参考資料

COSEL

TEST DATA OF YW515A

(100V INPUT)

Regulated DC Power Supply

Oct.1, 1999

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Design Engineer

コーセル株式会社

COSEL CO.,LTD.

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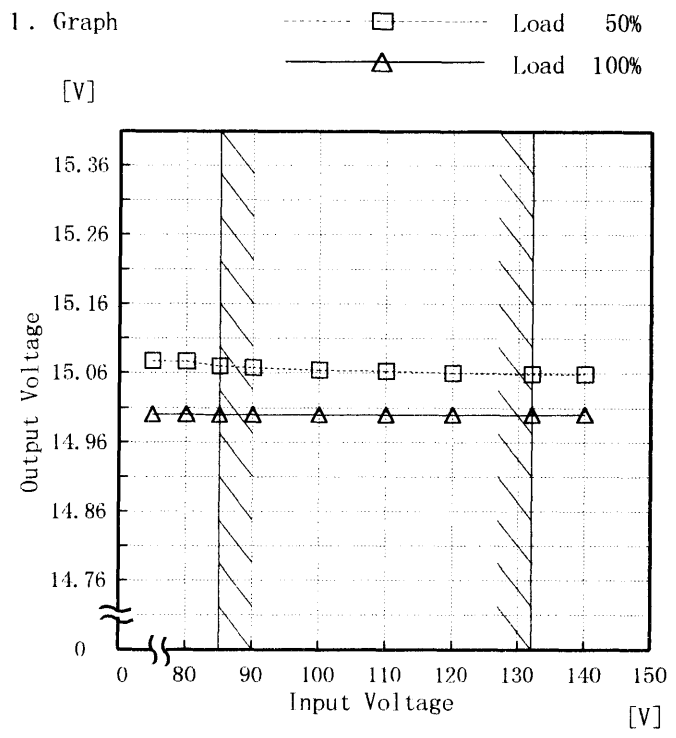
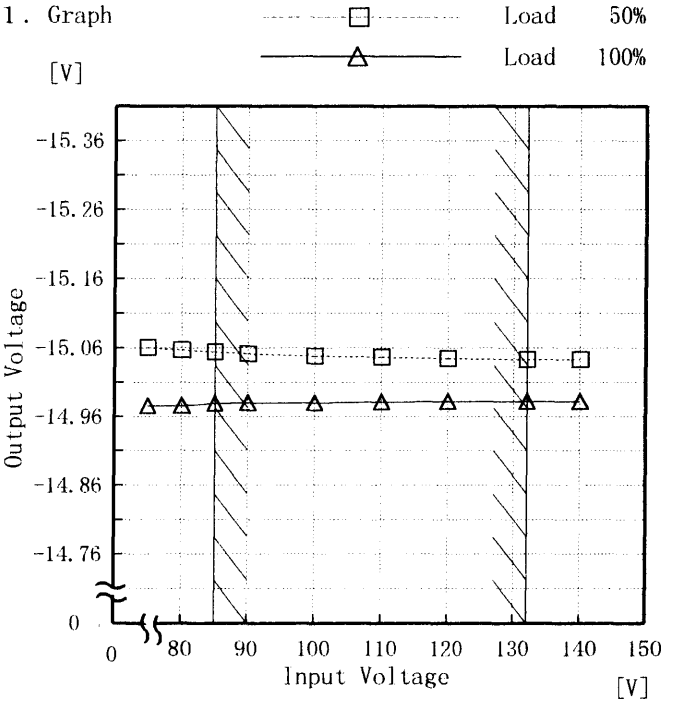


2. Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
75	15.078	15.001
80	15.077	15.001
85	15.070	15.000
90	15.068	15.000
100	15.064	15.000
110	15.063	15.000
120	15.061	15.000
132	15.059	15.000
140	15.059	15.000

Object −15.0V0.17A

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	−15.060	−14.976
80	−15.057	−14.976
85	−15.055	−14.979
90	−15.051	−14.980
100	−15.048	−14.980
110	−15.046	−14.981
120	−15.045	−14.982
132	−15.043	−14.982
140	−15.043	−14.982

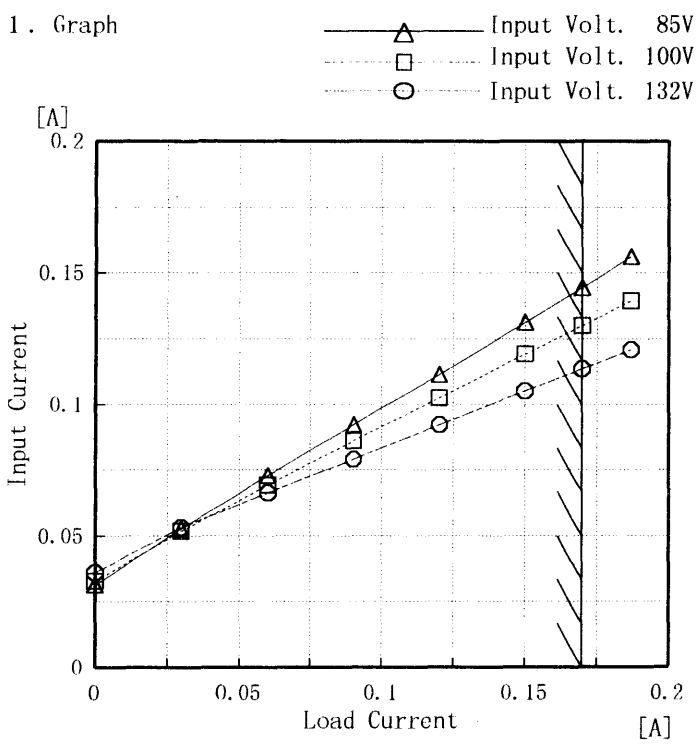
BC−3204

COSEL

Model	YW515A
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

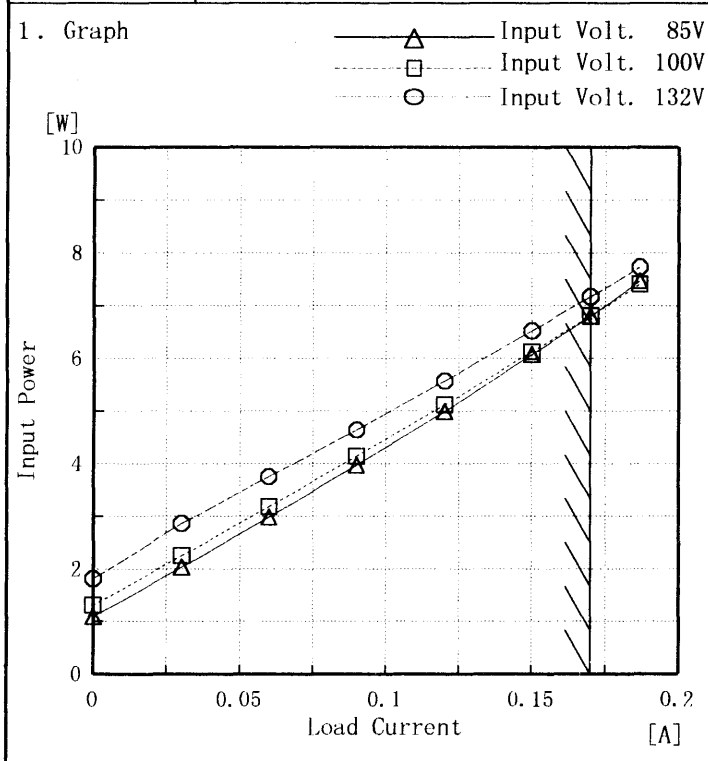
Load Current [A]	Input Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	0.031	0.033	0.036
0.030	0.053	0.052	0.053
0.060	0.073	0.069	0.066
0.090	0.092	0.086	0.079
0.120	0.112	0.103	0.092
0.150	0.131	0.119	0.105
0.170	0.144	0.130	0.114
0.187	0.156	0.140	0.121
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW515A
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

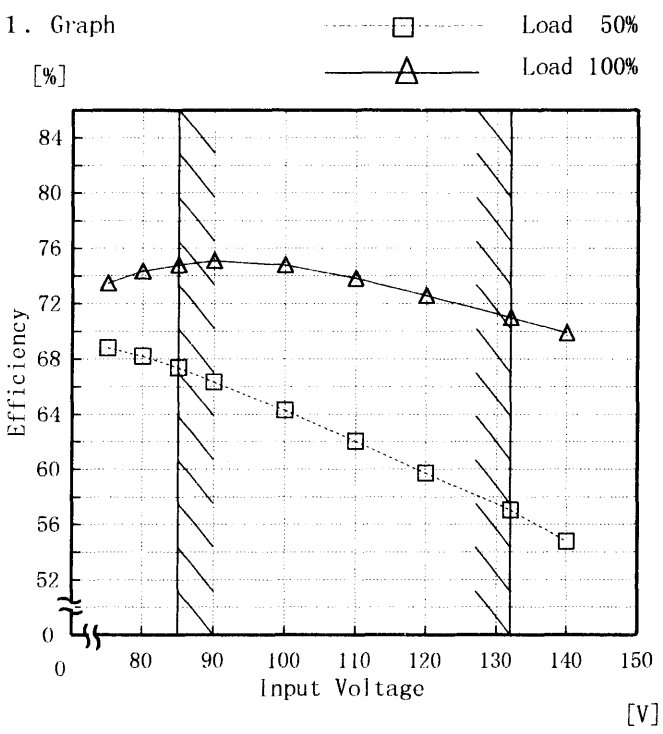
Load Current [A]	Input Power [W]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	1.09	1.31	1.81
0.030	2.03	2.25	2.86
0.060	2.98	3.18	3.75
0.090	3.97	4.14	4.64
0.120	4.99	5.12	5.57
0.150	6.07	6.13	6.53
0.170	6.80	6.81	7.17
0.187	7.47	7.41	7.74
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW515A
Item	Efficiency (by Input Voltage) 効率（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

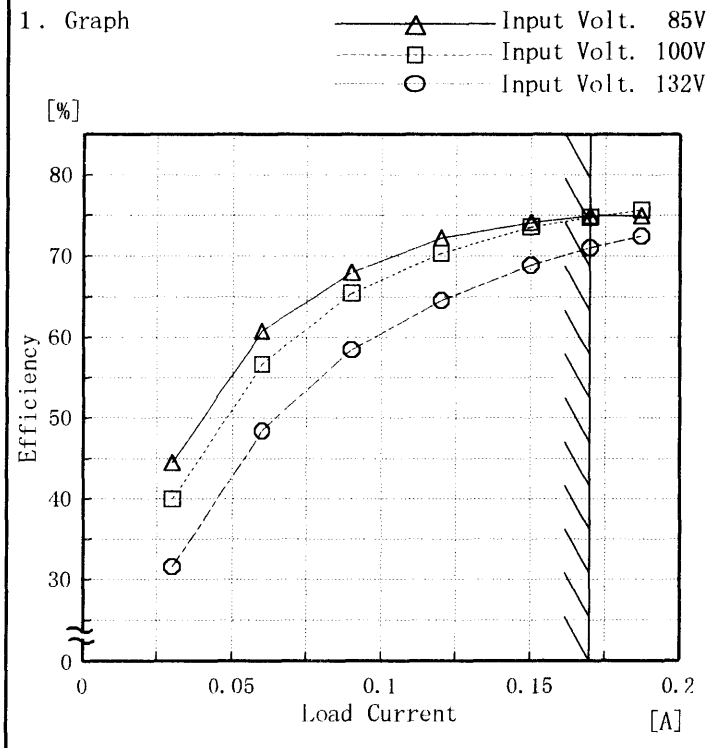
Input Voltage [V]	Efficiency [%]	
	Load 50%	Load 100%
75	68.8	73.5
80	68.2	74.4
85	67.4	74.8
90	66.3	75.1
100	64.3	74.8
110	62.0	73.8
120	59.7	72.6
132	57.1	71.0
140	54.8	69.9

