参考資料

COSEL

TEST DATA OF LEB100F-0512

(100V INPUT)

Regulated DC Power Supply

Mar. 16, 2000

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Design Manager

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Design Engineer

コーセル株式会社

COSEL CO.,LTD.

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CONTENTS

1. Line Regulation ・・・・・・・・・・・・・・・・・・・・・・・ 1
静的入力変動
2. Input Current (by Load Power) ・・・・・・・・・・・・・・・ 2
入力電流（負荷特性）
3. Input Power (by Load Power) ・・・・・・・・・・・・・・・・ 3
入力電力（負荷特性）
4. Efficiency (by Input Voltage) ・・・・・・・・・・・・・・・ 4
効率（入力電圧特性）
5. Efficiency (by Load Power) ・・・・・・・・・・・・・・・・ 5
効率（負荷特性）
6. Power Factor (by Input Voltage) ・・・・・・・・・・・・・・ 6
力率（入力電圧特性）
7. Power Factor (by Load Power) ・・・・・・・・・・・・・・・ 7
力率（負荷特性）
8. Hold-Up Time ・・・・・・・・・・・・・・・・・・・・・・・・ 8
出力保持時間
9. Instantaneous Interruption Compensation ・・・・・・・・・ 10
瞬時停電保障
10. Load Regulation ・・・・・・・・・・・・・・・・・・・・・・ 12
静的負荷変動
11. Ripple Voltage (by Load Current) ・・・・・・・・・・・・・ 13
リップル電圧（負荷特性）
12. Ripple-Noise ・・・・・・・・・・・・・・・・・・・・・・・・ 15
リップルノイズ
13. Overcurrent Protection ・・・・・・・・・・・・・・・・・・ 17
過電流保護
14. Overvoltage Protection ・・・・・・・・・・・・・・・・・・ 18
過電圧保護
15. Inrush Current ・・・・・・・・・・・・・・・・・・・・・・・ 19
突入電流
16. Dynamic Load Responce ・・・・・・・・・・・・・・・・・・ 20
動的負荷変動
17. Rise and Fall Time ・・・・・・・・・・・・・・・・・・・・・ 22
立上り、立下り時間
18. Ambient Temperature Drift ・・・・・・・・・・・・・・・・ 24
周囲温度変動
19. Minimum Input Voltage for Regulated Output Voltage ・・・・ 25
最低レギュレーション電圧
20. Ripple Voltage (by Ambient Temperature) ・・・・・・・・・ 26
リップル電圧（周囲温度特性）
21. Time Lapse Drift ・・・・・・・・・・・・・・・・・・・・・・ 27
経時ドリフト
22. Output Voltage Accuracy ・・・・・・・・・・・・・・・・・ 28
定電圧精度
23. Harmonic Current ・・・・・・・・・・・・・・・・・・・・・・ 29
高調波電流
24. Oscillator Frequency ・・・・・・・・・・・・・・・・・・・・ 31
発振周波数
25. Condensation ・・・・・・・・・・・・・・・・・・・・・・・・ 32
結露特性
26. Leakage Current ・・・・・・・・・・・・・・・・・・・・・・ 33
漏洩電流
27. Line Noise Tolerance ・・・・・・・・・・・・・・・・・・・・ 34
入力雑音耐量
28. Conducted Emission ・・・・・・・・・・・・・・・・・・・・・ 35
雑音端子電圧
29. Figure of Testing Circuitry ・・・・・・・・・・・・・・・・ 36
測定回路図

(Final Page 37)

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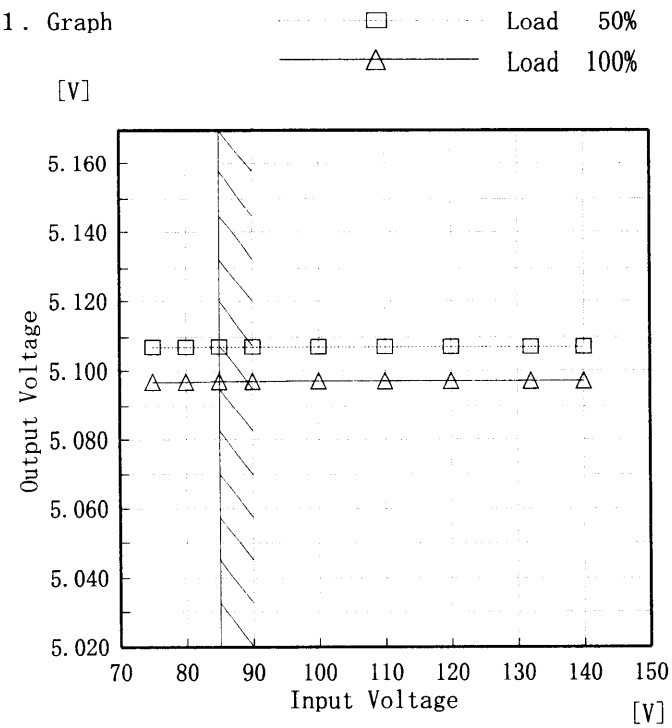
Model	LEB100F-0512
Item	Line Regulation 静的入力変動

Temperature 25℃
Testing Circuitry Figure A

Object V1:+5.0V5A

1. Graph

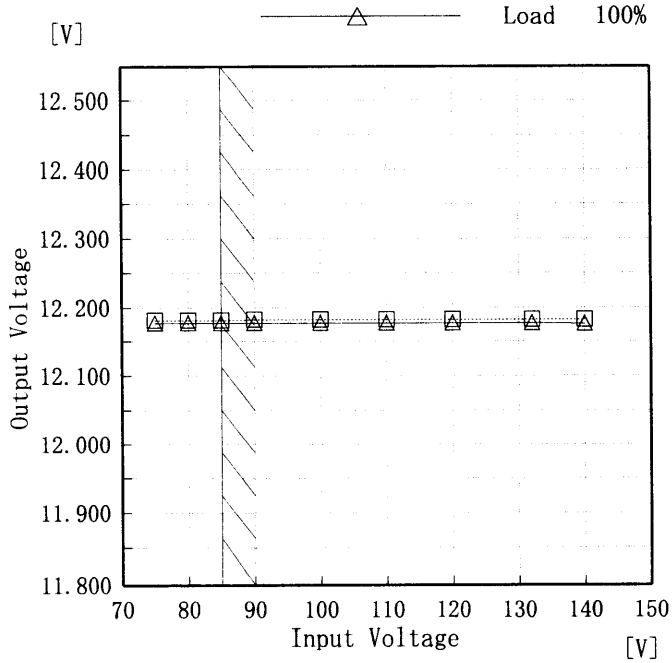


2. Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
75	5.107	5.097
80	5.107	5.097
85	5.107	5.097
90	5.107	5.097
100	5.107	5.097
110	5.107	5.097
120	5.107	5.097
132	5.107	5.097
140	5.107	5.097

Object V2:+12.0V5A

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	12.182	12.178
80	12.182	12.178
85	12.182	12.178
90	12.183	12.178
100	12.183	12.178
110	12.183	12.178
120	12.183	12.178
132	12.183	12.178
140	12.183	12.177

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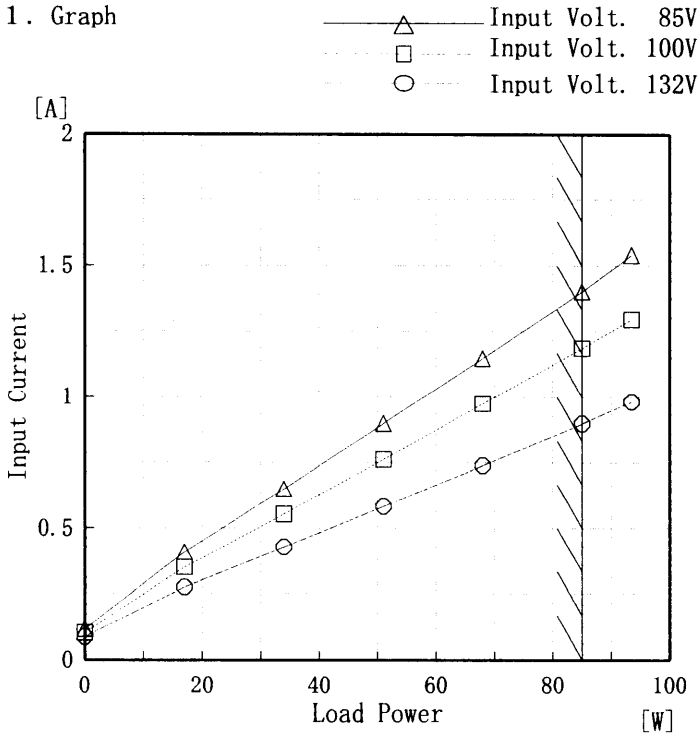
Model	LEB100F-0512
Item	Input Current (by Load Power) 入力電流 (負荷特性)
Output	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated load power.

(注)斜線は定格出力電力範囲を示す。

2. Values

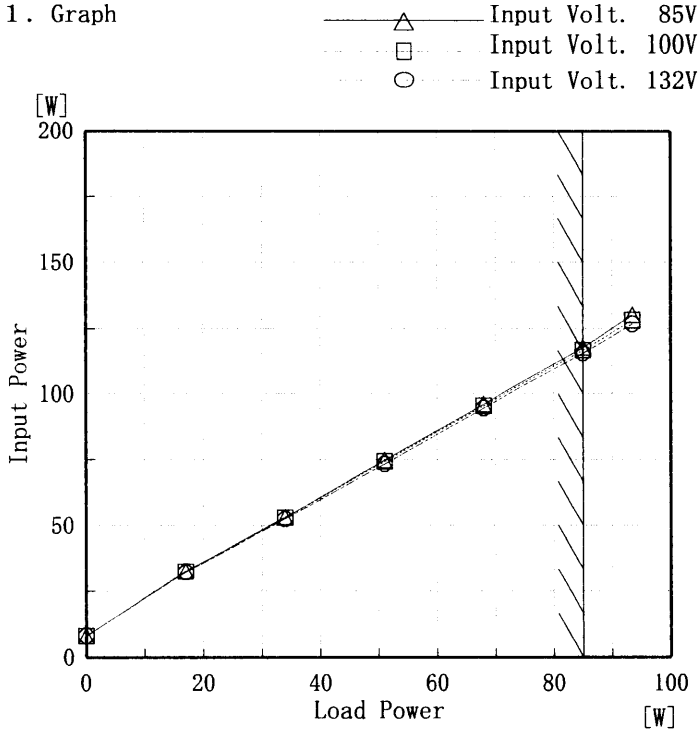
Load Power [W]	Input Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.0	0.115	0.101	0.086
17.0	0.409	0.351	0.275
34.0	0.649	0.554	0.428
51.0	0.898	0.763	0.583
68.0	1.148	0.974	0.739
85.0	1.402	1.186	0.899
93.5	1.540	1.298	0.981
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	LEB100F-0512
Item	Input Power (by Load Power) 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 power.

(注)斜線は定格出力電力範囲を示す。

2. Values

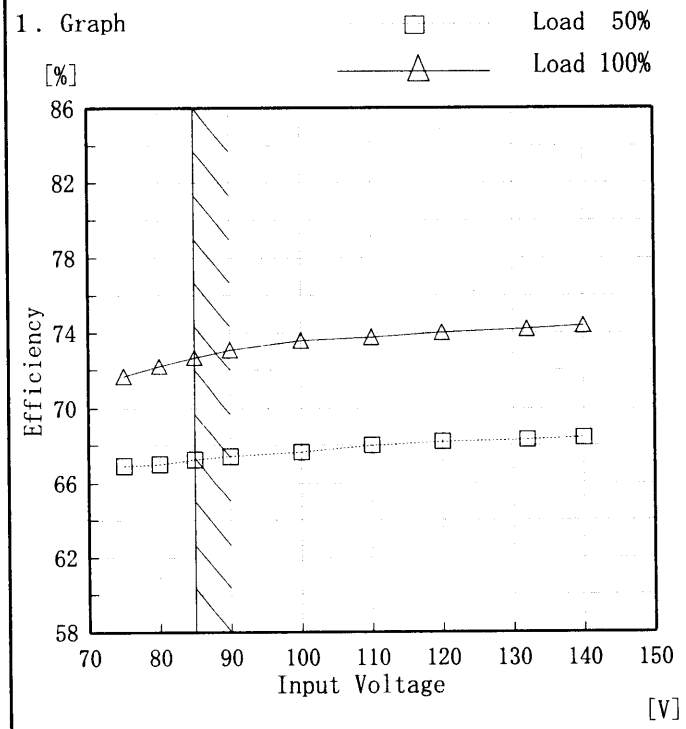
Load Power [W]	Input Power [W]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.0	7.98	8.01	8.10
17.0	32.70	32.52	32.37
34.0	53.20	53.00	52.60
51.0	74.80	74.30	73.40
68.0	96.10	95.50	94.60
85.0	118.00	117.00	115.70
93.5	130.20	128.30	126.80
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	LEB100F-0512
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	66.9	71.7
80	67.0	72.2
85	67.2	72.7
90	67.4	73.1
100	67.6	73.6
110	68.0	73.8
120	68.2	74.0
132	68.3	74.2
140	68.4	74.4

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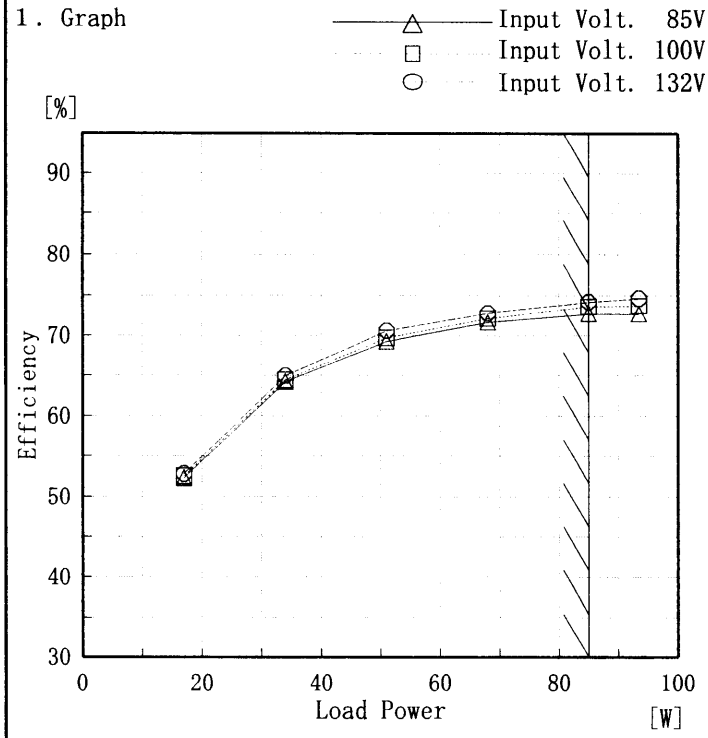
Model	LEB100F-0512
Item	Efficiency (by Load Power) 効率 (負荷特性)
Output	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated load power.

