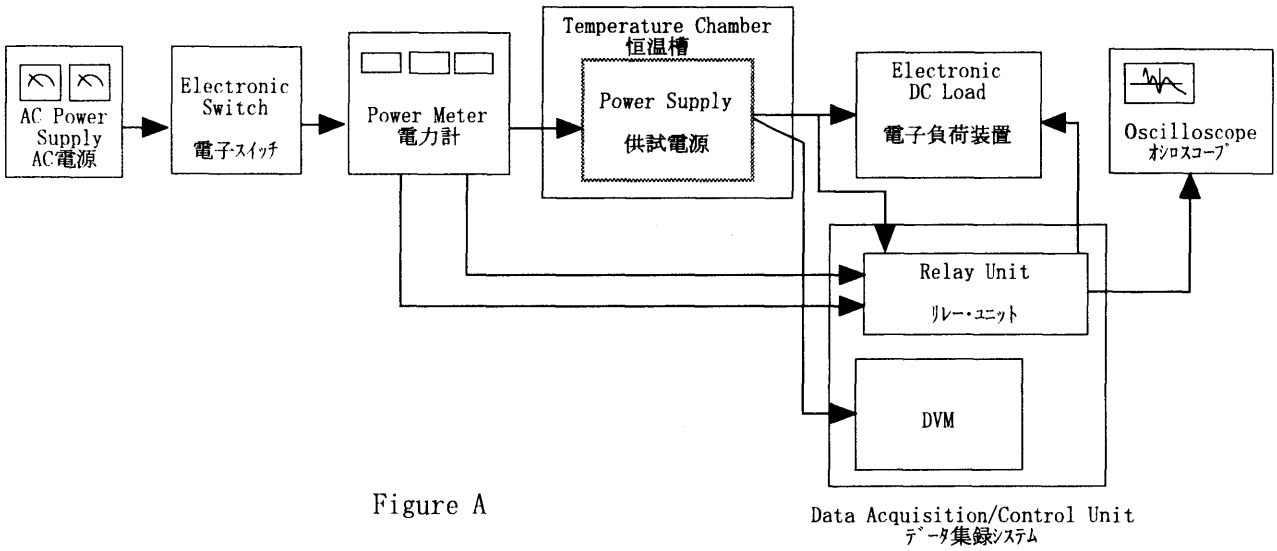


Figure A

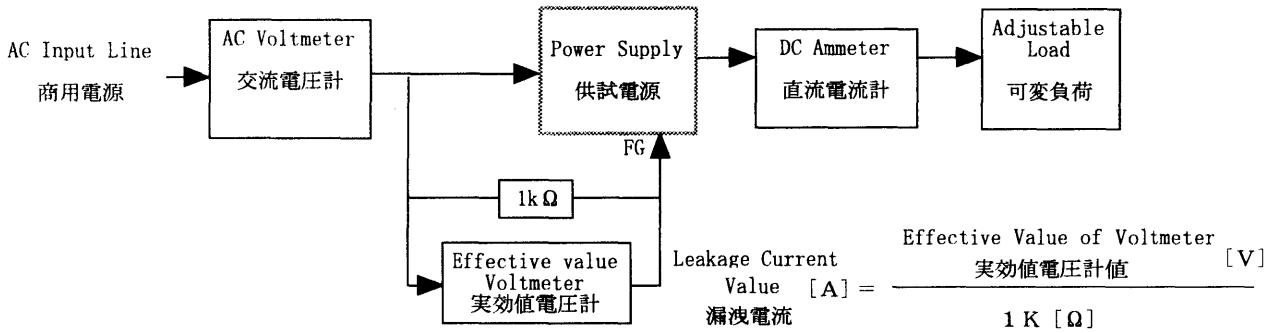


Figure B(DENTORI)