COSEL

Model	YW515A
Item	Efficiency (by Load Current) 効率（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。

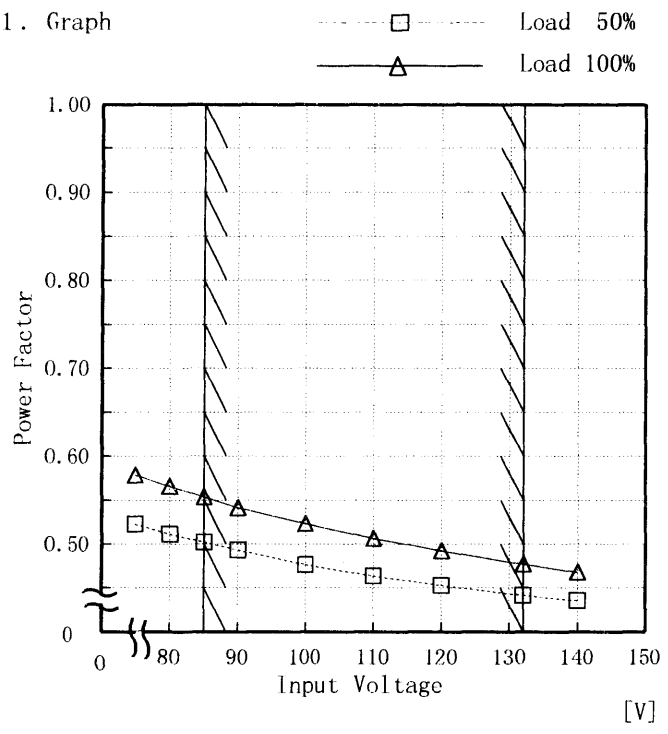
2. Values

Load Current [A]	Efficiency [%] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.030	44.5	40.0	31.6
0.060	60.7	56.7	48.4
0.090	68.0	65.5	58.5
0.120	72.3	70.4	64.6
0.150	74.2	73.6	68.9
0.170	75.0	74.8	71.1
0.187	75.0	75.7	72.5
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW515A		
Item	Power Factor (by Input Voltage) 力率 (入力電圧特性)	Temperature Testing Circuitry	25℃ Figure A
Object	———————————		

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

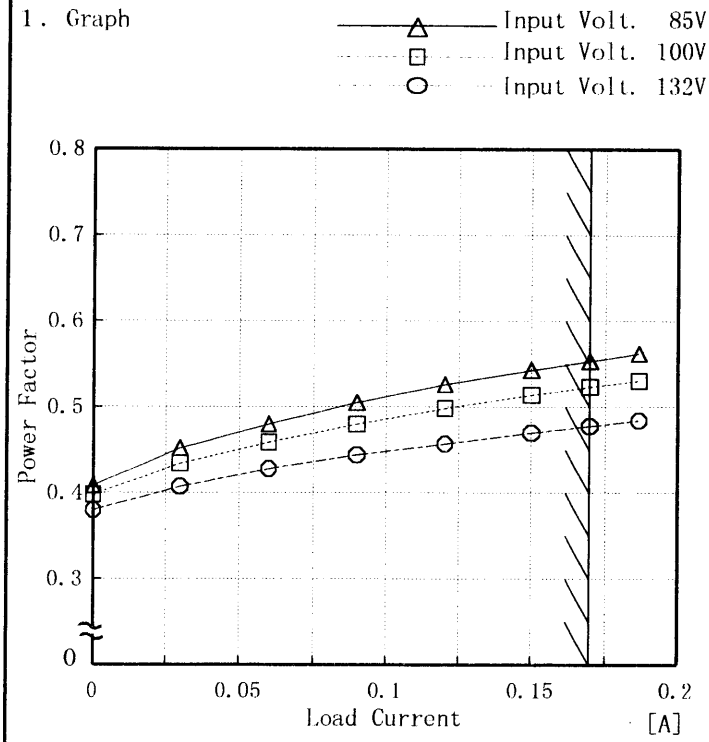
Input Voltage [V]	Power Factor	
	Load 50%	Load 100%
75	0.52	0.58
80	0.51	0.57
85	0.50	0.55
90	0.49	0.54
100	0.48	0.52
110	0.46	0.51
120	0.45	0.49
132	0.44	0.48
140	0.44	0.47

COSEL

Model	YW515A
Item	Power Factor (by Load Current) 力率（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]	Power Factor		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	0.41	0.40	0.38
0.030	0.45	0.43	0.41
0.060	0.48	0.46	0.43
0.090	0.51	0.48	0.44
0.120	0.53	0.50	0.46
0.150	0.54	0.51	0.47
0.170	0.55	0.52	0.48
0.187	0.56	0.53	0.48
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

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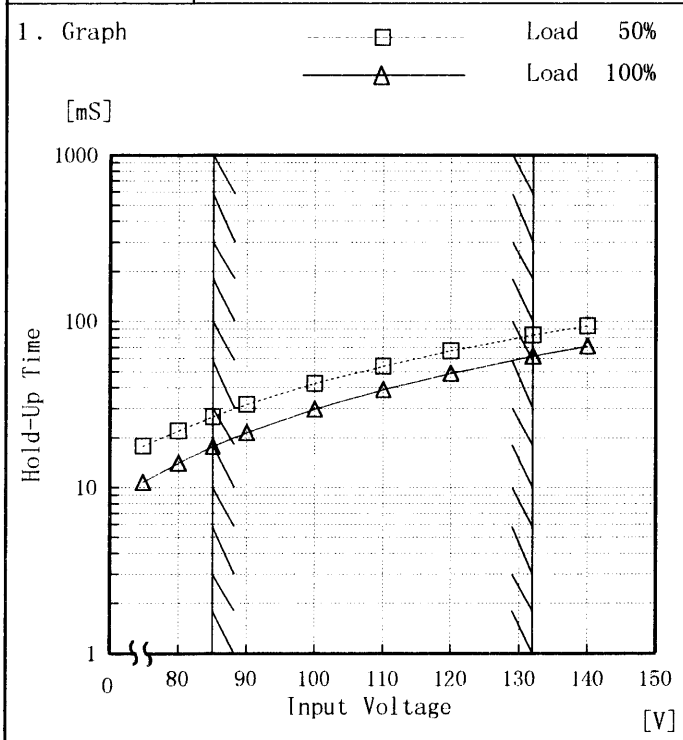
Model	YW515A
Item	Hold-Up Time 出力保持時間
Object	+15.0V0.17A

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	18	11
80	22	14
85	27	18
90	32	22
100	42	30
110	54	39
120	67	49
132	83	62
140	95	72

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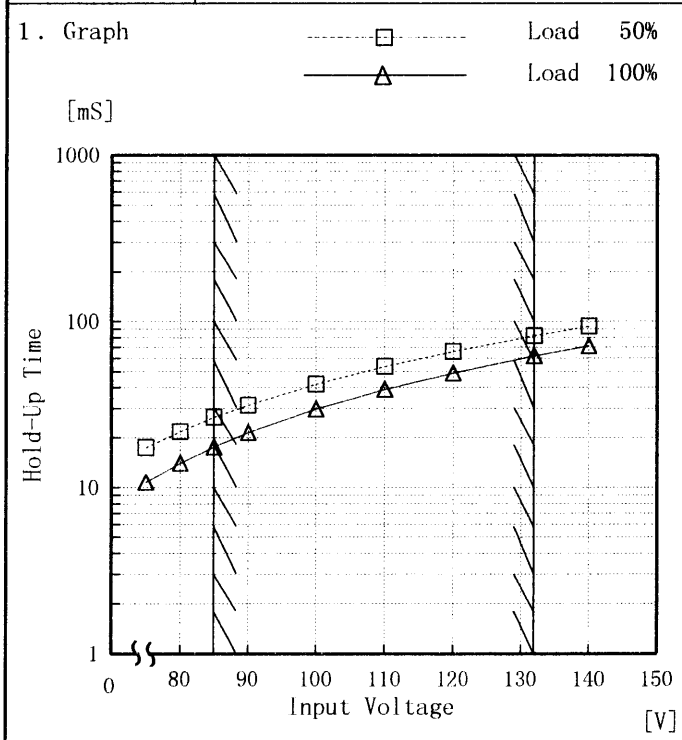
Model	YW515A
Item	Hold-Up Time 出力保持時間
Object	−15.0V0.17A

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

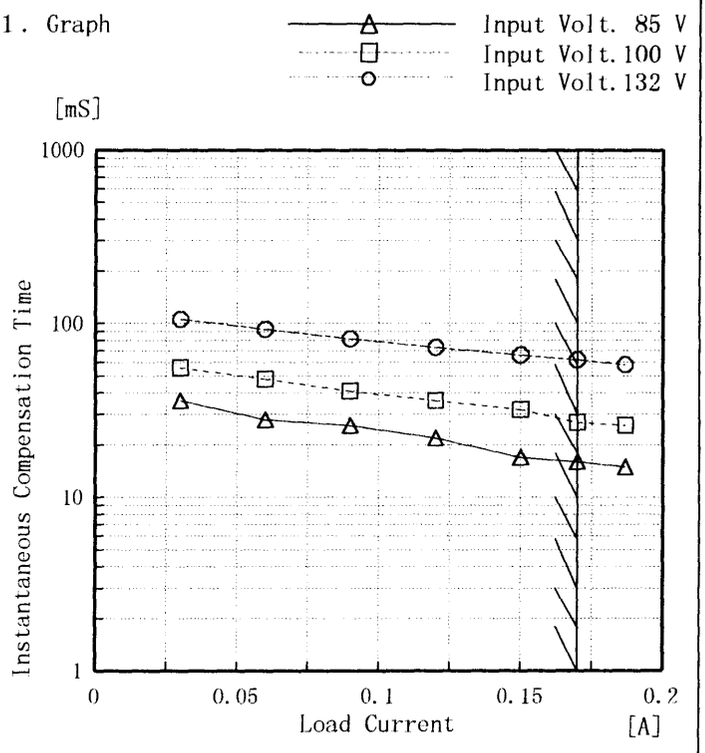
Input Voltage [V]	Hold-Up Time [mS]	
	Load 50%	Load 100%
75	18	11
80	22	14
85	26	18
90	31	21
100	42	30
110	54	39
120	66	49
132	82	62
140	94	71