(注)斜線は定格出力電力範囲を示す。

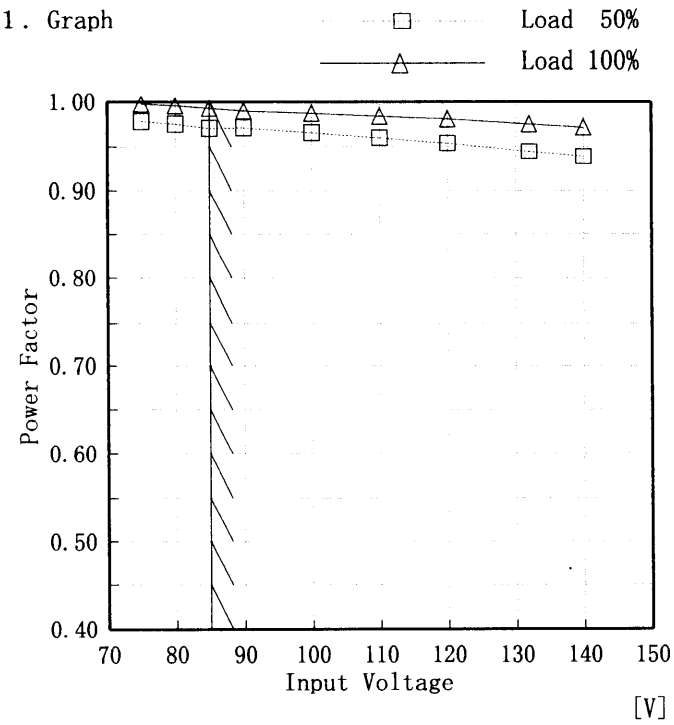
2. Values

Load Power [W]	Efficiency [%] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
17.0	52.3	52.5	52.8
34.0	64.2	64.5	65.0
51.0	69.3	69.7	70.6
68.0	71.7	72.1	72.8
85.0	72.7	73.6	74.2
93.5	72.7	73.8	74.6
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	LEB100F-0512		
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

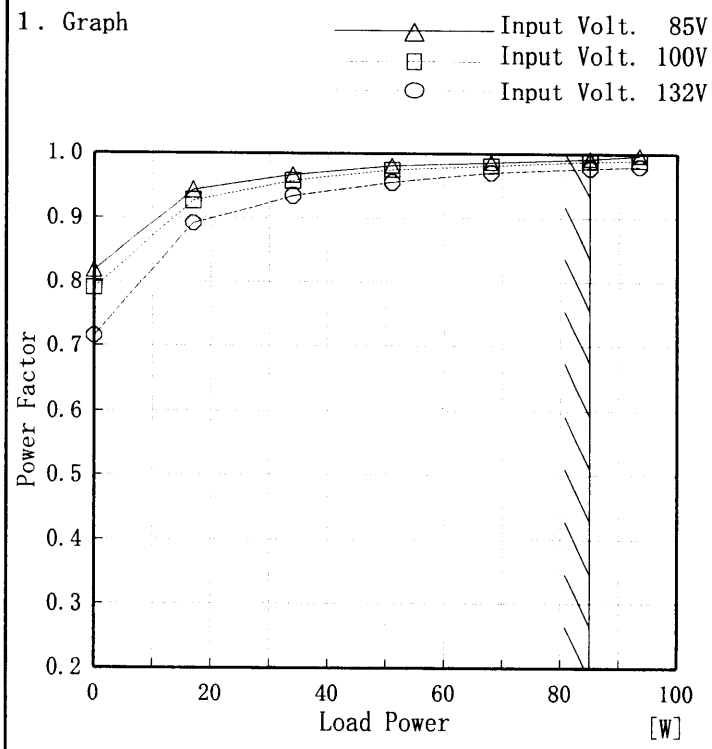
Input Voltage [V]	Power Factor	
	Load 50%	Load 100%
75	0.98	1.00
80	0.98	1.00
85	0.97	0.99
90	0.97	0.99
100	0.97	0.99
110	0.96	0.98
120	0.95	0.98
132	0.94	0.98
140	0.94	0.97

COSEL

Model	LEB100F-0512
Item	Power Factor (by Load Power) 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 power.

(注)斜線は定格出力電力範囲を示す。

2. Values

Load Power [W]	Power Factor		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.0	0.82	0.79	0.72
17.0	0.94	0.93	0.89
34.0	0.97	0.96	0.93
51.0	0.98	0.97	0.95
68.0	0.99	0.98	0.97
85.0	0.99	0.99	0.98
93.5	1.00	0.99	0.98
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

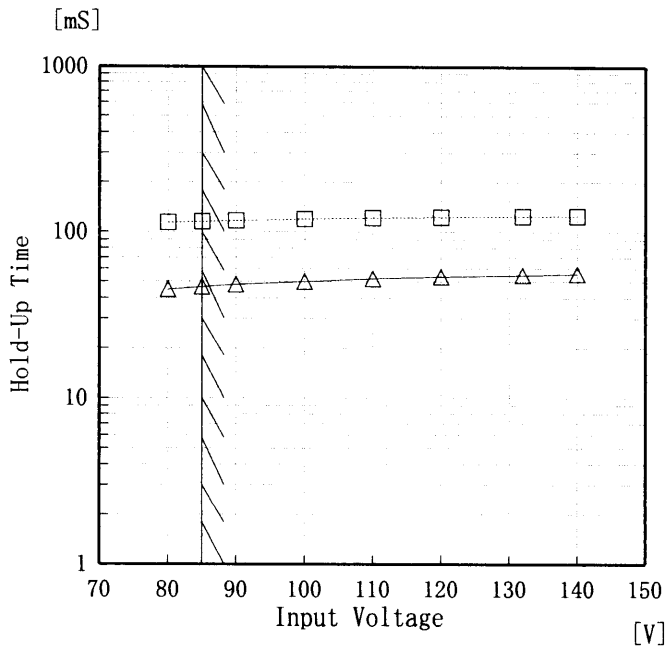
COSEL

Model	LEB100F-0512
Item	Hold-Up Time 出力保持時間
Object	V1:+5.0V5A

Temperature 25℃
Testing Circuitry Figure A

1. Graph

□ Load 50%
△ Load 100%



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	—	—
80	114	45
85	115	47
90	117	48
100	120	50
110	121	52
120	123	54
132	124	55
140	125	56

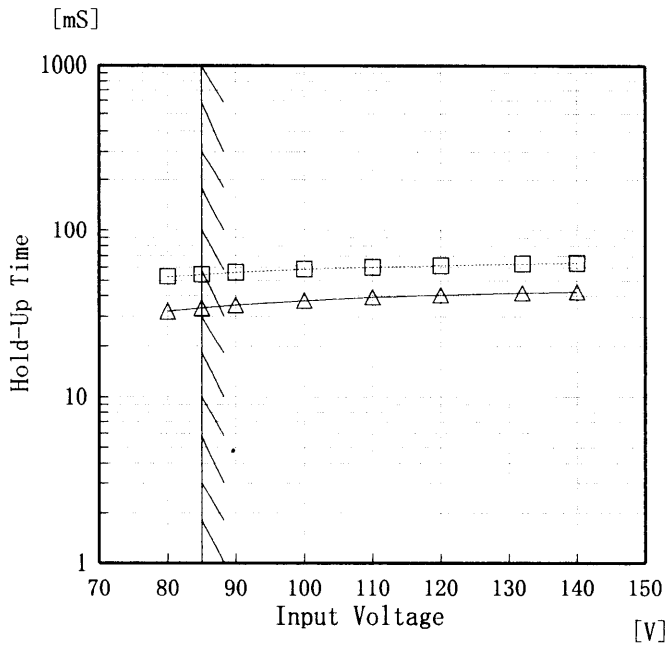
COSEL

Model	LEB100F-0512
Item	Hold-Up Time 出力保持時間
Object	V2:＋12.0V5A

Temperature 25℃
Testing Circuitry Figure A

1. Graph

□ Load 50%
△ Load 100%



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	—	—
80	53	32
85	54	34
90	56	35
100	59	37
110	60	39
120	62	41
132	63	42
140	64	42

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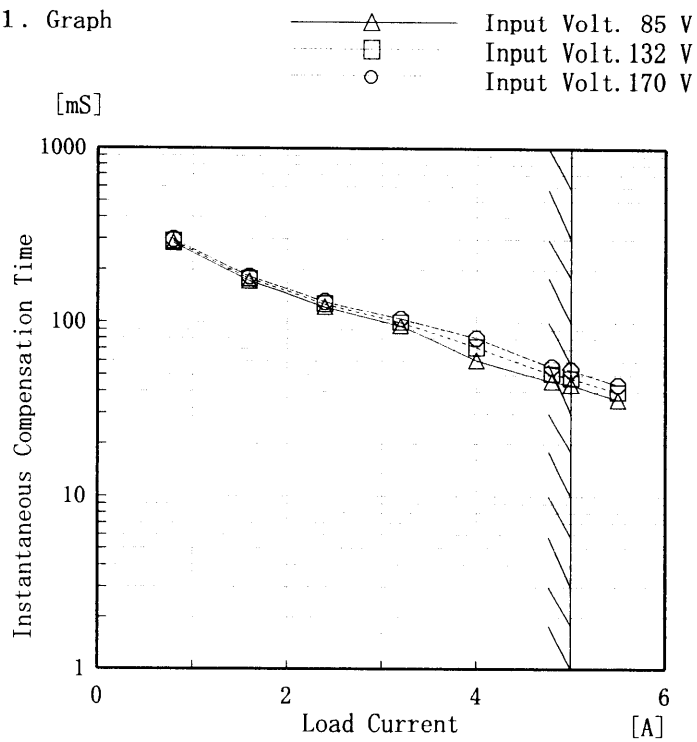
Model	LEB100F-0512
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	V1:+5.0V5A

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

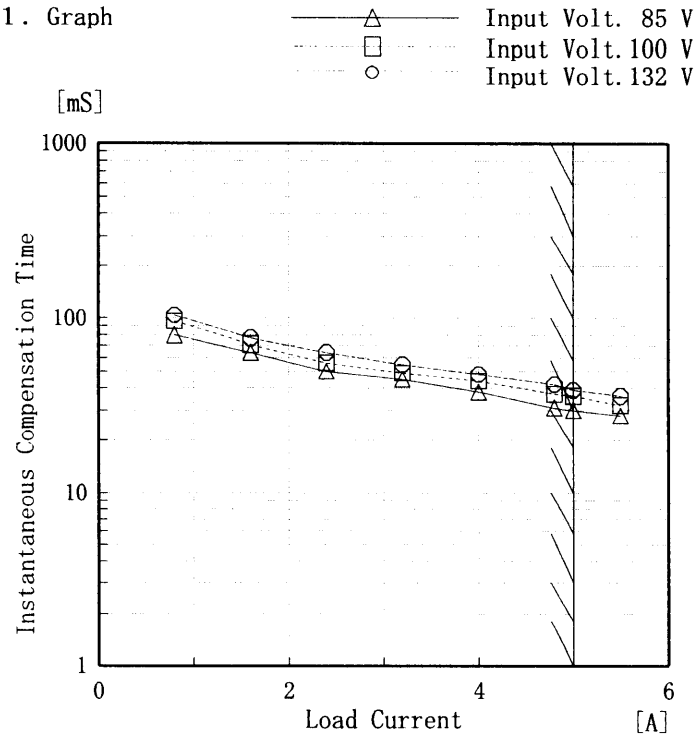
Load Current [A]	Time [mS]		
	Input Volt. 85[V]	Input Volt. 132[V]	Input Volt. 170[V]
0.0	—	—	—
0.8	284	290	297
1.6	172	177	182
2.4	123	128	132
3.2	95	100	105
4.0	61	72	81
4.8	46	51	56
5.0	44	48	54
5.5	36	40	44
—	—	—	—
—	—	—	—