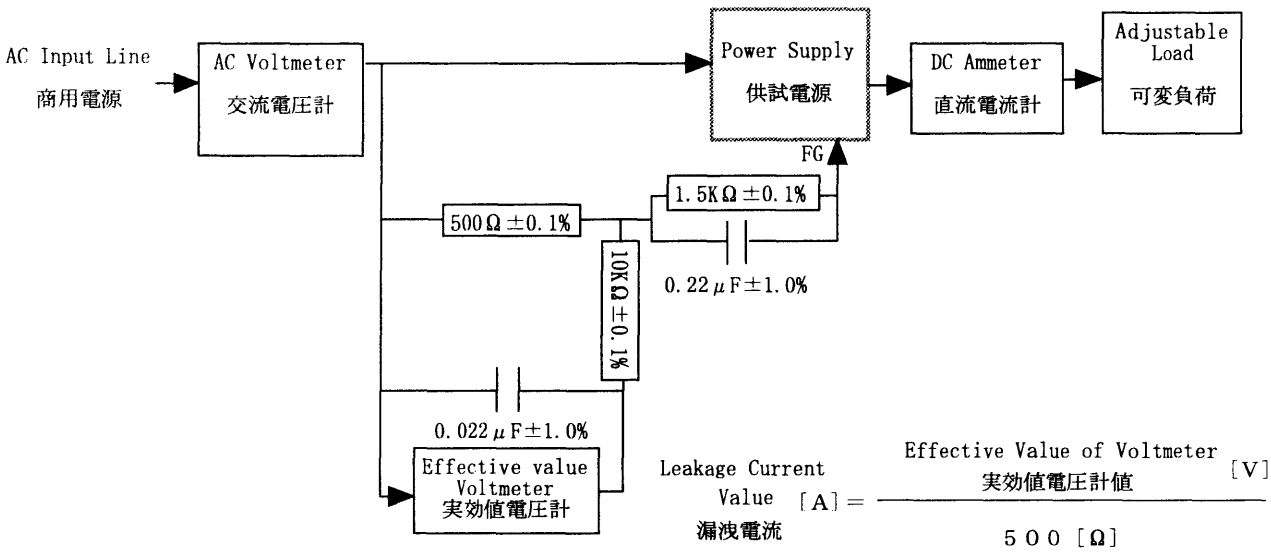


Figure B (IEC60950)

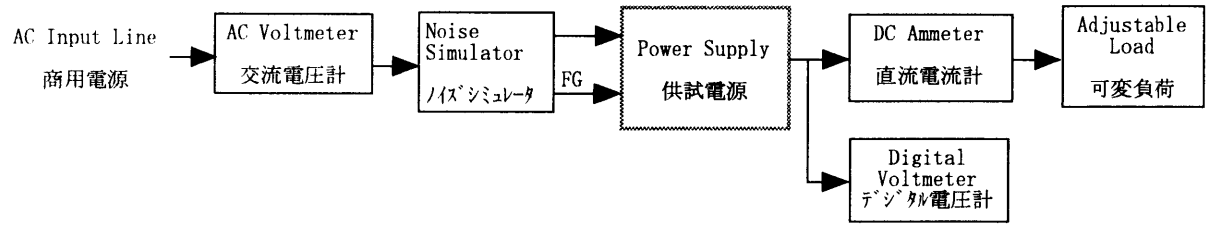


Figure C

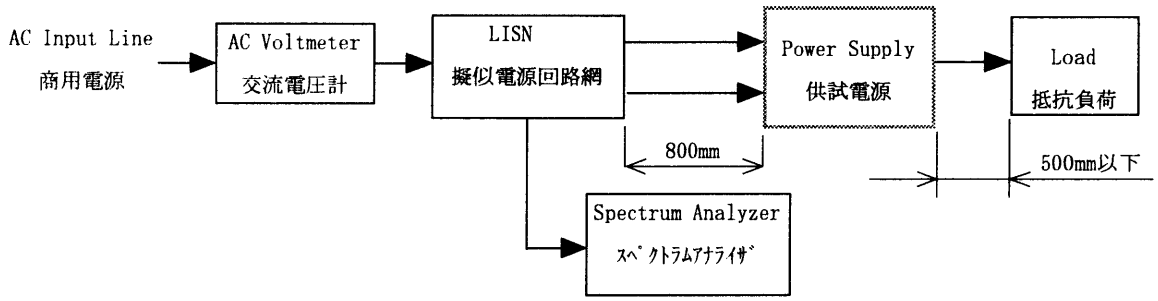


Figure D

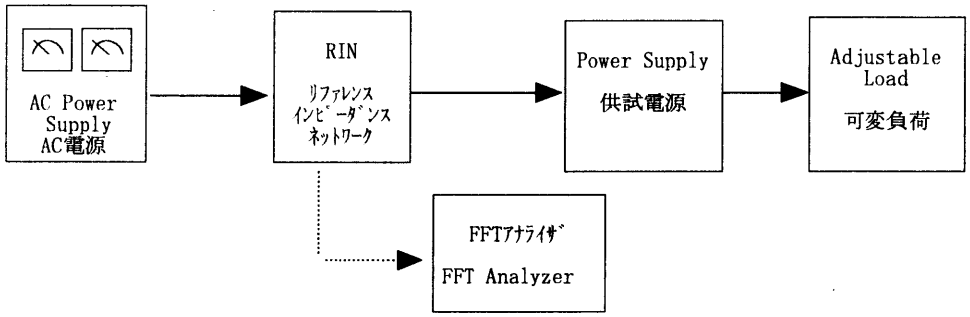


Figure E