COSEL

Model	YW515A
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	+15.0V0.17A

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

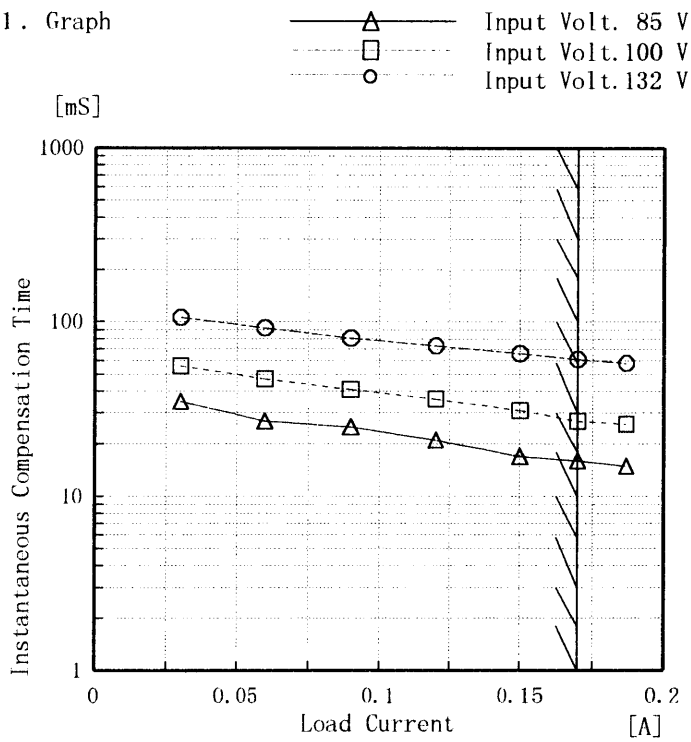
Load Current [A]	Time [mS]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	—	—	—
0.030	36	56	106
0.060	28	48	93
0.090	26	41	82
0.120	22	36	73
0.150	17	32	66
0.170	16	27	62
0.187	15	26	58
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW515A
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	−15.0V0.17A

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

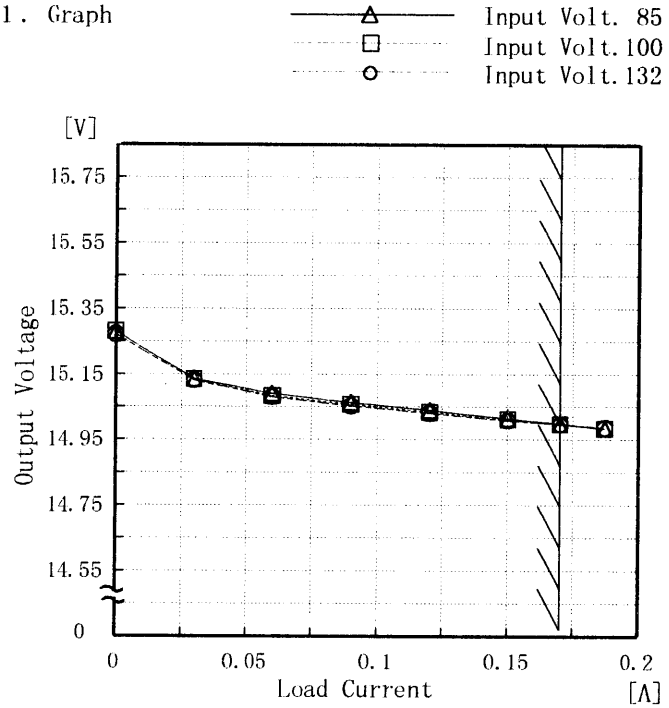
Load Current [A]	Time [mS]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	—	—	—
0.030	35	56	106
0.060	27	47	92
0.090	25	41	81
0.120	21	36	73
0.150	17	31	66
0.170	16	27	61
0.187	15	26	58
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW515A	Temperature	25℃
Item	Load Regulation 静的負荷変動	Testing Circuitry	Figure A

Object +15.0V0.17A

1. Graph

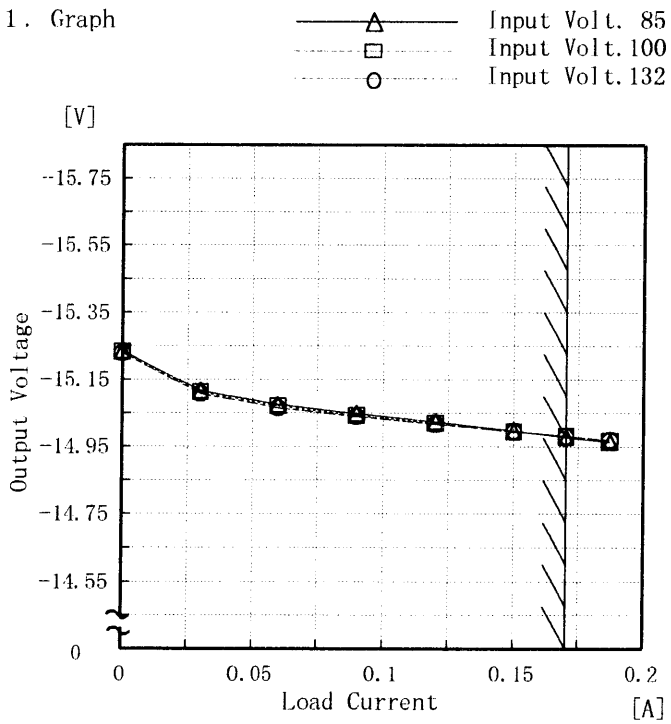


2. Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	15.280	15.281	15.272
0.030	15.136	15.134	15.131
0.060	15.090	15.084	15.080
0.090	15.063	15.058	15.053
0.120	15.039	15.033	15.031
0.150	15.014	15.011	15.009
0.170	14.998	14.998	14.997
0.187	14.985	14.984	14.986
—	—	—	—
—	—	—	—

Object −15.0V0.17A

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。

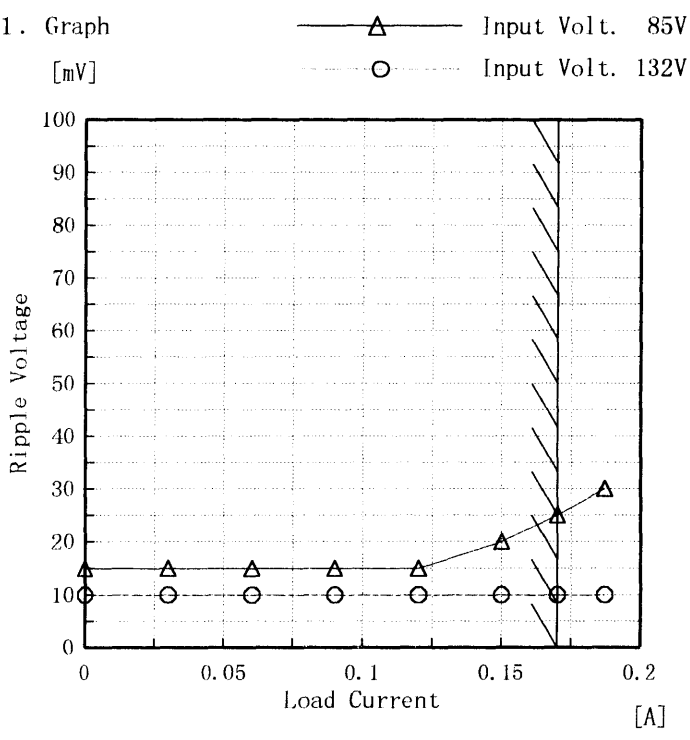
2. Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.000	-15.236	-15.233	-15.229
0.030	-15.118	-15.113	-15.108
0.060	-15.076	-15.072	-15.066
0.090	-15.049	-15.043	-15.039
0.120	-15.023	-15.020	-15.017
0.150	-14.997	-14.994	-14.995
0.170	-14.979	-14.981	-14.981
0.187	-14.964	-14.967	-14.970
—	—	—	—
—	—	—	—

COSEL

Model	YW515A	
Item	Ripple Voltage(by Load Current) リップル電圧(負荷特性)	Temperature 25℃ Testing Circuitry Figure A
Object	+15.0V0.17A	

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

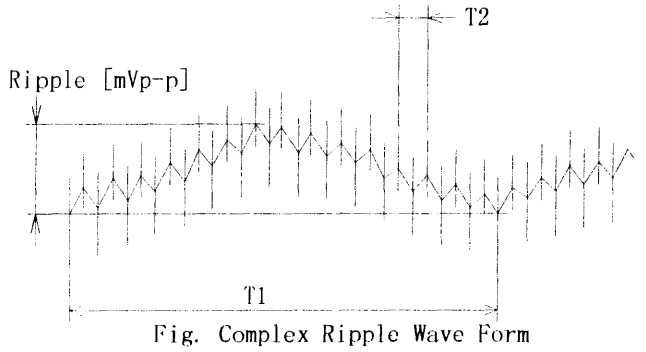


Fig. Complex Ripple Wave Form

図　リップル波形詳細図

2. Values

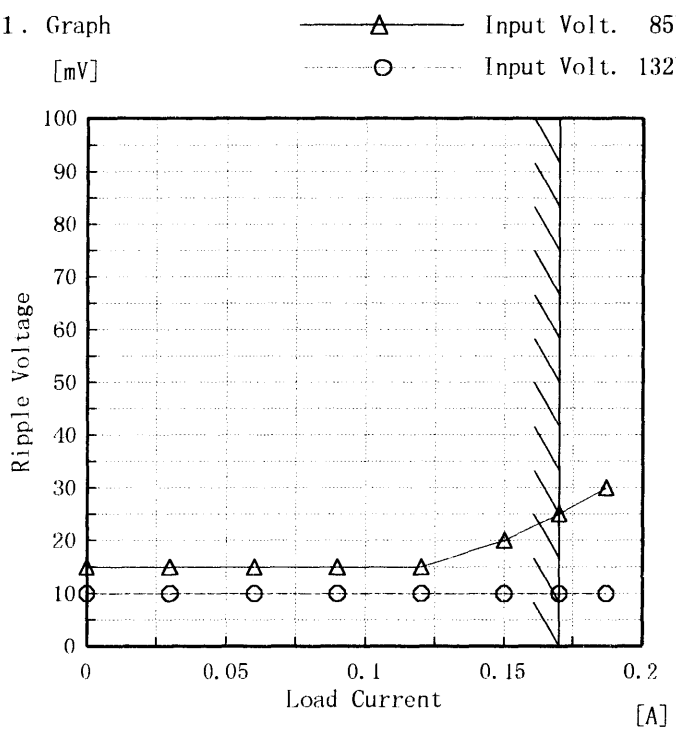
Load Current [A]	Ripple Output Voltage [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.000	15	10
0.030	15	10
0.060	15	10
0.090	15	10
0.120	15	10
0.150	20	10
0.170	25	10
0.187	30	10
—	—	—
—	—	—
—	—	—

COSEL

Model	YW515A
Item	Ripple Voltage(by Load Current) リップル電圧(負荷特性)
Object	−15.0V0.17A

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

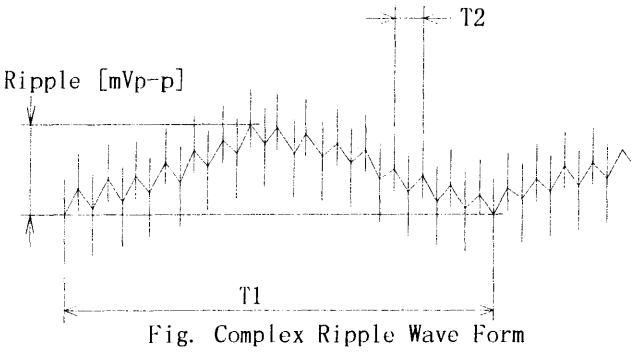


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

Load Current [A]	Ripple Output Voltage [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.000	15	10
0.030	15	10
0.060	15	10
0.090	15	10
0.120	15	10
0.150	20	10
0.170	25	10
0.187	30	10
—	—	—
—	—	—
—	—	—