COSEL

Model	LEB100F-0512
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	V2:+12.0V5A

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]
0.0	—	—	—
0.8	80	96	104
1.6	64	71	77
2.4	50	56	64
3.2	45	49	55
4.0	38	44	48
4.8	31	37	42
5.0	30	36	39
5.5	28	32	36
—	—	—	—
—	—	—	—

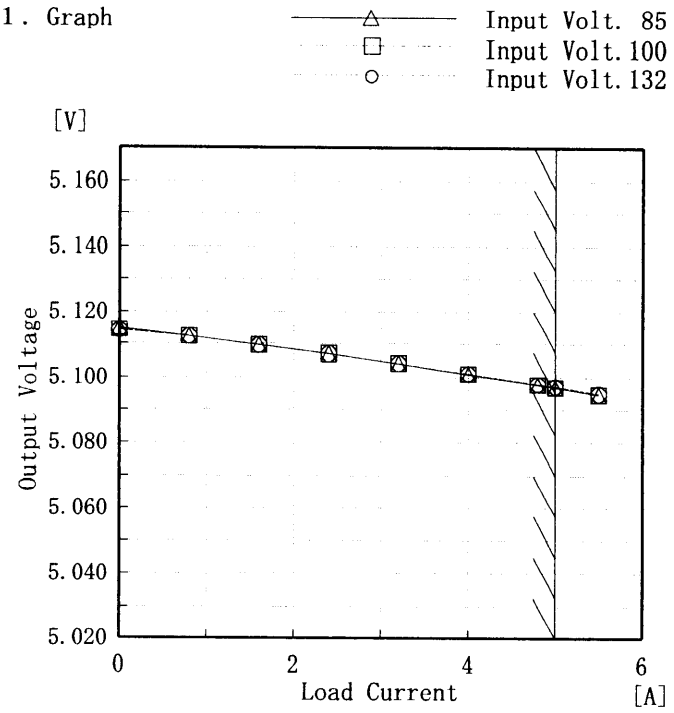
COSEL

Model	LEB100F-0512
Item	Load Regulation 静的負荷変動

Temperature 25℃
Testing Circuitry Figure A

Object V1:+5.0V5A

1. Graph

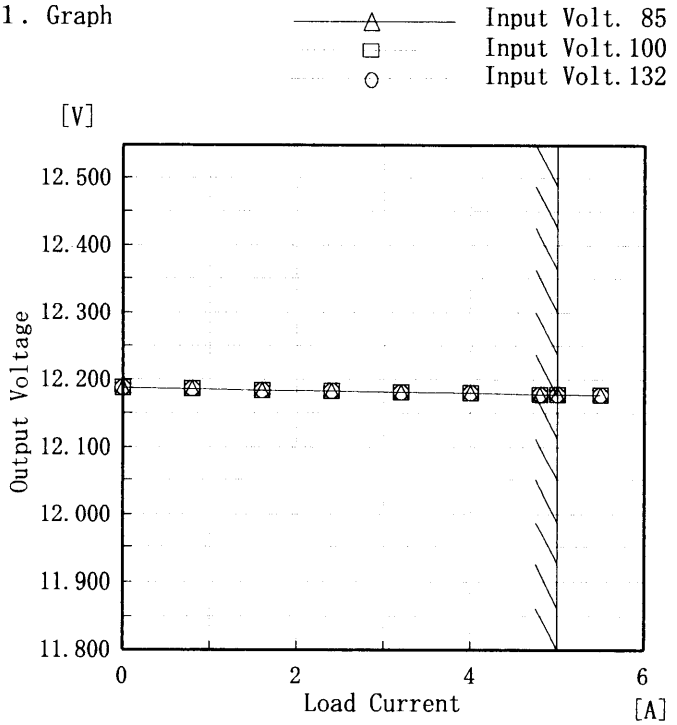


2. Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.0	5.115	5.114	5.114
0.8	5.112	5.112	5.112
1.6	5.110	5.110	5.110
2.4	5.107	5.107	5.107
3.2	5.104	5.104	5.104
4.0	5.101	5.101	5.101
4.8	5.098	5.098	5.098
5.0	5.097	5.097	5.097
5.5	5.095	5.095	5.095
—	—	—	—

Object V2:+12.0V5A

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]
0.0	12.188	12.188	12.188
0.8	12.186	12.186	12.186
1.6	12.184	12.184	12.184
2.4	12.183	12.183	12.183
3.2	12.181	12.181	12.181
4.0	12.180	12.180	12.180
4.8	12.178	12.178	12.178
5.0	12.178	12.178	12.178
5.5	12.177	12.177	12.177
—	—	—	—

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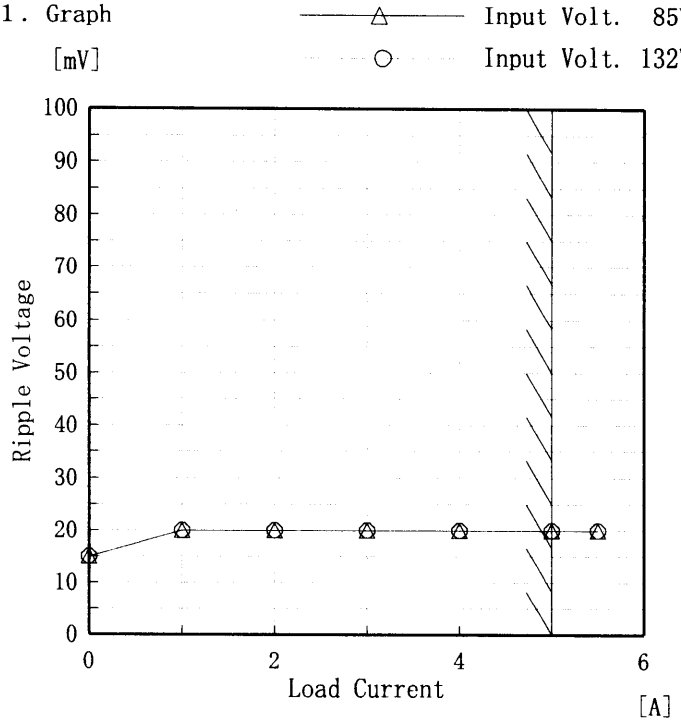
Model	LEB100F-0512
Item	Ripple Voltage(by Load Current) リップル電圧(負荷特性)
Object	V1:+5.0V5A

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

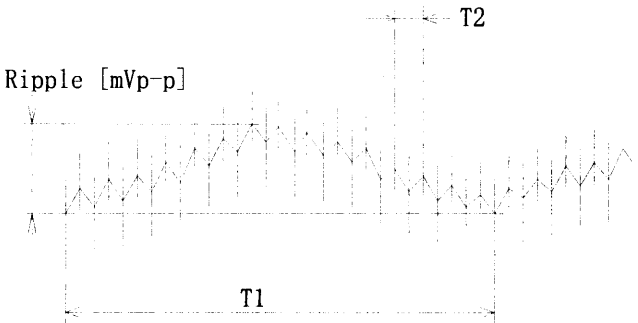


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

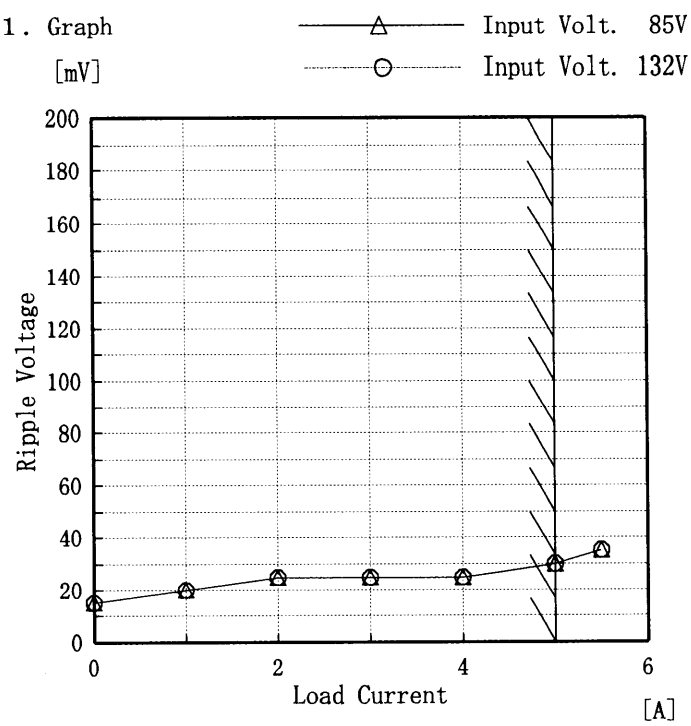
Load Current [A]	Ripple Output Voltage [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.0	15	15
1.0	20	20
2.0	20	20
3.0	20	20
4.0	20	20
5.0	20	20
5.5	20	20
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

Model	LEB100F-0512
Item	Ripple Voltage(by Load Current) リップル電圧(負荷特性)
Object	V2:+12.0V5A

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

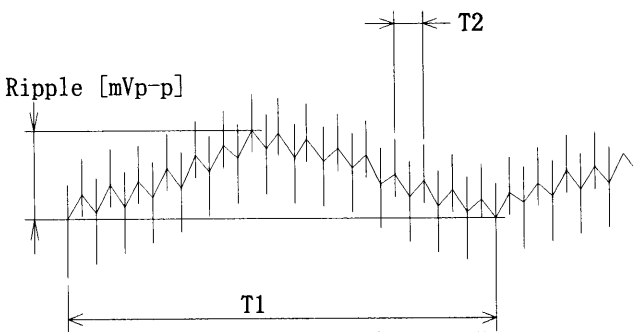


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

Load Current [A]	Ripple Output Voltage [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.0	15	15
1.0	20	20
2.0	25	25
3.0	25	25
4.0	25	25
5.0	30	30
5.5	35	35
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

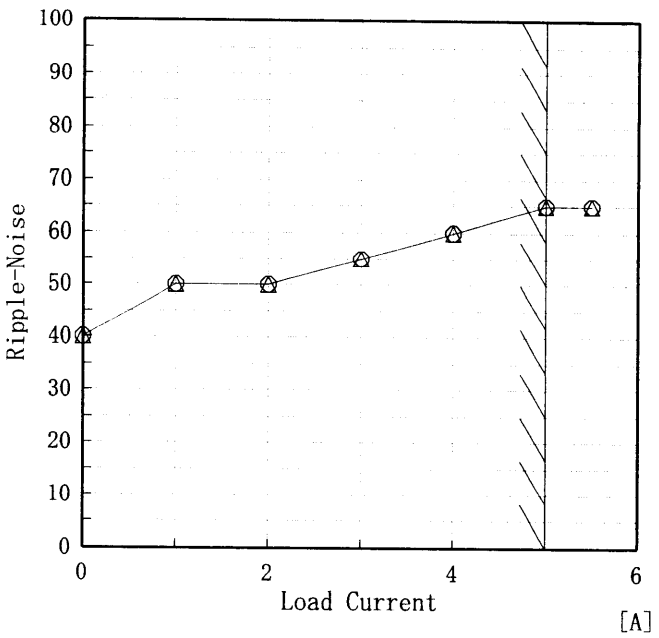
Model	LEB100F-0512
Item	Ripple-Noise　リップルノイズ
Object	V1:+5.0V5A

Temperature　25℃
Testing Circuitry　Figure A

1. Graph

[mV]

△ 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

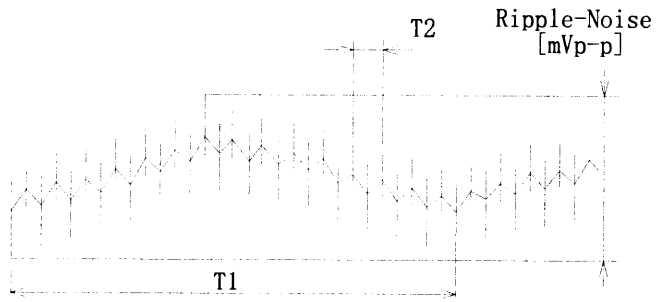


Fig. Complex Ripple Wave Form
図　リップル波形詳細図

2. Values

Load Current [A]	Ripple-Noise [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.0	40	40
1.0	50	50
2.0	50	50
3.0	55	55
4.0	60	60
5.0	65	65
5.5	65	65
—	—	—
—	—	—
—	—	—
—	—	—