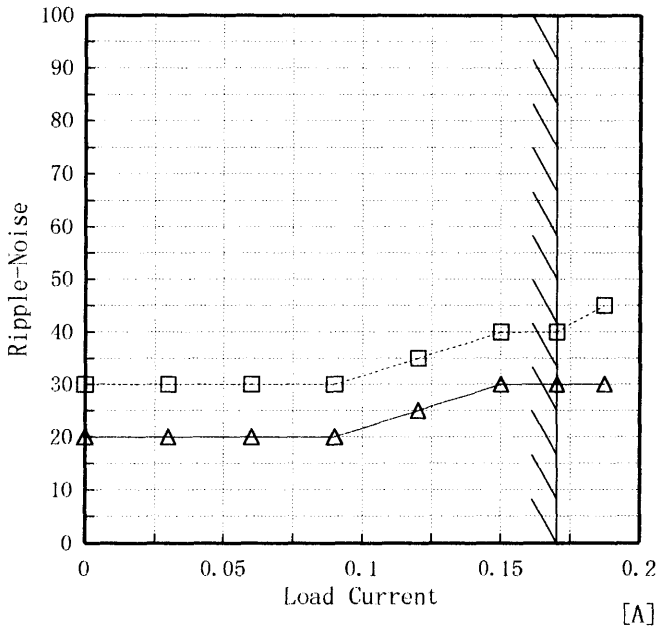
COSEL

Model	YW515A
Item	Ripple-Noise　リップルノイズ
Object	+15.0V0.17A

Temperature　25℃
Testing Circuitry　Figure A

1. Graph

□ Input Volt. 85V
△ Input Volt. 132V



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

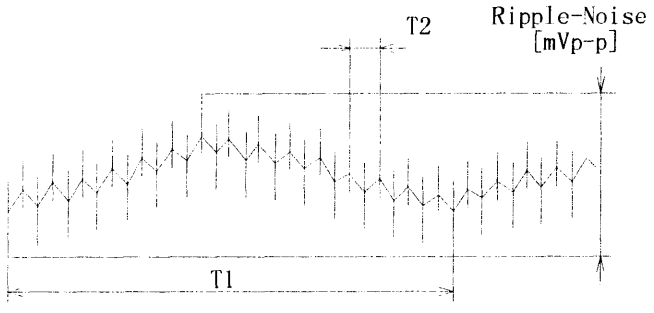


Fig. Complex Ripple Wave Form
図　リップル波形詳細図

2. Values

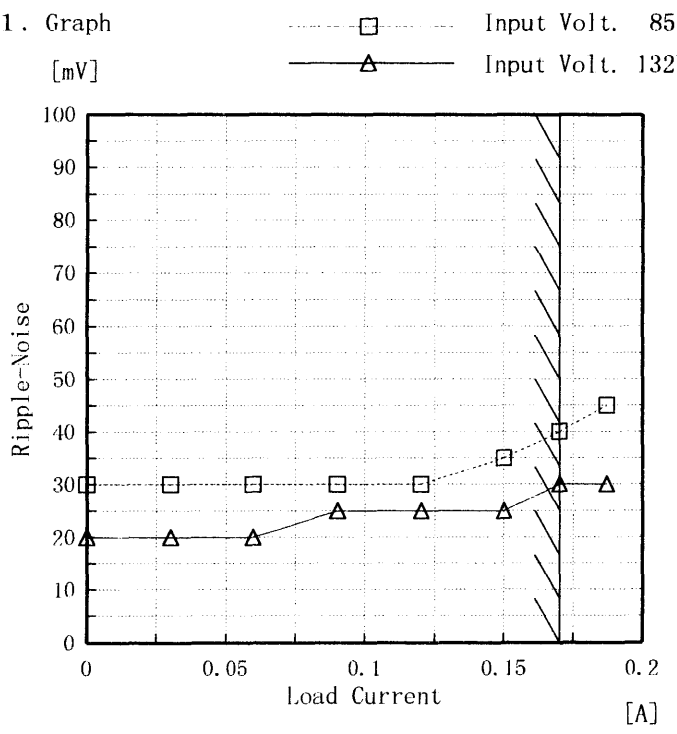
Load Current [A]	Ripple-Noise [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.000	30	20
0.030	30	20
0.060	30	20
0.090	30	20
0.120	35	25
0.150	40	30
0.170	40	30
0.187	45	30
—	—	—
—	—	—
—	—	—

COSEL

Model	YW515A
Item	Ripple-Noise　リップルノイズ
Object	−15.0V0.17A

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

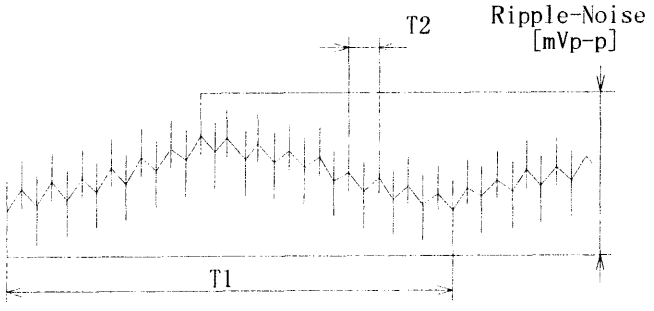


Fig. Complex Ripple Wave Form
図　リップル波形詳細図

2. Values

Load Current [A]	Ripple-Noise [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.000	30	20
0.030	30	20
0.060	30	20
0.090	30	25
0.120	30	25
0.150	35	25
0.170	40	30
0.187	45	30
—	—	—
—	—	—
—	—	—

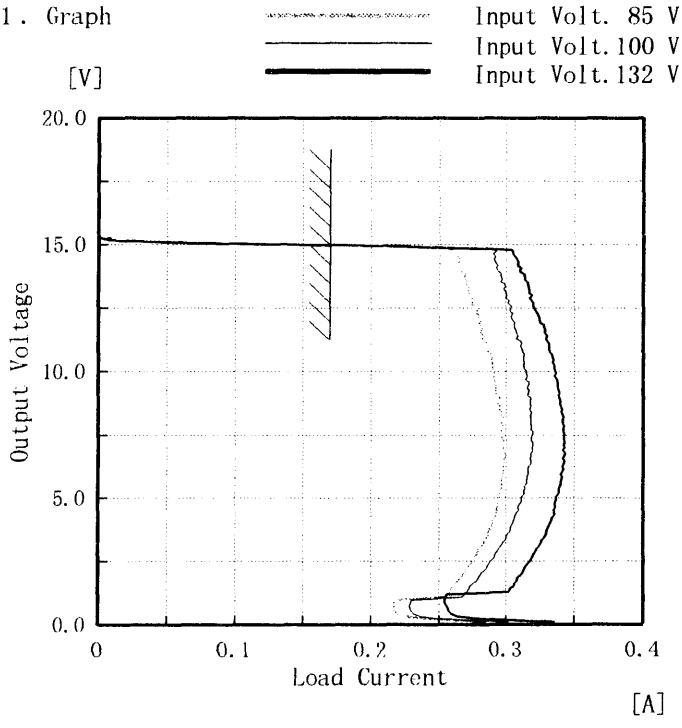
COSEL

Model	YW515A
Item	Overcurrent Protection 過電流保護

Temperature 25℃
Testing Circuitry Figure A

Object +15.0V0.17A

1. Graph

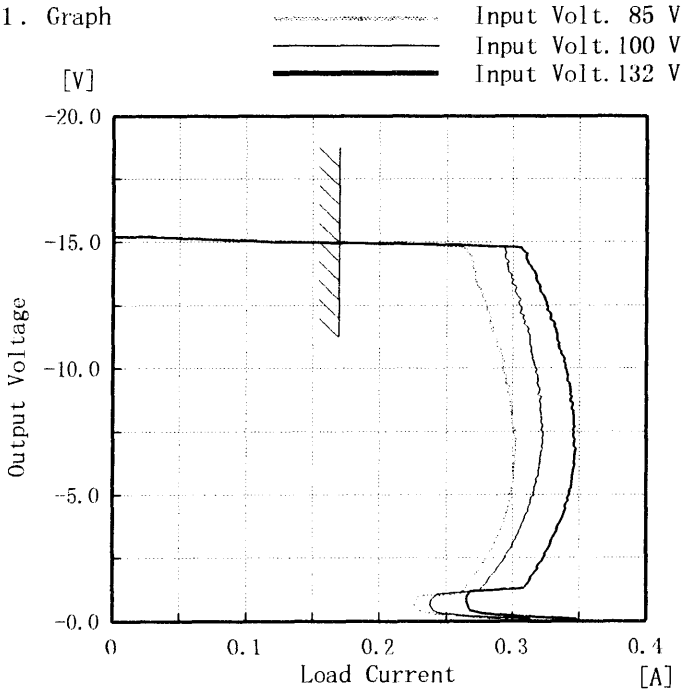


2. Values

Output Voltage [V]	Load Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
15.00	0.257	0.286	0.304
14.25	0.264	0.293	0.308
13.50	0.272	0.295	0.315
12.00	0.281	0.304	0.324
10.50	0.289	0.313	0.333
9.00	0.294	0.316	0.338
7.50	0.297	0.319	0.342
6.00	0.297	0.316	0.341
4.50	0.293	0.309	0.334
3.00	0.281	0.295	0.322
1.50	0.262	0.273	0.306
0.00	0.285	0.302	0.335

Object −15.0V0.17A

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。

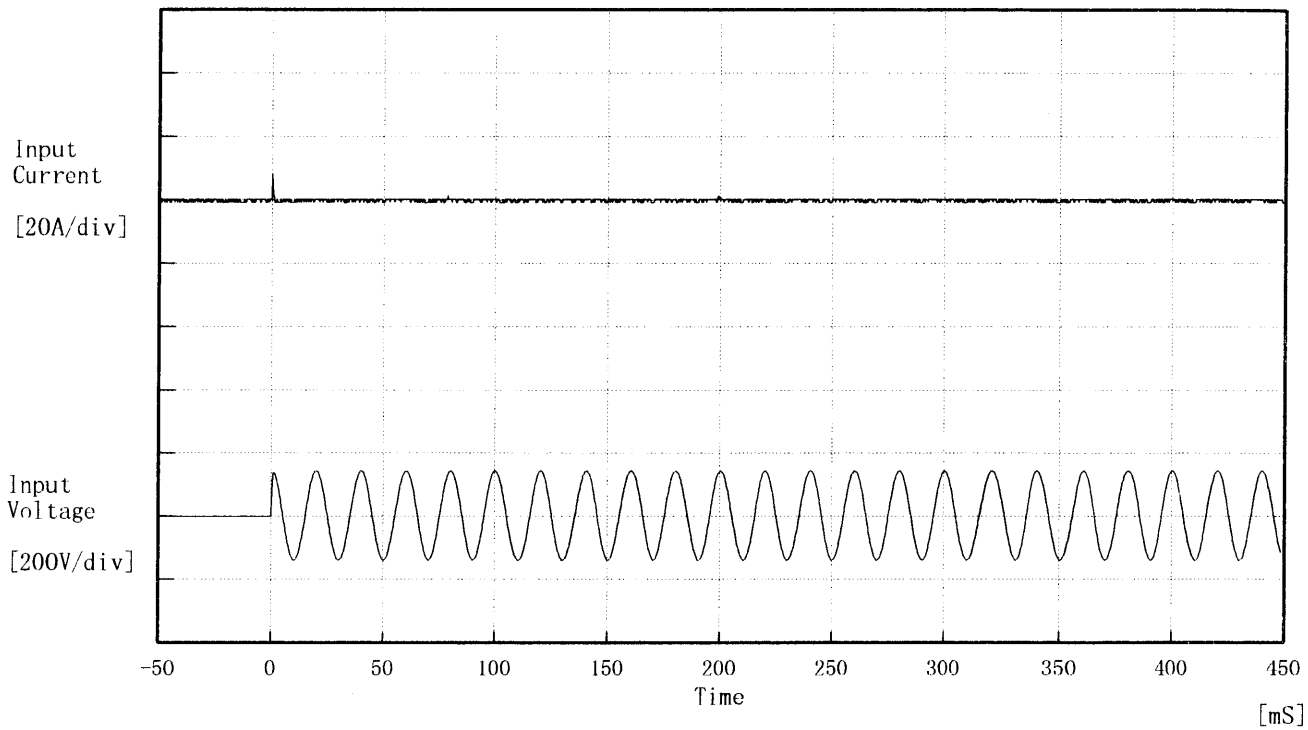
2. Values

Output Voltage [V]	Load Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-15.00	0.256	0.291	0.308
-14.25	0.270	0.297	0.312
-13.50	0.272	0.301	0.318
-12.00	0.285	0.309	0.329
-10.50	0.291	0.314	0.336
-9.00	0.296	0.320	0.344
-7.50	0.302	0.321	0.345
-6.00	0.301	0.320	0.345
-4.50	0.298	0.313	0.339
-3.00	0.286	0.300	0.328
-1.50	0.268	0.281	0.312
0.00	0.297	0.314	0.349

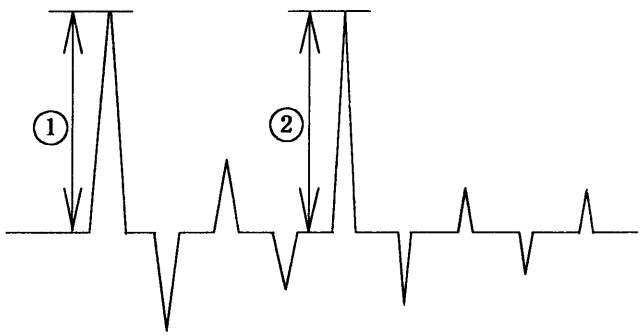
BC−3204

COSEL

Model	YW515A		
Item	Inrush Current　突入電流	Temperature	25℃
		Testing Circuitry	Figure A
Object	――――――――		



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



COSEL

Model	YW515A		
Item	Dynamic Load Responce 動的負荷変動	Temperature Testing Circuitry	25℃ Figure A
Object	+15.0V0.17A		

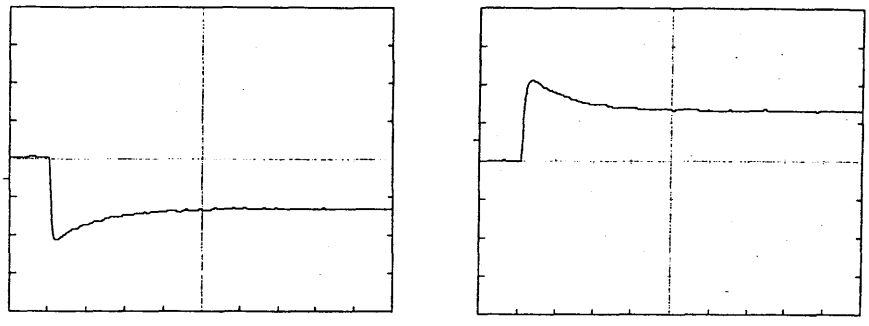
Input Volt. 100 V

Cycle 1000 mS

Load Current

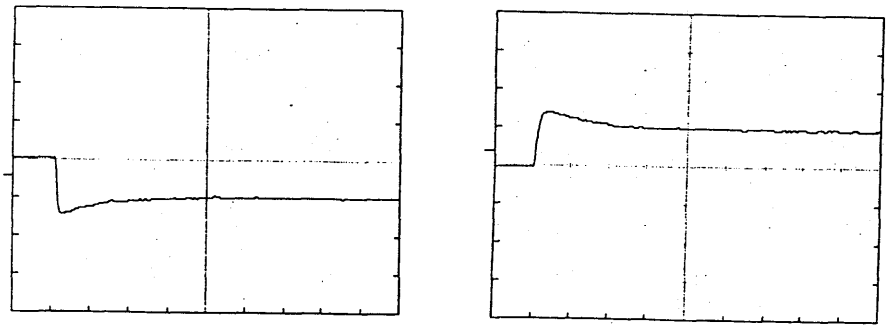
Load 0% ⟷

Load 100 %



Load 0% ⟷

Load 50 %



200 mV/div

1 mS/div

COSEL

Model	YW515A		
Item	Dynamic Load Responce 動的負荷変動	Temperature Testing Circuitry	25℃ Figure A
Object	−15.0V0.17A		

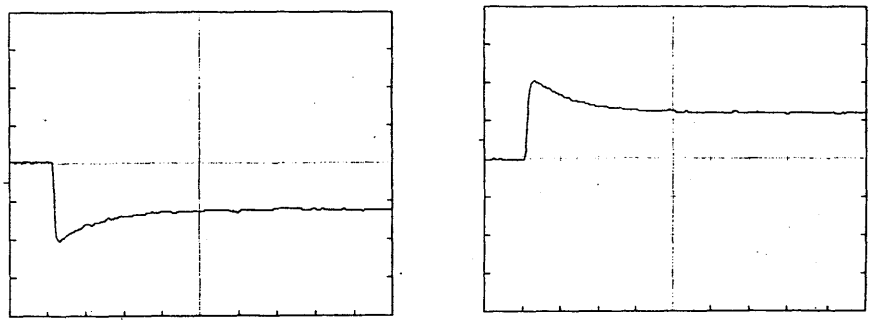
Input Volt. 100 V

Cycle 1000 mS

Load Current

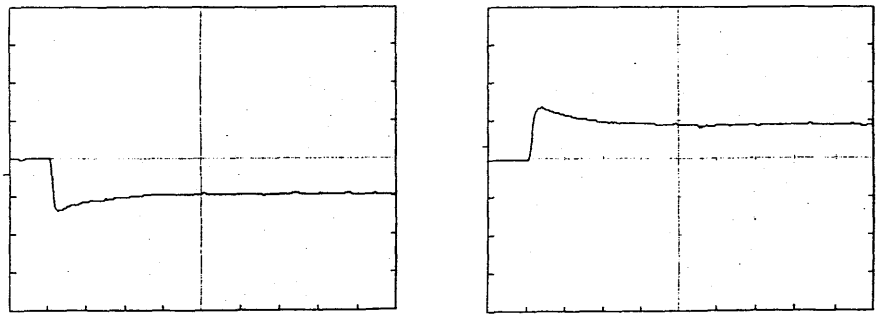
Load 0% ⟷

Load 100 %



Load 0% ⟷

Load 50 %



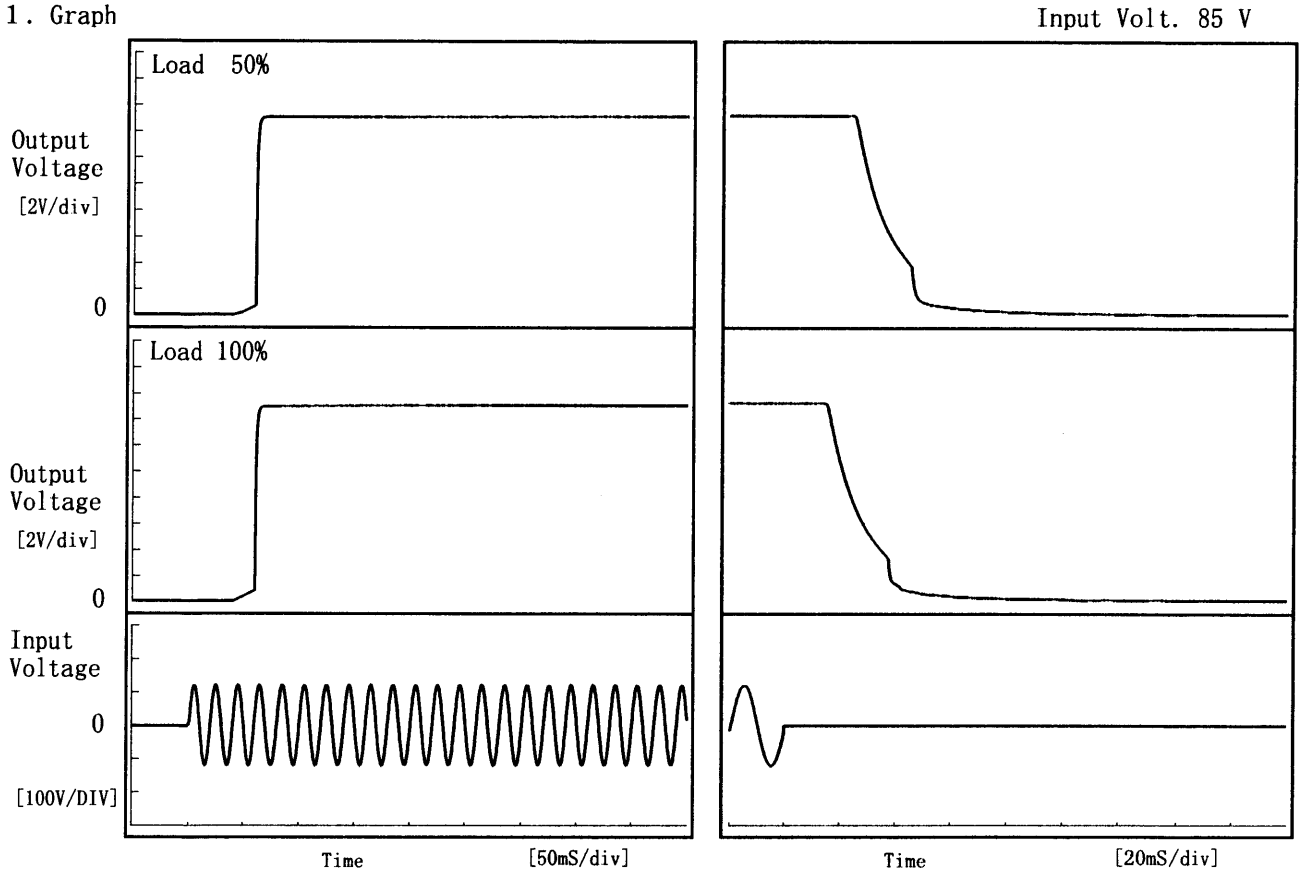
200 mV/div

1 mS/div

COSEL

Model	YW515A		
Item	Rise and Fall Time 立上り、立下り時間	Temperature Testing Circuitry	25℃ Figure A
Object	+15.0V0.17A		

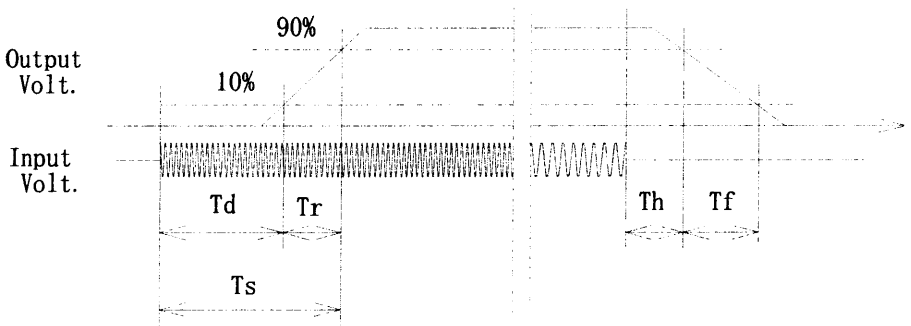
1. Graph



2. Values

[mS]