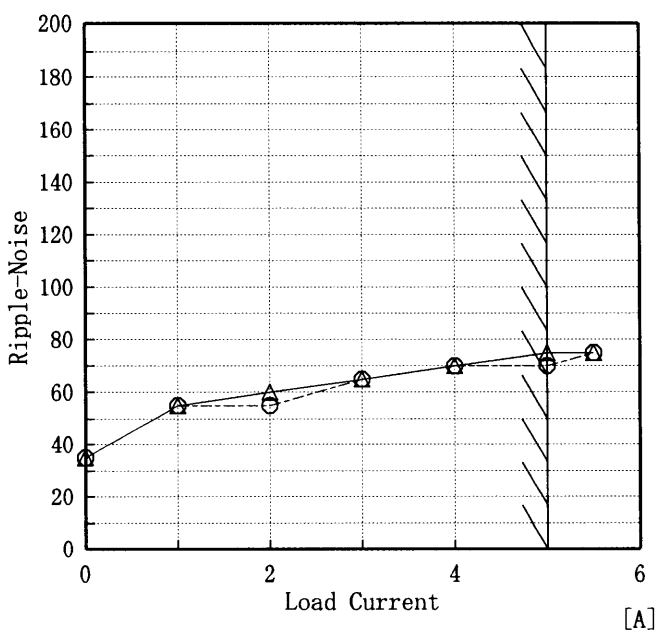
COSEL

Model	LEB100F-0512
Item	Ripple-Noise　リップルノイズ
Object	V2:＋12.0V5A

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

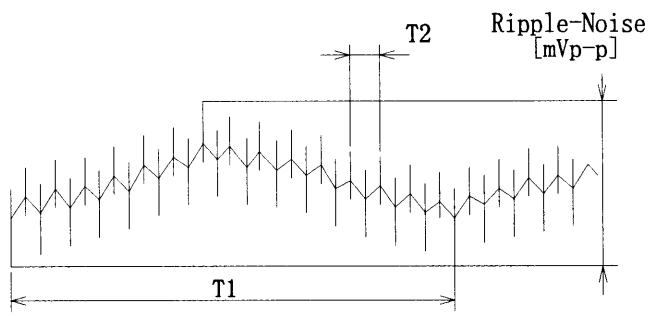


Fig. Complex Ripple Wave Form
図　リップル波形詳細図

2. Values

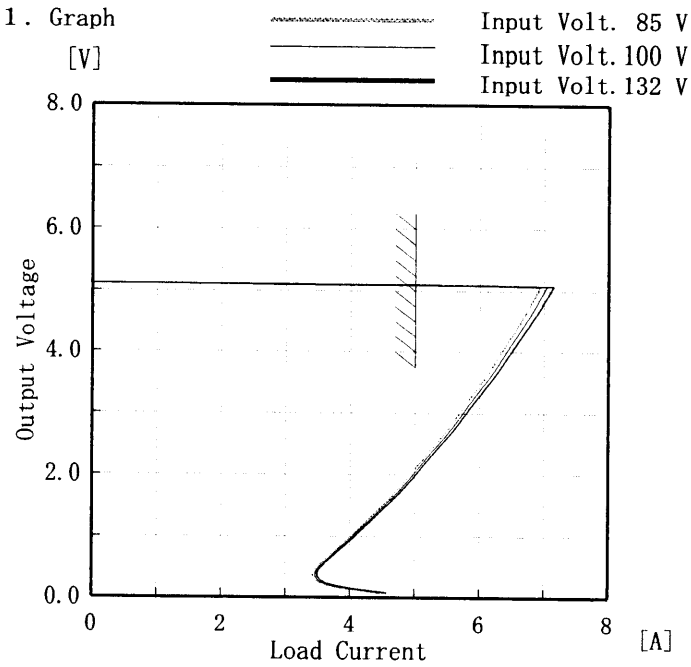
Load Current [A]	Ripple-Noise [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.0	35	35
1.0	55	55
2.0	60	55
3.0	65	65
4.0	70	70
5.0	75	70
5.5	75	75
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

Model	LEB100F-0512		
Item	Overcurrent Protection 過電流保護	Temperature Testing Circuitry	25℃ Figure A

Object: V1:+5.0V5A

1. Graph



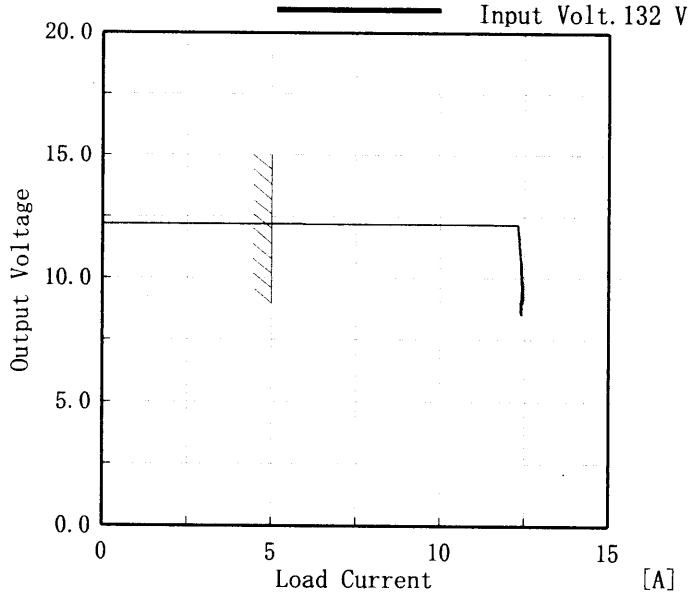
Note: Slanted line shows the range of the rated load current.

2. Values

Output Voltage [V]	Load Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
5.00	6.89	7.00	7.10
4.75	6.78	6.86	6.95
4.50	6.61	6.70	6.79
4.00	6.32	6.39	6.46
3.50	6.03	6.07	6.14
3.00	5.68	5.74	5.80
2.50	5.29	5.34	5.38
2.00	4.89	4.93	4.97
1.50	4.50	4.53	4.57
1.00	3.96	3.99	4.02
0.50	3.48	3.51	3.54
0.00	4.48	4.52	4.57

Object: V2:+12.0V5A

1. Graph



Note: Slanted line shows the range of the rated load current.

Intermittent operation occurs when the output voltage is from 8.4V to 0V.

2. Values

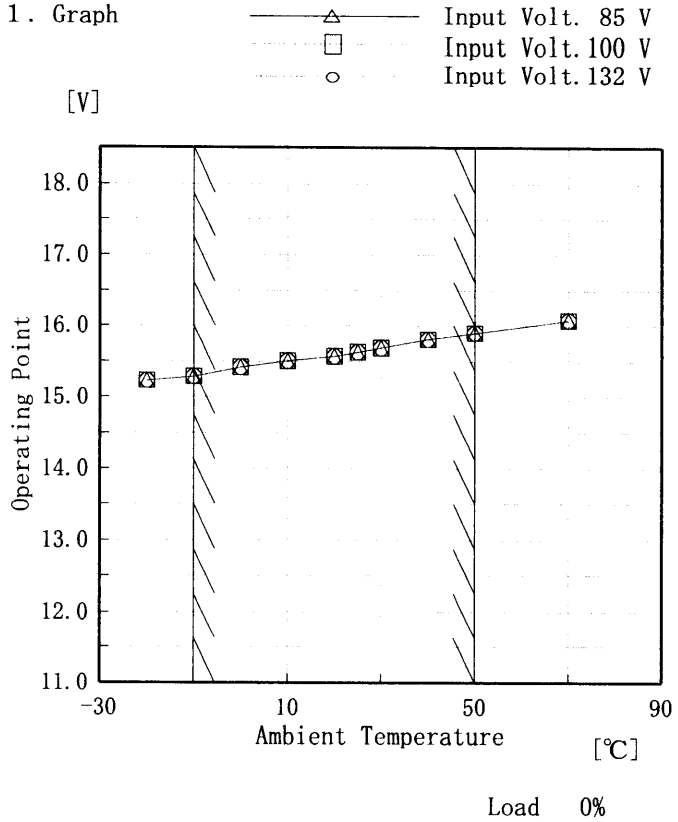
Output Voltage [V]	Load Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
12.00	12.33	12.32	12.31
11.40	12.36	12.36	12.34
10.80	12.41	12.40	12.38
9.60	12.47	12.44	12.41
8.40	12.44	12.42	12.42
7.20	—	—	—
6.00	—	—	—
4.80	—	—	—
3.60	—	—	—
2.40	—	—	—
1.20	—	—	—
0.00	—	—	—

COSEL

Model	LEB100F-0512
Item	Overvoltage Protection 過電圧保護
Object	V2:＋12.0V5A

Testing Circuitry Figure A

1. Graph



Load 0%

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

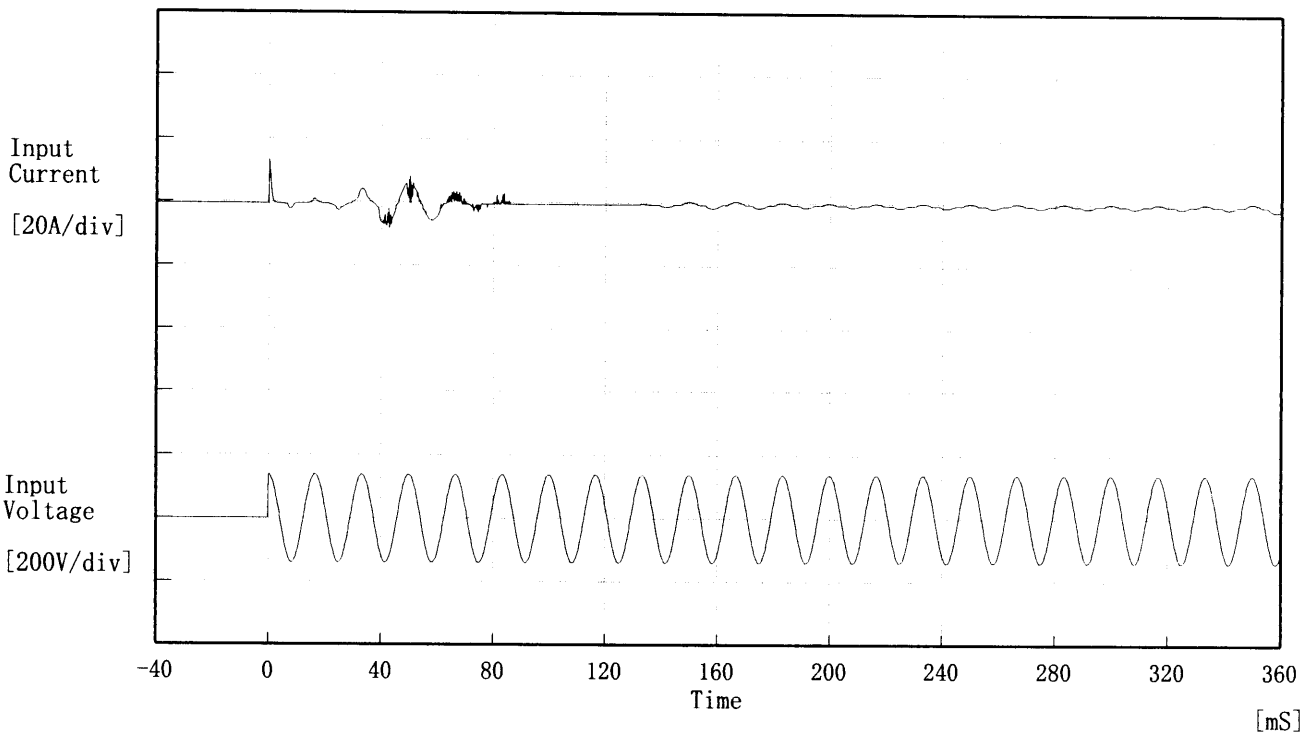
(注)斜線は定格周囲温度範囲を示す。

2. Values

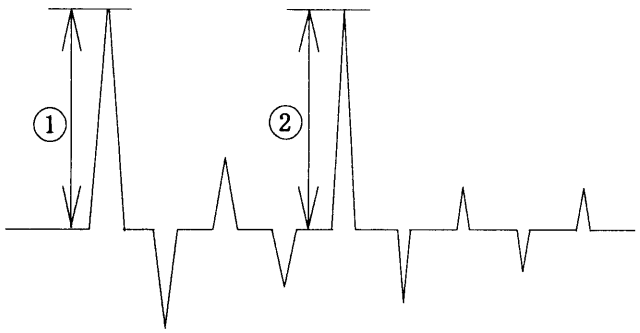
Ambient Temperature [℃]	Operating Point [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	15.2	15.2	15.2
-10	15.3	15.3	15.3
0	15.4	15.4	15.4
10	15.5	15.5	15.5
20	15.6	15.6	15.6
25	15.6	15.6	15.6
30	15.7	15.7	15.7
40	15.8	15.8	15.8
50	15.9	15.9	15.9
70	16.1	16.1	16.1
—	—	—	—

COSEL

Model	LEB100F-0512		
Item	Inrush Current 突入電流	Temperature Testing Circuitry	25℃ Figure A
Object	————————		