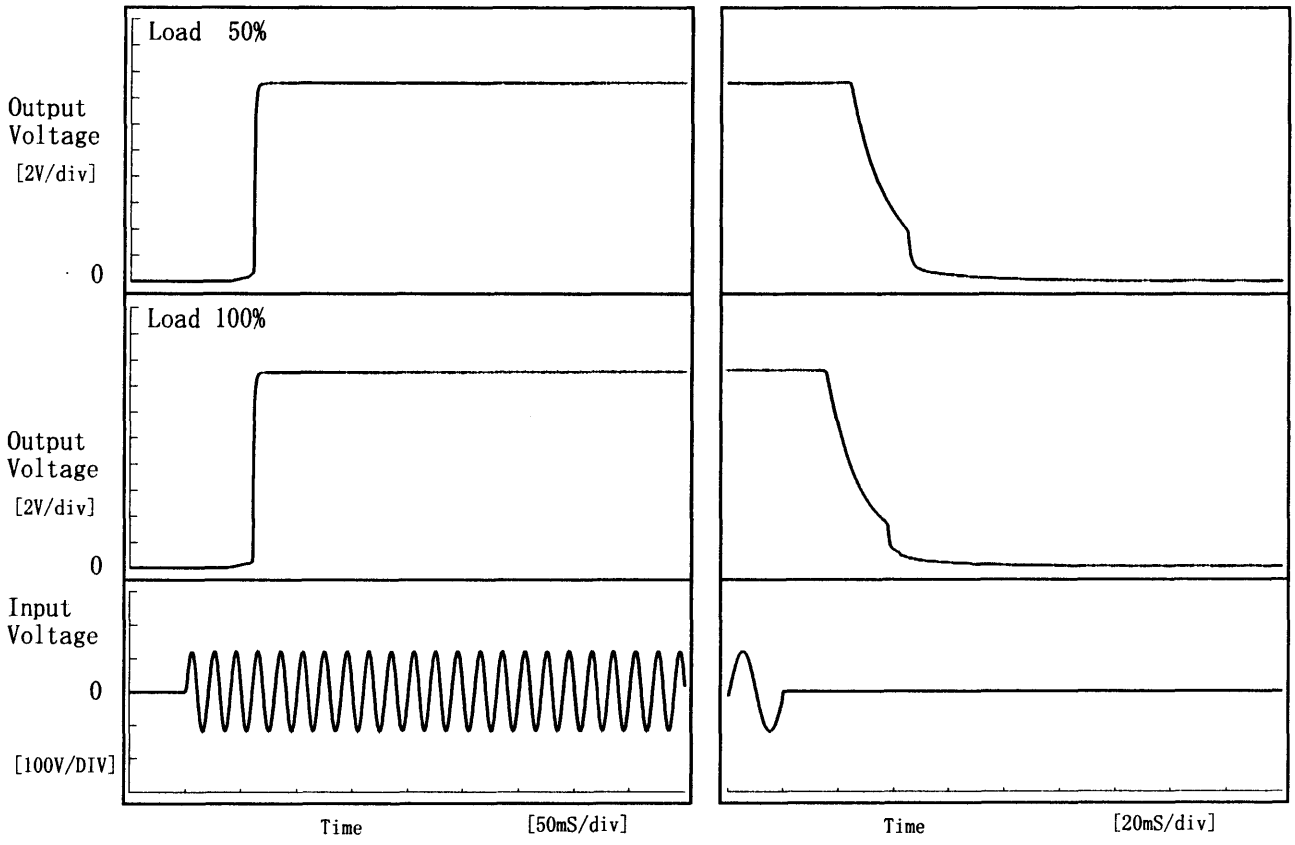
Load \ Time	T d	T r	T s	T h	T f
50 %	60.3	2.0	62.3	27.3	20.4
100 %	60.5	2.3	62.8	17.6	21.8



COSEL

Model	YW515A		
Item	Rise and Fall Time 立上り、立下り時間	Temperature Testing Circuitry	25℃ Figure A
Object	−15.0V0.17A		

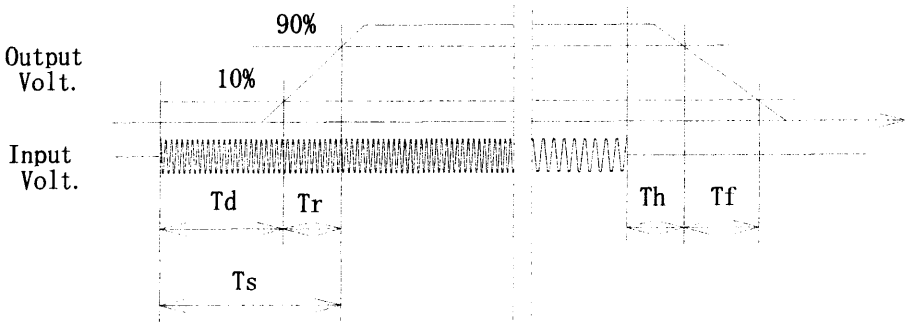
1. Graph



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	60.5	2.0	62.5	26.4	20.6
100 %	60.5	2.0	62.5	17.8	22.0



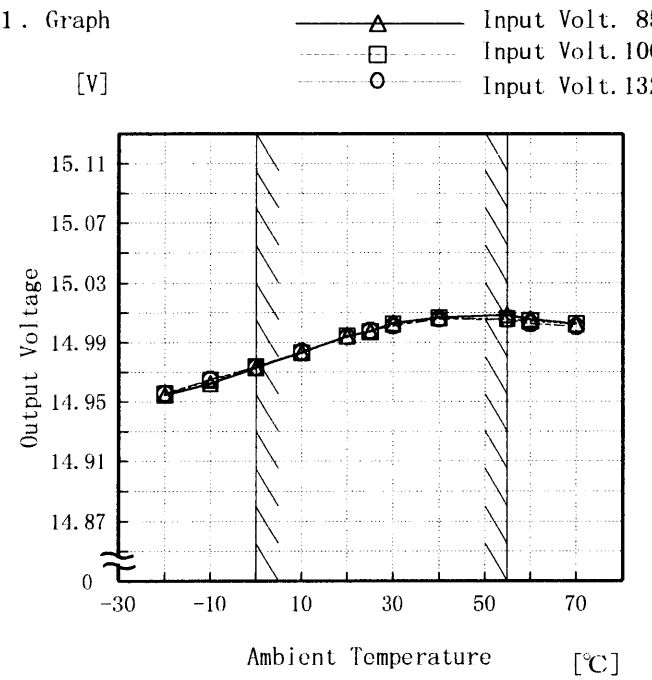
COSEL

Model	YW515A
Item	Ambient Temperature Drift 周囲温度変動

Testing Circuitry Figure A

Object +15.0V0.17A

1. Graph

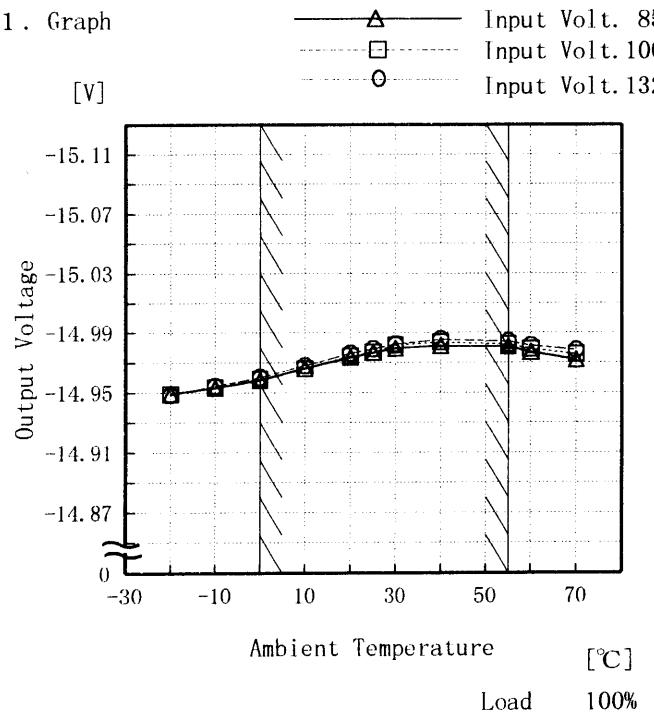


2. Values

Ambient Temperature [℃]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	14.954	14.956	14.956
-10	14.962	14.965	14.965
0	14.973	14.973	14.974
10	14.983	14.983	14.984
20	14.994	14.994	14.994
25	14.997	14.997	14.998
30	15.003	15.002	15.001
40	15.007	15.006	15.006
55	15.008	15.006	15.005
60	15.006	15.004	15.003
70	15.002	15.002	15.001

Object −15.0V0.17A

1. Graph



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 [℃]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	-14.949	-14.949	-14.949
-10	-14.953	-14.954	-14.955
0	-14.958	-14.959	-14.960
10	-14.966	-14.966	-14.968
20	-14.973	-14.974	-14.976
25	-14.977	-14.977	-14.979
30	-14.980	-14.982	-14.983
40	-14.981	-14.984	-14.986
55	-14.981	-14.982	-14.984
60	-14.977	-14.979	-14.982
70	-14.972	-14.976	-14.978

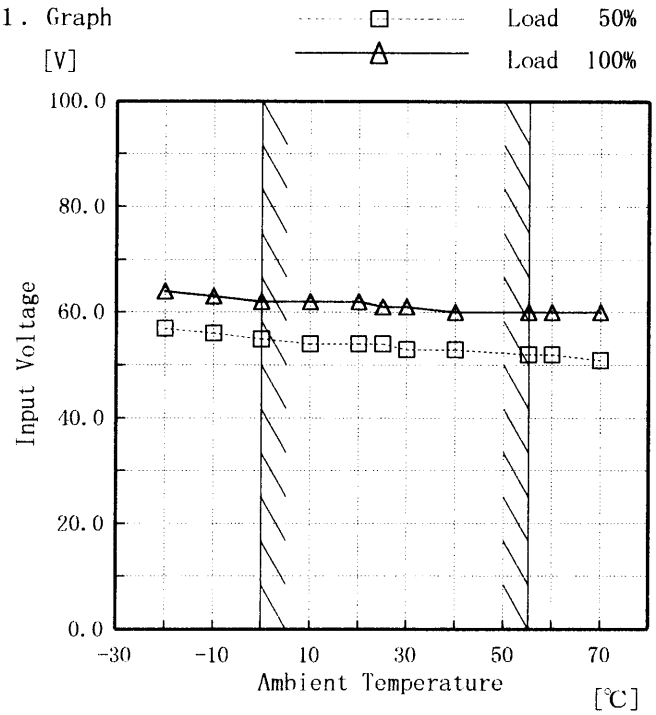
COSEL

Model	YW515A
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧

Testing Circuitry Figure A

Object +15.0V0.17A

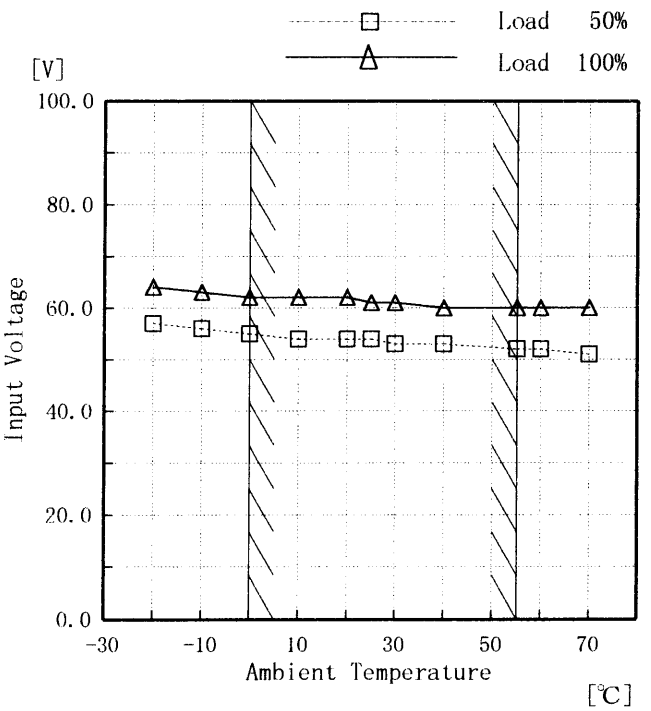
1. Graph



2. Values

Ambient Temperature [℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	57	64
-10	56	63
0	55	62
10	54	62
20	54	62
25	54	61
30	53	61
40	53	60
55	52	60
60	52	60
70	51	60