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



BC－3268

COSEL

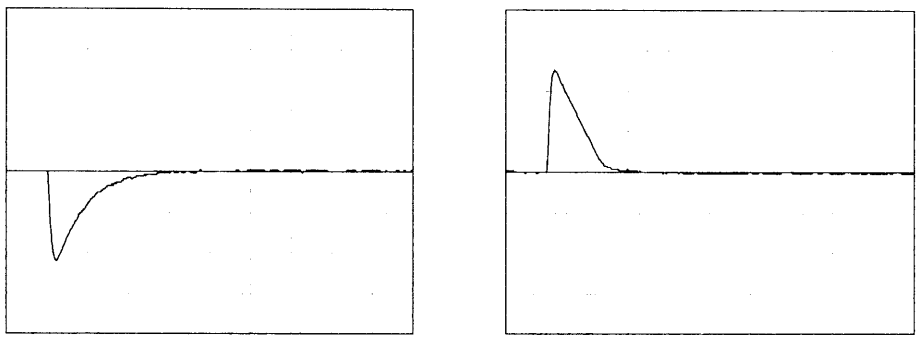
Model	LEB100F-0512
Item	Dynamic Load Responce 動的負荷変動
Object	V1:+5.0V5A

Temperature 25℃
Testing Circuitry Figure A

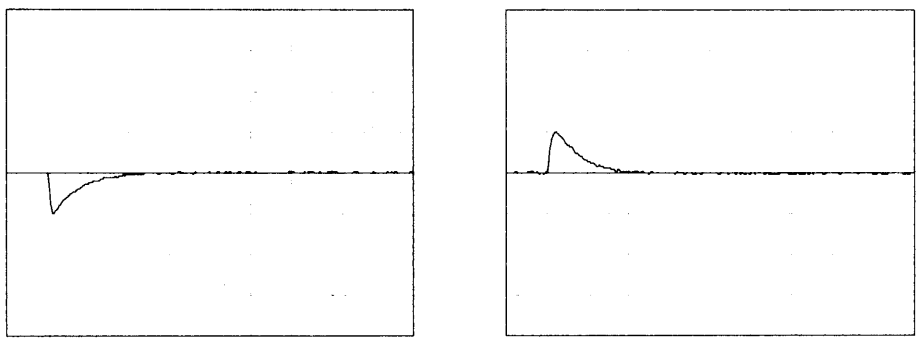
Input Volt. 100 V
Cycle 1000 mS

Load Current

Min. Load ←→
Load 100 %



Min. Load ←→
Load 50 %



100 mV/div

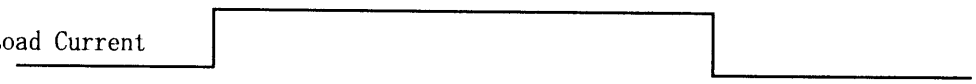
10 ms/div

COSEL

Model	LEB100F-0512		
Item	Dynamic Load Responce 動的負荷変動	Temperature Testing Circuitry	25℃ Figure A
Object	V2:＋12.0V5A		

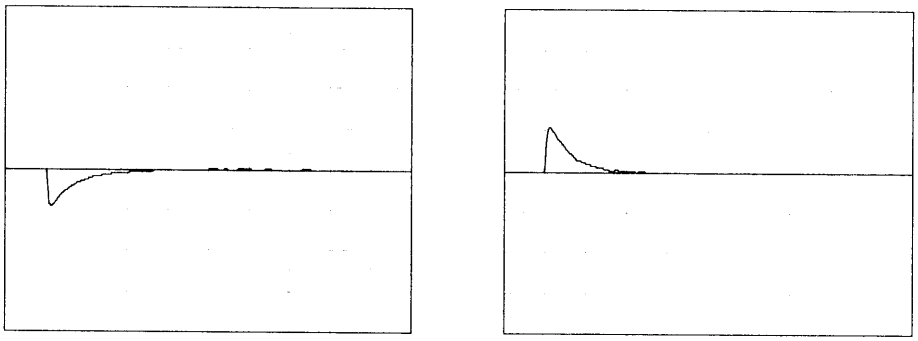
Input Volt. 100 V

Cycle 1000 mS



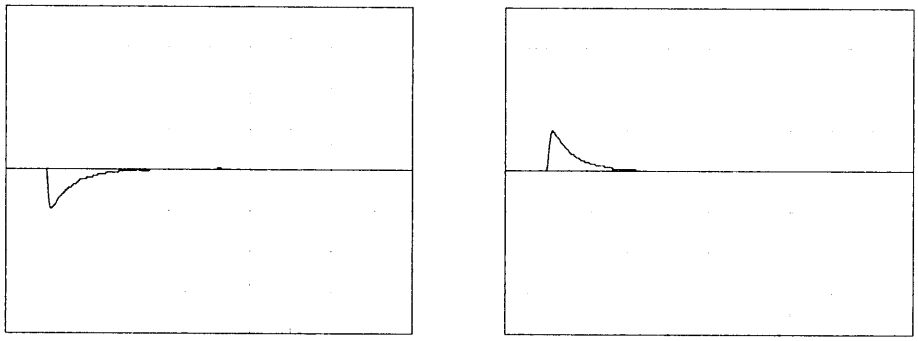
Min. Load ←→

Load 100 %



Min. Load ←→

Load 50 %



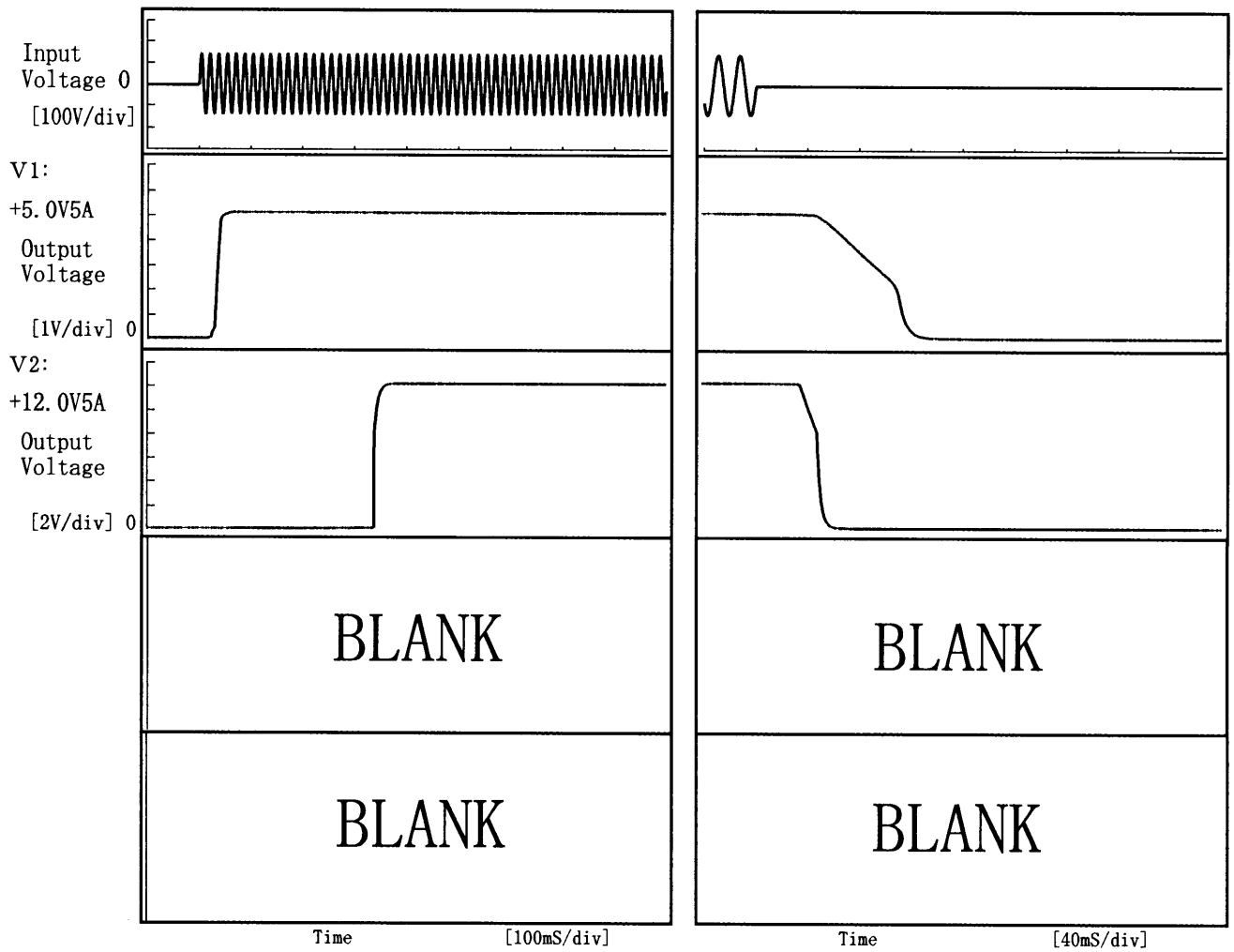
COSEL

Model	LEB100F-0512
Item	Rise and Fall Time 立上り、立下り時間
Object	————

Temperature 25℃
Testing Circuitry Figure A

Load Power 100 %
Input Volt. 100 V

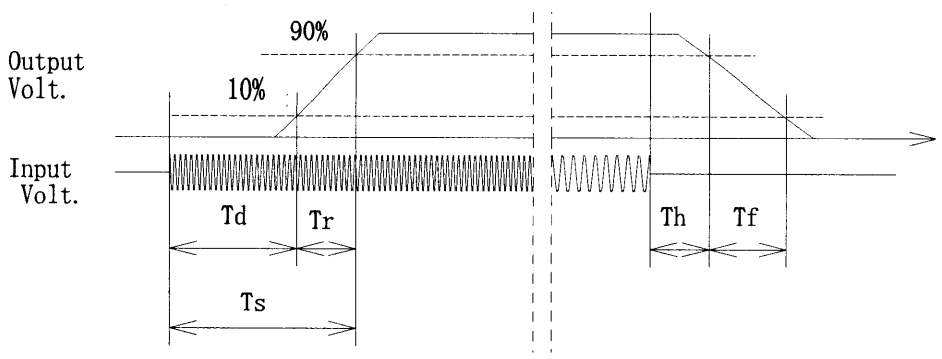
1. Graph



2. Values

[mS]

Output \ Time	T d	T r	T s	T h	T f
V1	28.5	11.0	39.5	60.8	58.0
V2	336.0	9.0	345.0	39.0	14.8
—	—	—	—	—	—
—	—	—	—	—	—