Object −15.0V0.17A



2. Values

Ambient Temperature [℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	57	64
-10	56	63
0	55	62
10	54	62
20	54	62
25	54	61
30	53	61
40	53	60
55	52	60
60	52	60
70	51	60

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。

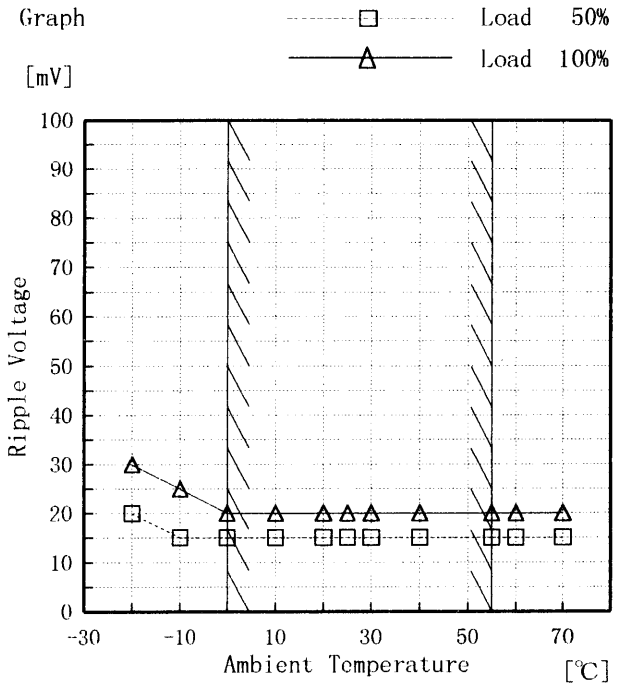
COSEL

Model	YW515A
Item	Ripple Voltage (by Ambient Temp.) リップル電圧（周囲温度特性）

Testing Circuitry　Figure A

Object　+15.0V0.17A

1. Graph



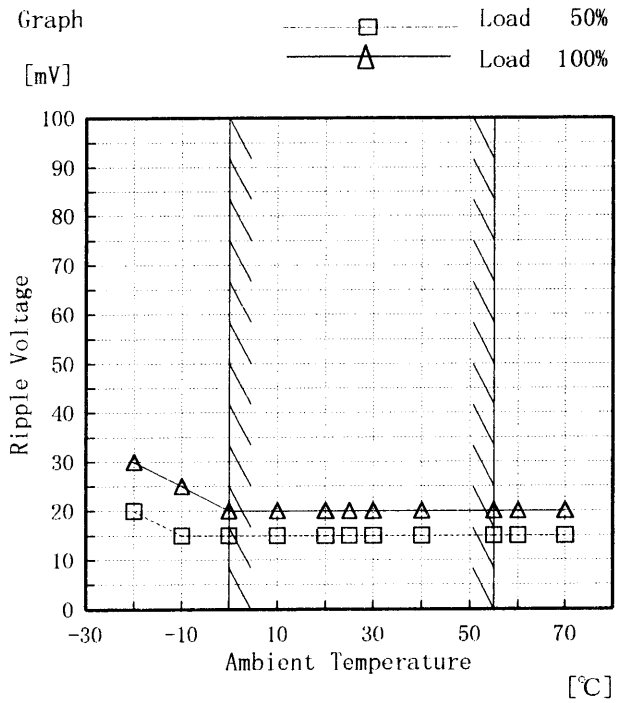
Input Volt.　100 V

2. Values

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

Object　−15.0V0.17A

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

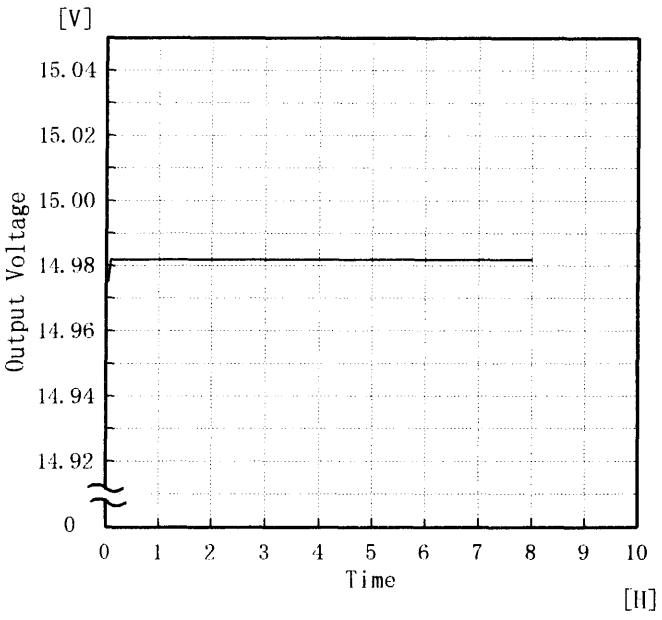
COSEL

Model	YW515A
Item	Time Lapse Drift 経時ドリフト

Temperature 25℃
Testing Circuitry Figure A

Object +15.0V0.17A

1. Graph



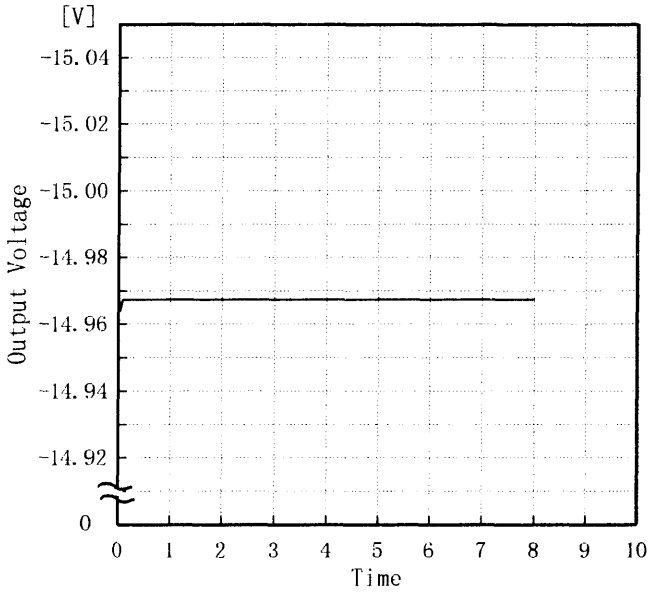
Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	14.975
0.5	14.982
1.0	14.982
2.0	14.982
3.0	14.982
4.0	14.982
5.0	14.982
6.0	14.982
7.0	14.982
8.0	14.982

Object −15.0V0.17A

1. Graph



Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	-14.964
0.5	-14.967
1.0	-14.967
2.0	-14.967
3.0	-14.967
4.0	-14.967
5.0	-14.967
6.0	-14.967
7.0	-14.967
8.0	-14.967

COSEL

Model	YW515A	
Item	Output Voltage Accuracy 定電圧精度	Testing Circuitry Figure A

1 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) : 0～0.17 A

(AVR 2) : 0～0.17 A

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

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

1. 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) 0～0.17 A

(AVR 2) 0～0.17 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

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

2. Values

Object	+15.0V0.17A

Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy(Ration)[%]
Maximum Voltage	25	100	0.00	15.282	±153	±1.1
Minimum Voltage	0	85	0.17	14.976		

Object	−15.0V0.17A

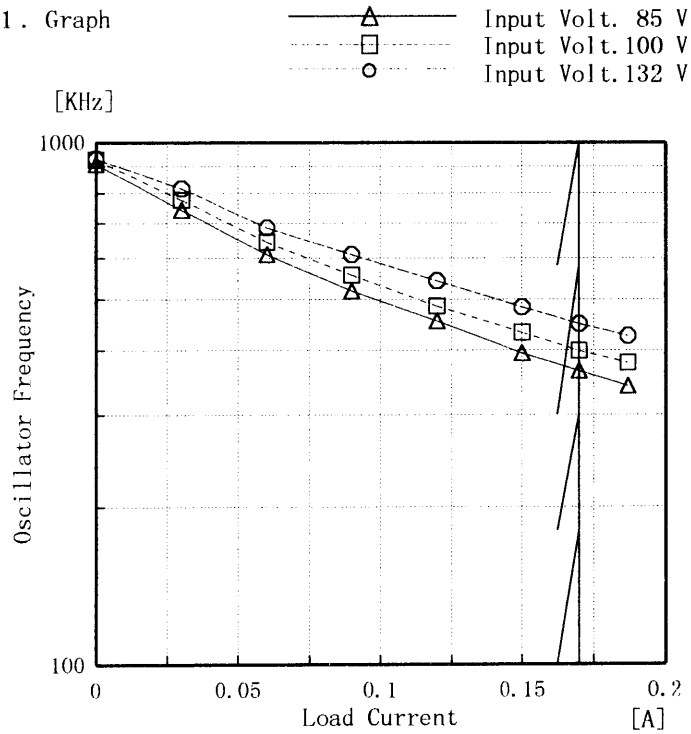
Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy(Ration)[%]
Maximum Voltage	25	85	0.00	-15.231	±135	±0.9
Minimum Voltage	0	85	0.17	-14.961		

COSEL

Model	YW515A
Item	Oscillator Frequency 発振周波数
Object	+15.0V0.17A

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	909	928	931
0.030	743	776	817
0.060	610	645	687
0.090	519	557	610
0.120	455	485	543
0.150	395	432	483
0.170	365	399	449
0.187	341	378	426
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	YW515A	
Item	Condensation 結露特性	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

Object	+15.0V0.17A

Item	Data	Testing Conditions
Output Voltage [V]	15.000	Input Volt.: 100V, Load Current:0.17A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:0.17A
Load Regulation [mV]	283	Input Volt.: 100V, Load Current:0～0.17A

Object	−15.0V0.17A

Item	Data	Testing Conditions
Output Voltage [V]	-14.980	Input Volt.: 100V, Load Current:0.17A
Line Regulation [mV]	3	Input Volt.: 85～132V, Load Current:0.17A
Load Regulation [mV]	252	Input Volt.: 100V, Load Current:0～0.17A

COSEL

Model	YW515A		
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	0.15	0.18	0.24

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	YW515A		
Item	Line Noise Tolerance 入力雑音耐量	Temperature Testing Circuitry	25℃ Figure C
Object	+15.0V0.17A		

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 %

Object	−15.0V0.17A

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	YW515A
Item	Conducted Emission 雑音端子電圧
Object	――――――

Testing Circuitry Figure D

1. Graph

Remarks

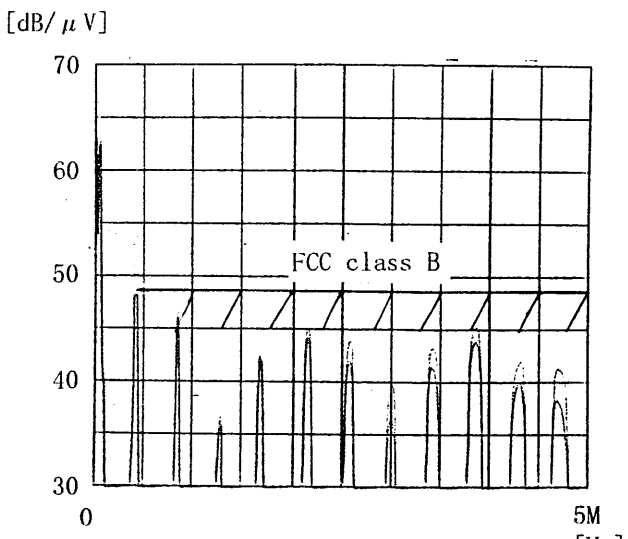
Input Volt. 120 V

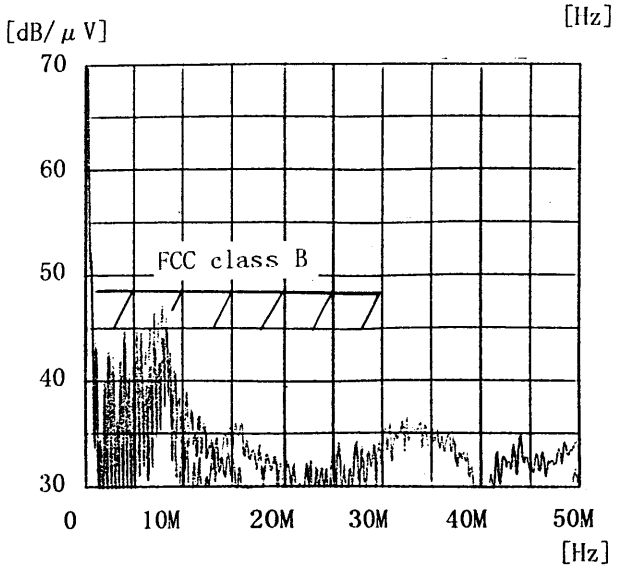
Load 100 %

Note: Slanted line shows the range of Tolerance.

(注)斜線は許容値を示す。

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





COSEL

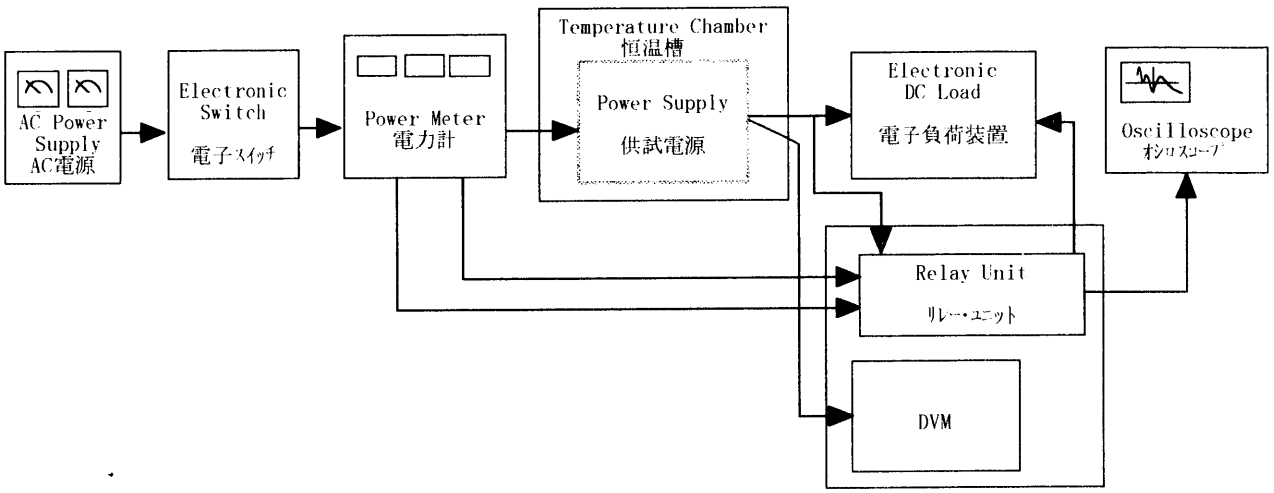


Figure A

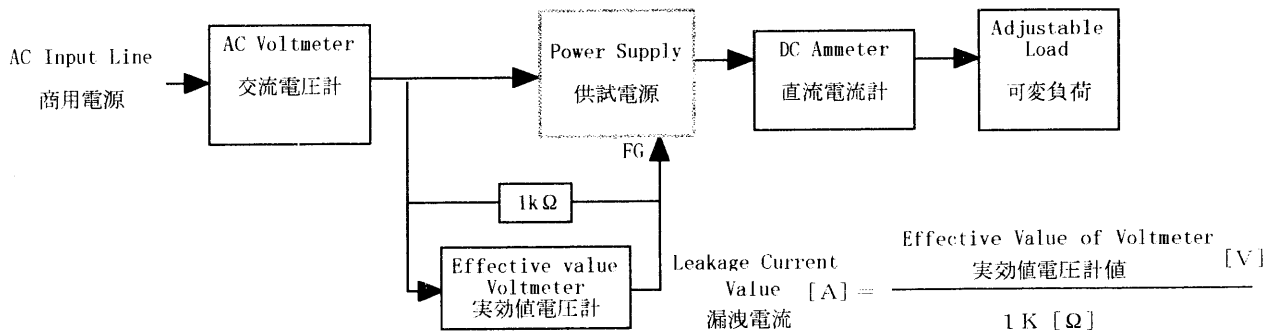


Figure B(DENTOR1)

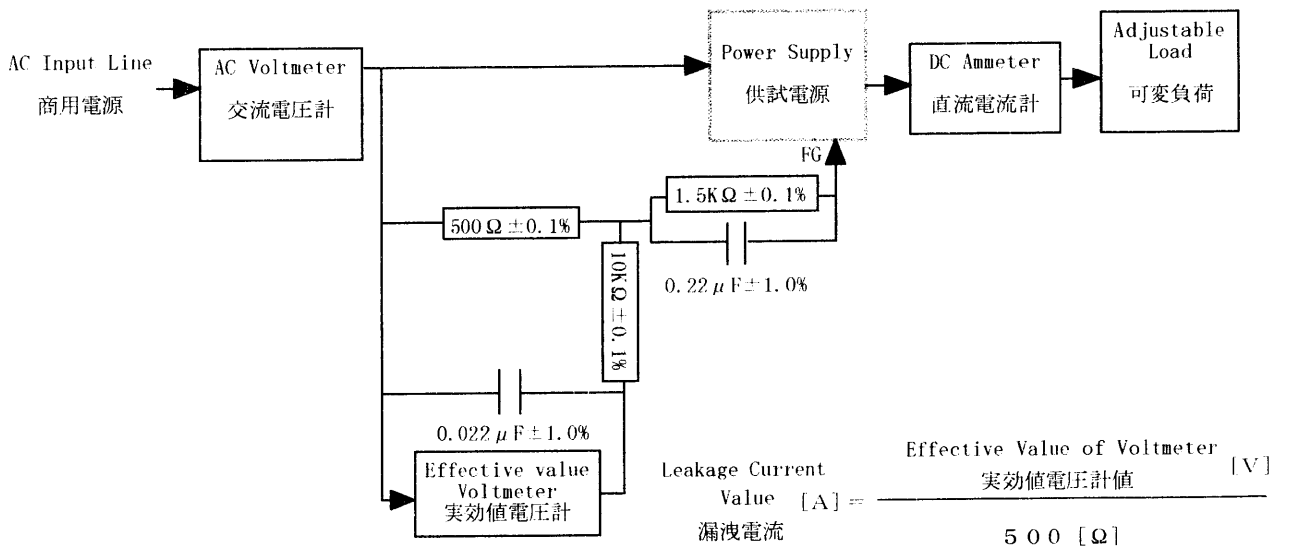


Figure B (IEC60950)

COSEL

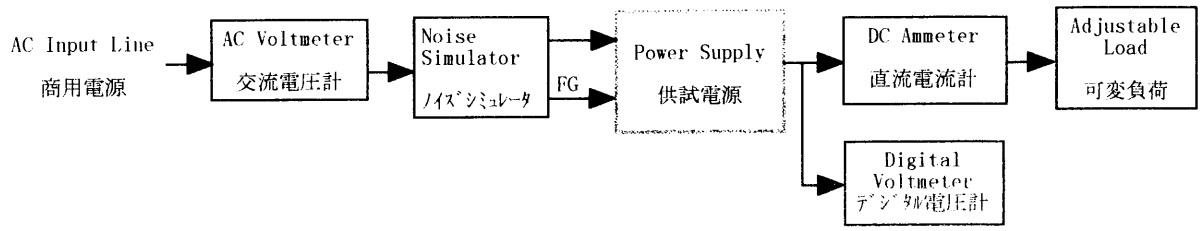


Figure C

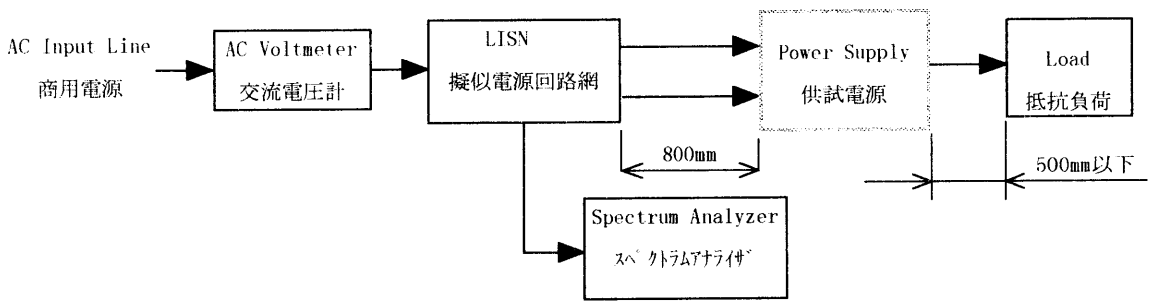


Figure D

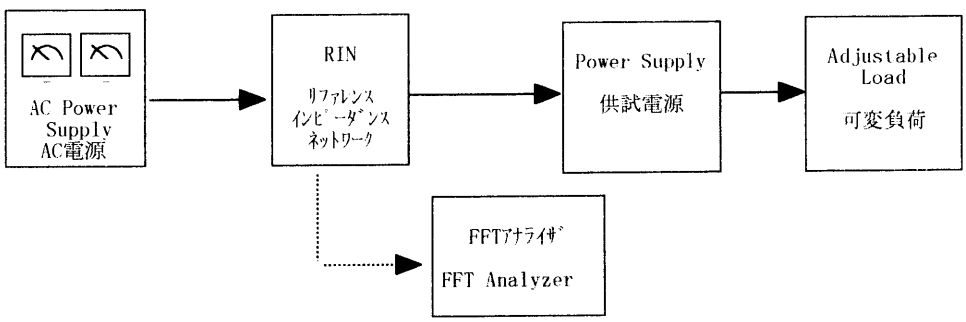


Figure E