BC−3268

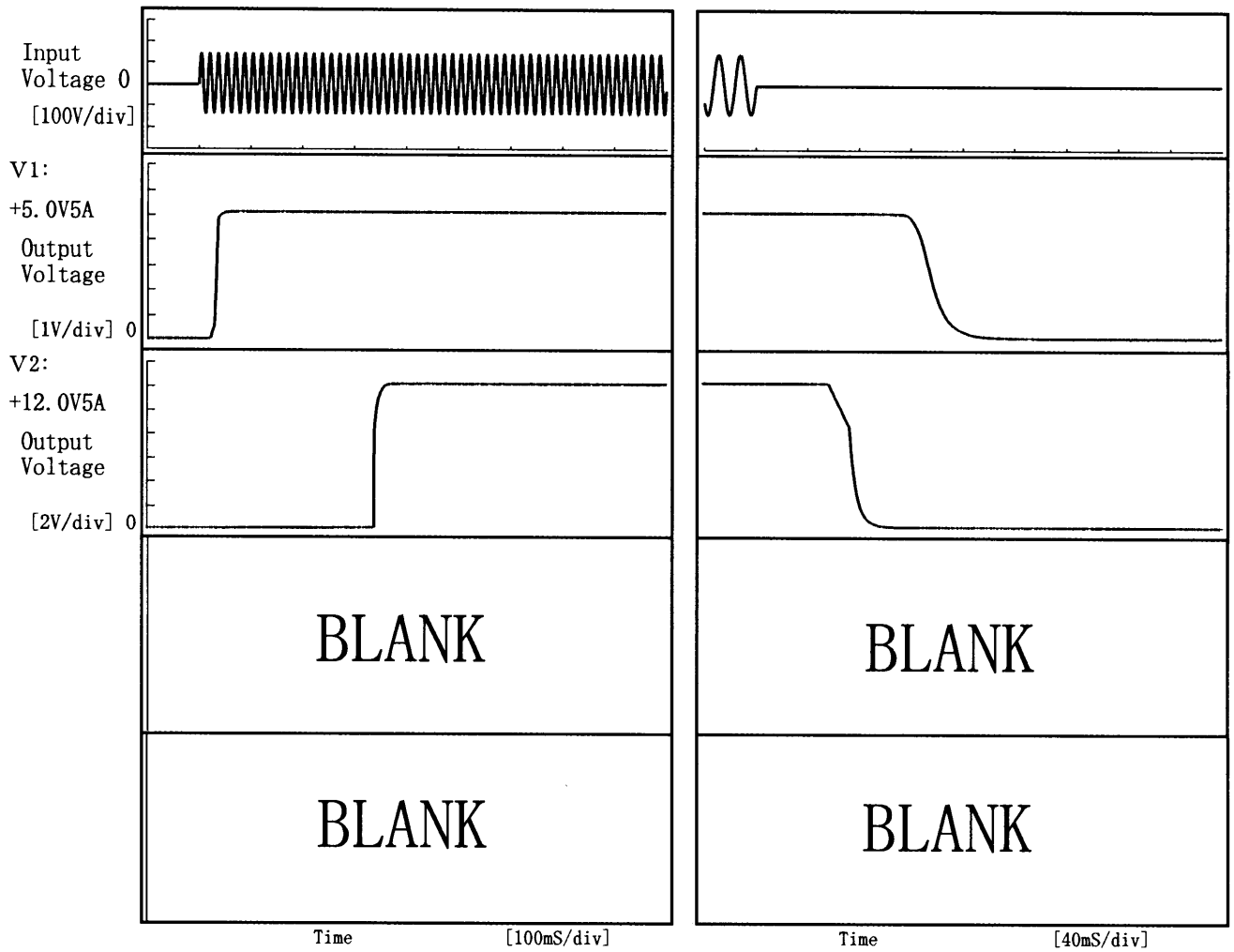
COSEL

Model	LEB100F-0512
Item	Rise and Fall Time 立上り、立下り時間
Object	————

Temperature 25℃
Testing Circuitry Figure A

Load Power 50 %
Input Volt. 100 V

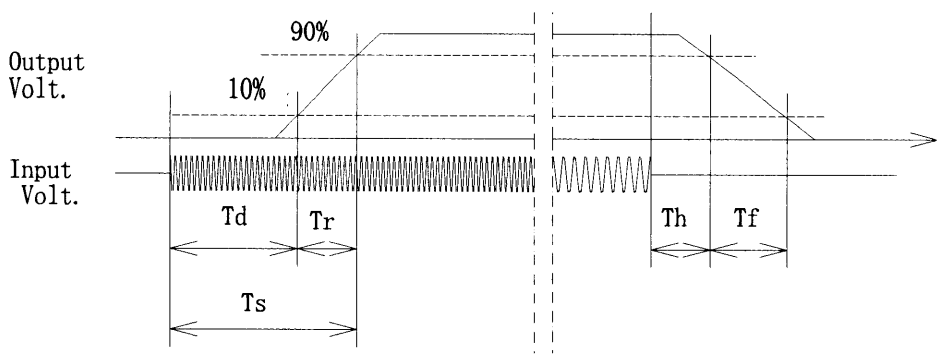
1. Graph



2. Values

[mS]

Output \ Time	T d	T r	T s	T h	T f
V1	27.5	8.0	35.5	124.8	31.2
V2	336.0	9.0	345.0	62.8	21.8
—	—	—	—	—	—
—	—	—	—	—	—



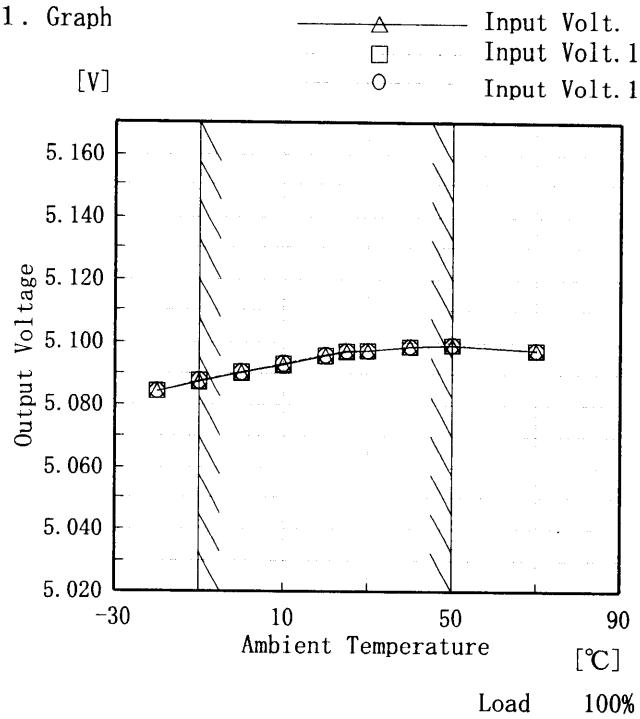
COSEL

Model	LEB100F-0512
Item	Ambient Temperature Drift 周囲温度変動

Testing Circuitry Figure A

Object V1:+5.0V5A

1. Graph

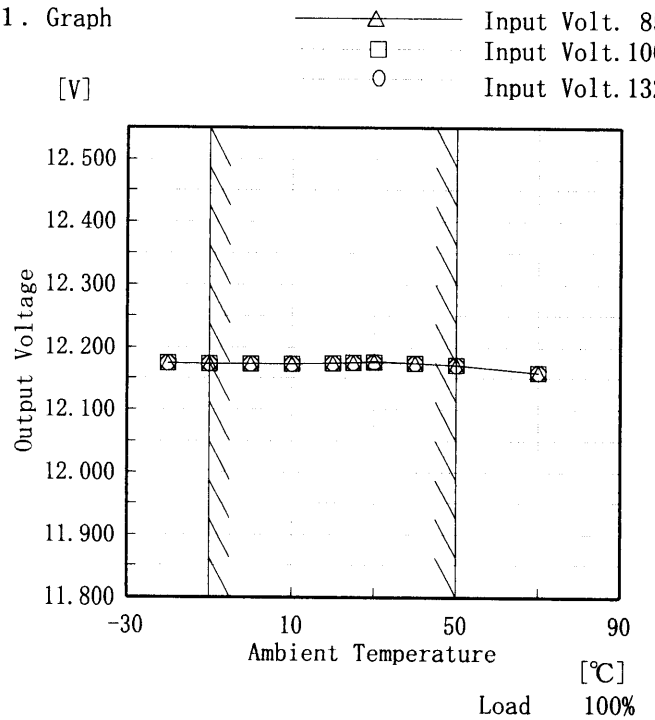


2. Values

Ambient Temperature [℃]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	5.084	5.084	5.085
-10	5.087	5.088	5.088
0	5.090	5.090	5.090
10	5.093	5.093	5.093
20	5.096	5.096	5.096
25	5.097	5.097	5.097
30	5.097	5.097	5.097
40	5.099	5.099	5.099
50	5.099	5.099	5.099
70	5.097	5.098	5.098
—	—	—	—

Object V2:+12.0V5A

1. Graph



2. Values

Ambient Temperature [℃]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	12.174	12.174	12.174
-10	12.173	12.173	12.173
0	12.173	12.173	12.173
10	12.173	12.173	12.173
20	12.174	12.174	12.174
25	12.175	12.175	12.175
30	12.177	12.176	12.176
40	12.174	12.174	12.174
50	12.171	12.171	12.171
70	12.159	12.159	12.159
—	—	—	—

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。

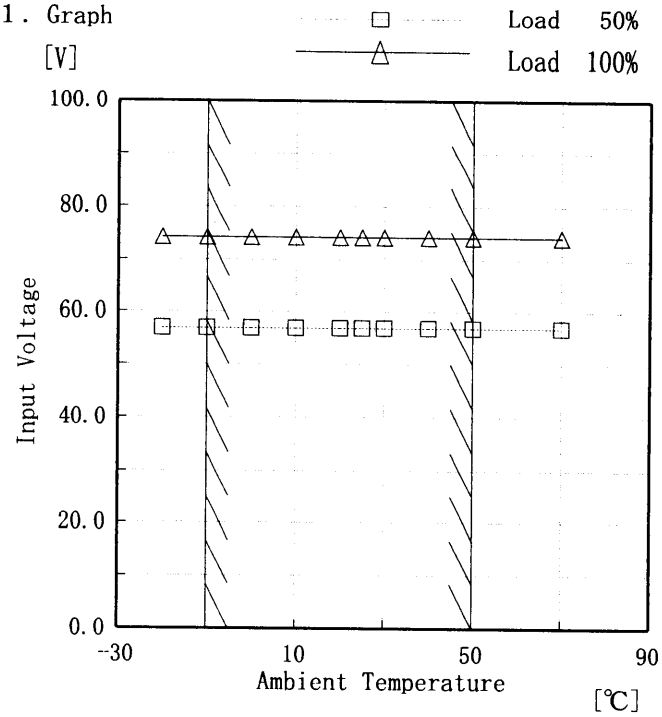
COSEL

Model	LEB100F-0512
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 V1:+5.0V5A

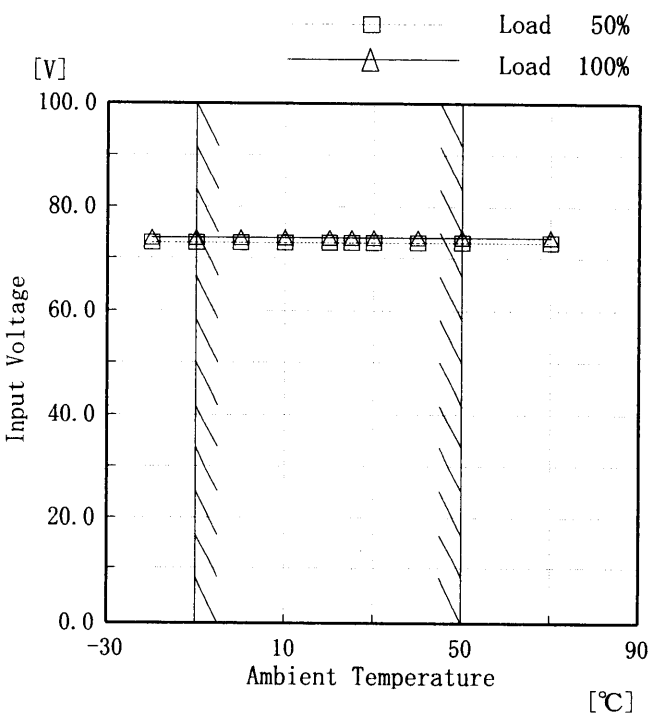
1. Graph



2. Values

Ambient Temperature [℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	57	74
-10	57	74
0	57	74
10	57	74
20	57	74
25	57	74
30	57	74
40	57	74
50	57	74
70	57	74
—	—	—

Object V2:+12.0V5A



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	73	74
-10	73	74
0	73	74
10	73	74
20	73	74
25	73	74
30	73	74
40	73	74
50	73	74
70	73	74
—	—	—

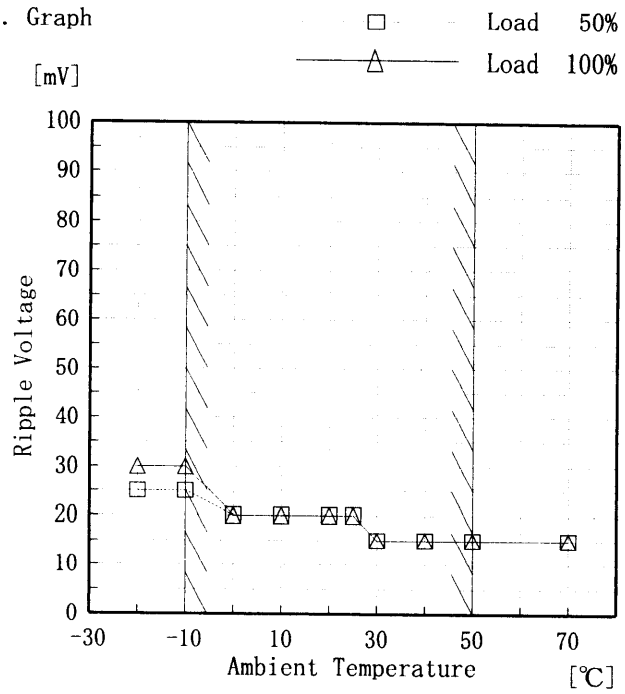
COSEL

Model	LEB100F-0512
Item	Ripple Voltage (by Ambient Temp.) リップル電圧 (周囲温度特性)

Testing Circuitry Figure A

Object V1:+5.0V5A

1. Graph



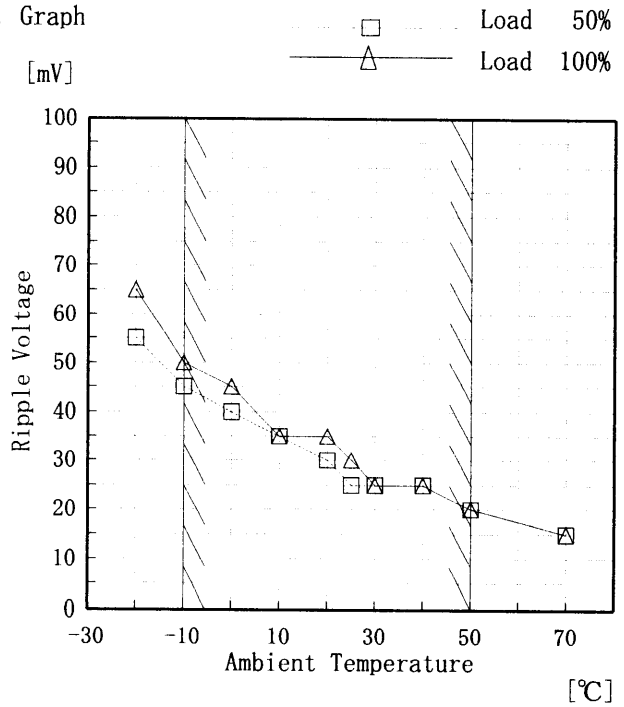
Input Volt. 100 V

2. Values

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

Object V2:+12.0V5A

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

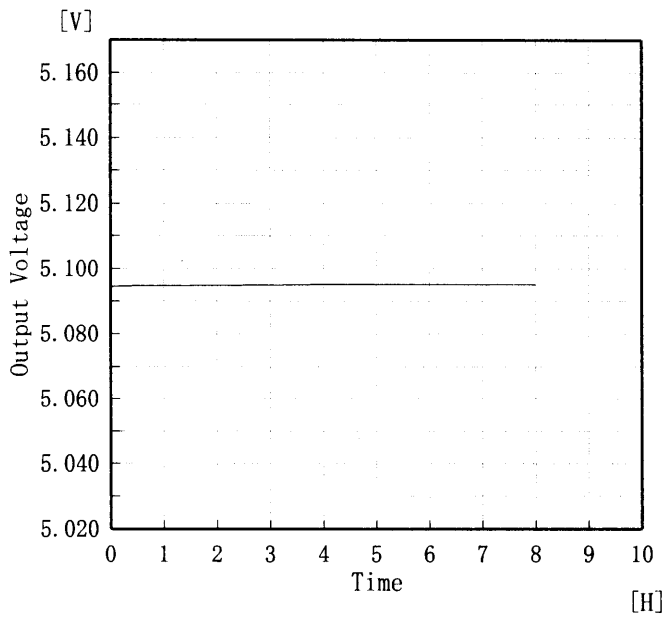
Ambient Temperature [℃]	Ripple Output Voltage [mV]	
	Load 50%	Load 100%
-20	55	65
-10	45	50
0	40	45
10	35	35
20	30	35
25	25	30
30	25	25
40	25	25
50	20	20
70	15	15
—	—	—

COSEL

Model	LEB100F-0512		
Item	Time Lapse Drift 経時ドリフト	Temperature Testing Circuitry	25℃ Figure A

Object V1:+5.0V5A

1. Graph



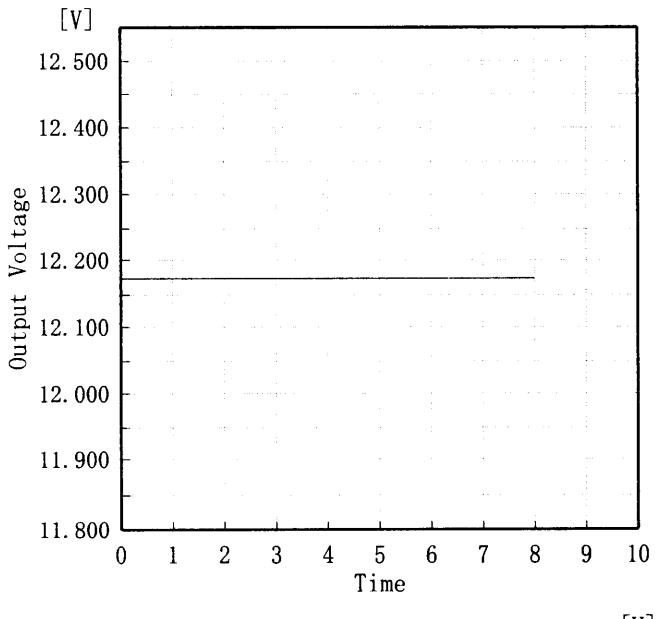
Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	5.094
0.5	5.095
1.0	5.095
2.0	5.095
3.0	5.095
4.0	5.095
5.0	5.095
6.0	5.095
7.0	5.095
8.0	5.095

Object V2:+12.0V5A

1. Graph



Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	12.175
0.5	12.173
1.0	12.173
2.0	12.173
3.0	12.173
4.0	12.173
5.0	12.173
6.0	12.173
7.0	12.173
8.0	12.173

COSEL

Model	LEB100F-0512
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 : -10～50 ℃

Input Voltage : 85～132 V

Load Current (V1) : 0～5 A

(V2) : 0～5 A

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

* Output Voltage Accuracy (Ration) = $\frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}}$ ×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 -10～50 ℃

入力電圧 85～132 V

負荷電流 (V1) 0～5 A

(V2) 0～5 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) ＝ $\frac{\text{変動値}}{\text{定格出力電圧}}$ ×１００

2. Values

Object V1:+5.0V5A

Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	50	100	0	5.117	±15	±0.3
Minimum Voltage	-10	85	5	5.088		

Object V2:+12.0V5A

Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	25	85	0	12.187	±9	±0.1
Minimum Voltage	50	85	5	12.170		

COSEL

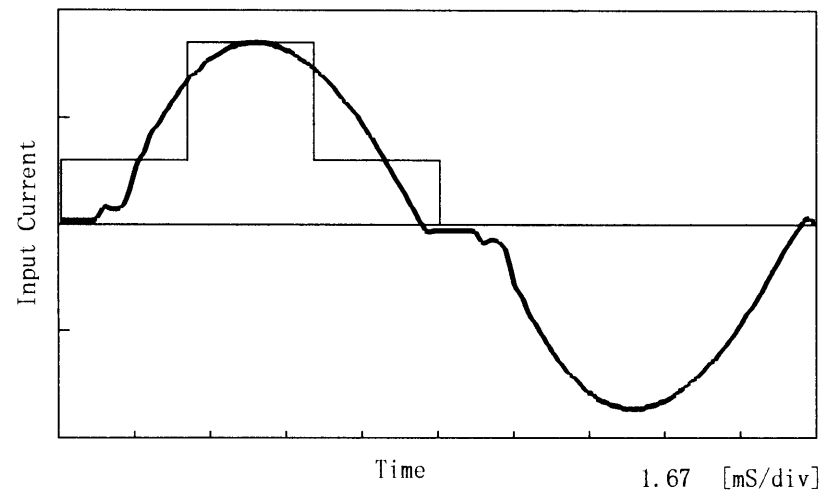
Model	LEB100F-0512		
Item	Harmonic Current 高調波電流	Temperature Testing Circuitry	25℃ Figure E
Object	————		

1. Input Current Waveform

——— Input Current

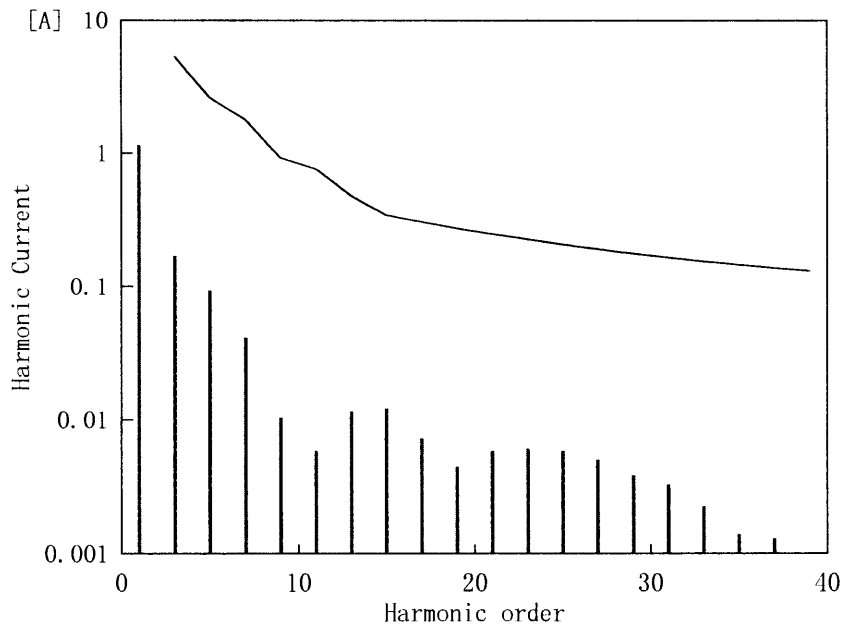
——— Envelope of the input current to classify equipment as Class D
ｸﾗｽDの機器を決定するための入力電流包絡線

1 A/div



Conditions	Values
Input Voltage [V]	100
Input Current [A]	1.179
Active Power [W]	116.2
Apparent Power[VA]	117.9
Frequency [Hz]	60
Power Factor	0.986
Output Power [W]	85

2. Harmonic Current



——— Harmonic Current
高調波電流

——— Limits for Class A equipment
ｸﾗｽAの機器に対する限度値

Harmonics order 高調波次数	Limits 限度値 [A]	Values 測定値 [A]
1	—	1.16170
2	—	0.00050
3	5.29000	0.17330
4	—	0.00030
5	2.62200	0.09370
6	—	0.00010
7	1.77100	0.04200
8	—	0.00010
9	0.92000	0.01040
10	—	0.00010
11	0.75900	0.00600
12	—	0.00010
13	0.48300	0.01160
14	—	0.00000
15	0.34500	0.01220
16	—	0.00000
17	0.30441	0.00730
18	—	0.00010
19	0.27237	0.00450
20	—	0.00000
21	0.24643	0.00590
22	—	0.00010
23	0.22500	0.00620
24	—	0.00000
25	0.20700	0.00590
26	—	0.00000
27	0.19167	0.00510
28	—	0.00000
29	0.17845	0.00390
30	—	0.00010
31	0.16694	0.00330
32	—	0.00000
33	0.15682	0.00230
34	—	0.00000
35	0.14786	0.00140
36	—	0.00000
37	0.13986	0.00130
38	—	0.00000
39	0.13269	0.00010
40	—	0.00010

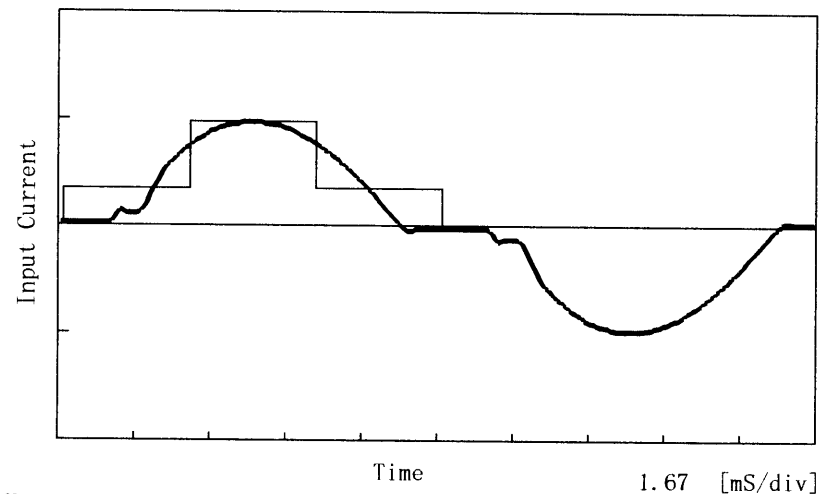
COSEL

Model	LEB100F-0512		
Item	Harmonic Current 高調波電流	Temperature Testing Circuitry	25℃ Figure E
Object	———		

1. Input Current Waveform

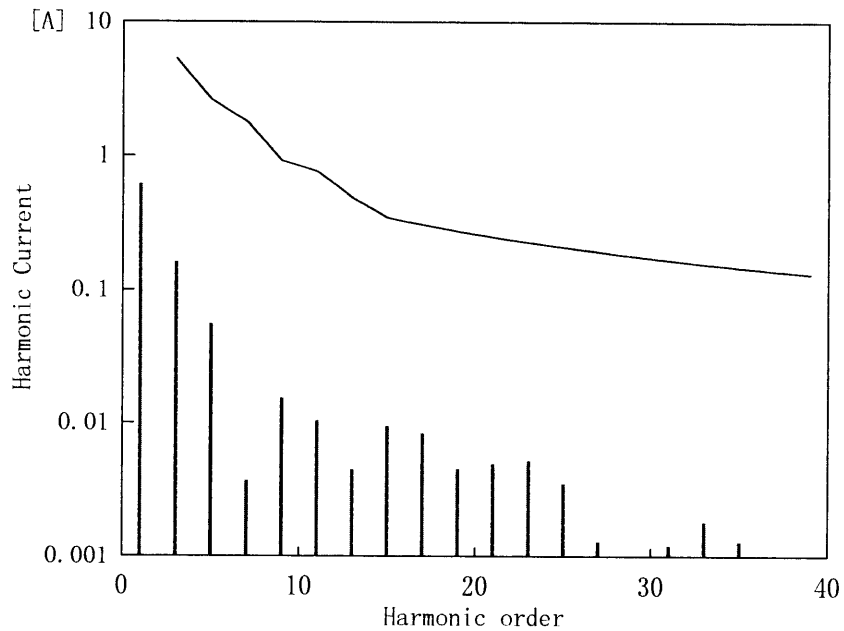
——— Input Current

——— Envelope of the input current to classify equipment as Class D
ｸﾗｽDの機器を決定するための入力電流包絡線



Conditions	Values
Input Voltage [V]	100.2
Input Current [A]	0.635
Active Power [W]	61.2
Apparent Power[VA]	63.6
Frequency [Hz]	60
Power Factor	0.962
Output Power [W]	42.5

2. Harmonic Current



——— Harmonic Current
高調波電流

——— Limits for Class A equipment
ｸﾗｽAの機器に対する限度値

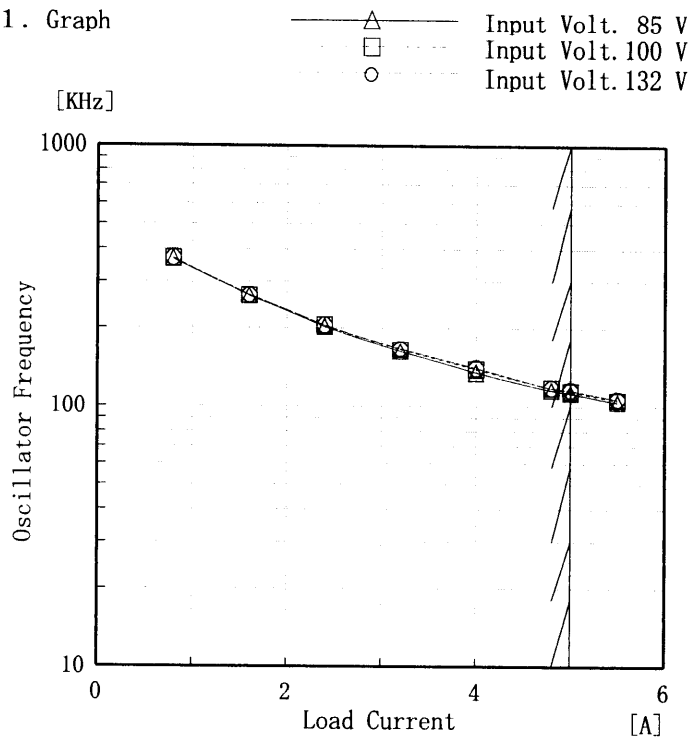
Harmonics order 高調波次数	Limits 限度値 [A]	Values 測定値 [A]
1	—	0.61120
2	—	0.00060
3	5.27944	0.16100
4	—	0.00010
5	2.61677	0.05490
6	—	0.00000
7	1.76747	0.00370
8	—	0.00010
9	0.91816	0.01530
10	—	0.00010
11	0.75749	0.01050
12	—	0.00000
13	0.48204	0.00450
14	—	0.00010
15	0.34431	0.00950
16	—	0.00010
17	0.30380	0.00840
18	—	0.00010
19	0.27182	0.00460
20	—	0.00000
21	0.24594	0.00500
22	—	0.00000
23	0.22455	0.00530
24	—	0.00000
25	0.20659	0.00350
26	—	0.00010
27	0.19128	0.00130
28	—	0.00010
29	0.17809	0.00100
30	—	0.00010
31	0.16660	0.00120
32	—	0.00000
33	0.15651	0.00180
34	—	0.00000
35	0.14756	0.00130
36	—	0.00000
37	0.13959	0.00080
38	—	0.00000
39	0.13243	0.00090
40	—	0.00000

COSEL

Model	LEB100F-0512
Item	Oscillator Frequency 発振周波数
Object	V1:+5.0V5A

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]	Oscillator Frequency [KHz]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.8	368	370	371
1.6	263	264	265
2.4	202	204	204
3.2	161	164	165
4.0	134	138	139
4.8	116	118	118
5.0	113	115	116
5.5	104	106	107
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	LEB100F-0512	
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	V1:＋5.0V5A

Item	Data	Testing Conditions
Output Voltage [V]	5.097	Input Volt.: 100V, Load Current:5A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:5A
Load Regulation [mV]	15	Input Volt.: 100V, Load Current:0～5A

Object	V2:＋12.0V5A

Item	Data	Testing Conditions
Output Voltage [V]	12.178	Input Volt.: 100V, Load Current:5A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:5A
Load Regulation [mV]	10	Input Volt.: 100V, Load Current:0～5A

COSEL

Model	LEB100F-0512		
Item	Leakage Current 漏洩電流	Temperature	25℃
		Testing Circuitry	Figure B
Object	————————		

1. Results

Standards	Leakage Current [mA]		
	Input Volt. 85 [V]	Input Volt. 100 [V]	Input Volt. 132 [V]
(A) DENTORI	0.17	0.19	0.25
(B) IEC60950	0.17	0.20	0.25

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	LEB100F-0512		
Item	Line Noise Tolerance 入力雑音耐量	Temperature Testing Circuitry	25℃ Figure C
Object	V1:+5.0V5A		

1. Results

Conditions

Input Voltage :100 V Pulse Input Duration:1 min. or more

Pulse Voltage :2000 V Load :100 %

Pulse Cycle :10 mS

Pulse Width [nS]	MODE	POLARITY	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
		−	OK	no fluctuation
	NORMAL	+	OK	no fluctuation
		−	OK	no fluctuation
1000	COMMON	+	OK	no fluctuation
		−	OK	no fluctuation
	NORMAL	+	OK	no fluctuation
		−	OK	no fluctuation

Object	V2:+12.0V5A

1. Results

Conditions

Input Voltage :100 V Pulse Input Duration:1 min. or more

Pulse Voltage :2000 V Load :100 %

Pulse Cycle :10 mS

Pulse Width [nS]	MODE	POLARITY	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
		−	OK	no fluctuation
	NORMAL	+	OK	no fluctuation
		−	OK	no fluctuation
1000	COMMON	+	OK	no fluctuation
		−	OK	no fluctuation
	NORMAL	+	OK	no fluctuation
		−	OK	no fluctuation

COSEL

Model	LEB100F-0512		
Item	Conducted Emission 雑音端子電圧	Temperature Testing Circuitry	25℃ Figure D
Object	————————		

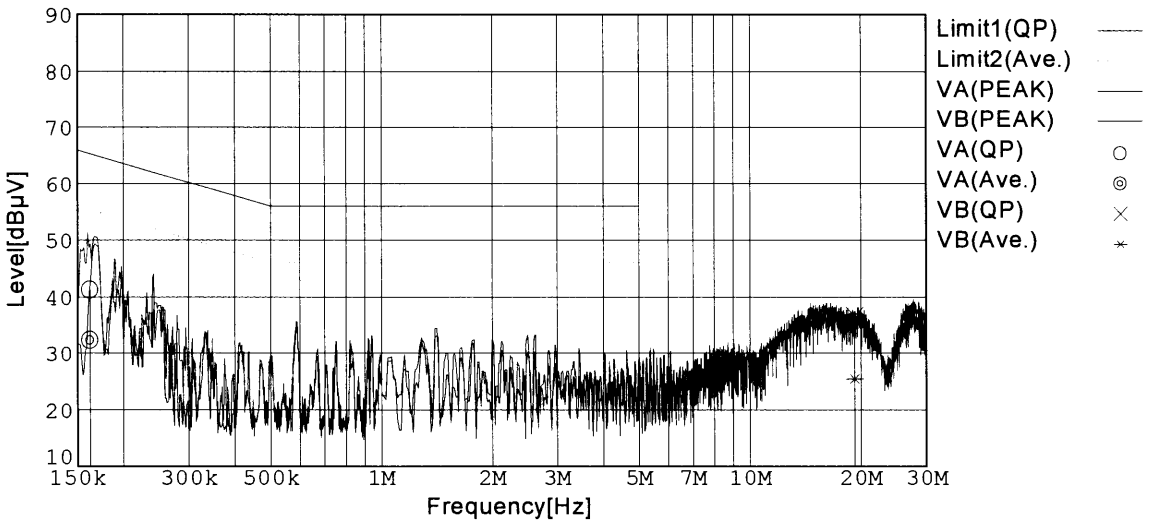
1. Graph

Remarks

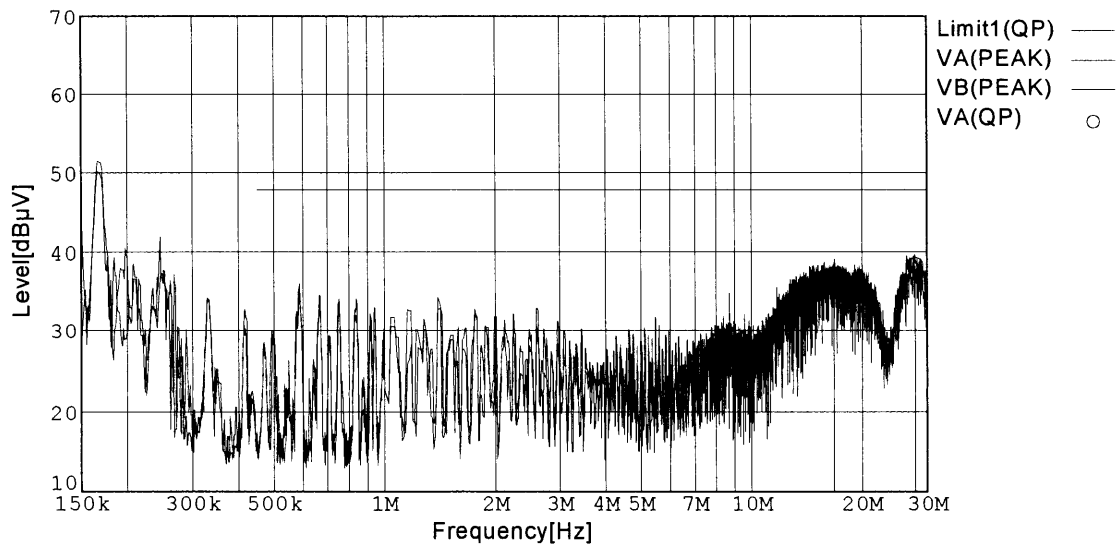
Input Volt. 100 V (VCCI Class B)
120 V (FCC Class B)

Load 100 %

Limit1: [VCCI] Class B(QP)
Limit2: [VCCI] Class B(Ave.)



Limit1: [FCC Part15] Class B



COSEL

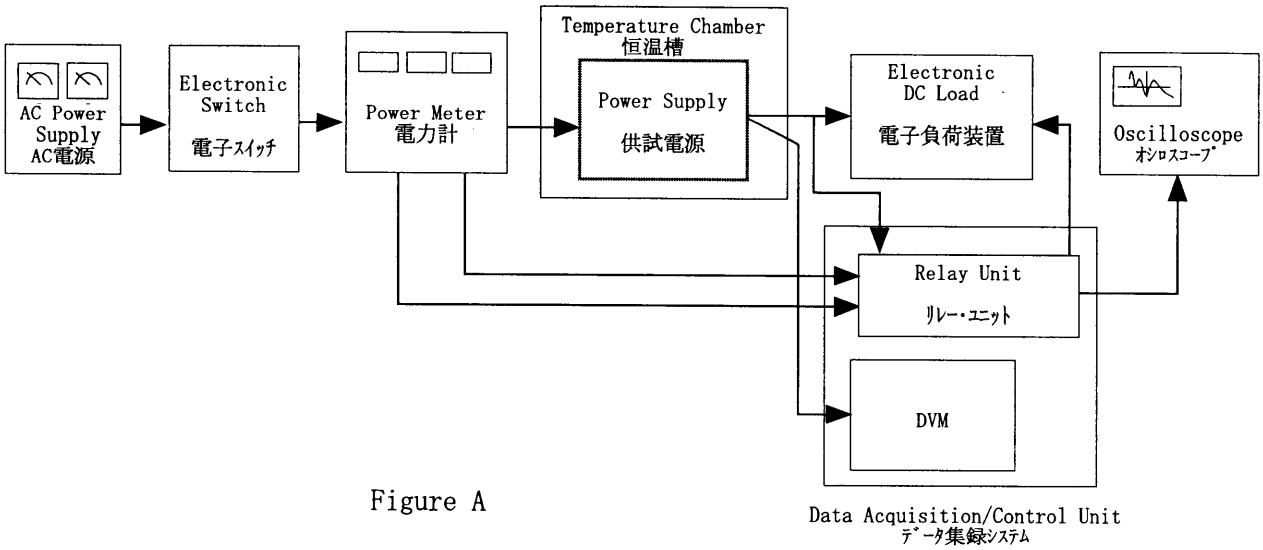


Figure A

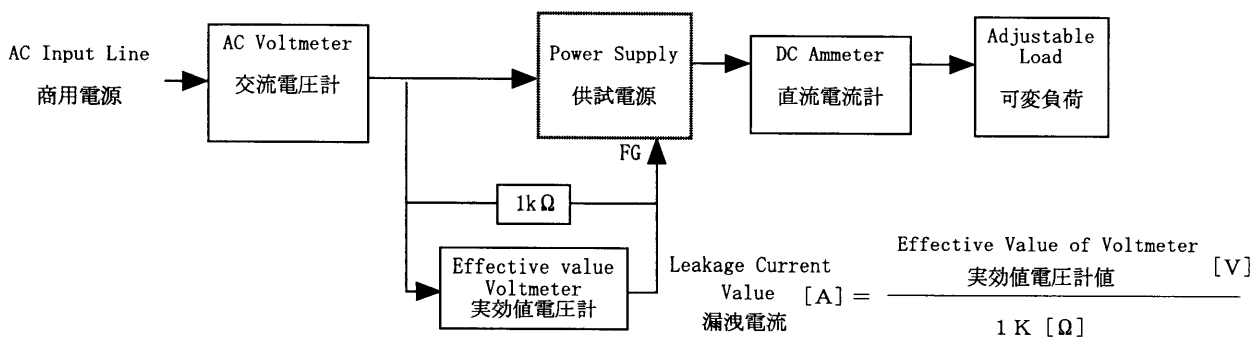


Figure B(DENTORI)

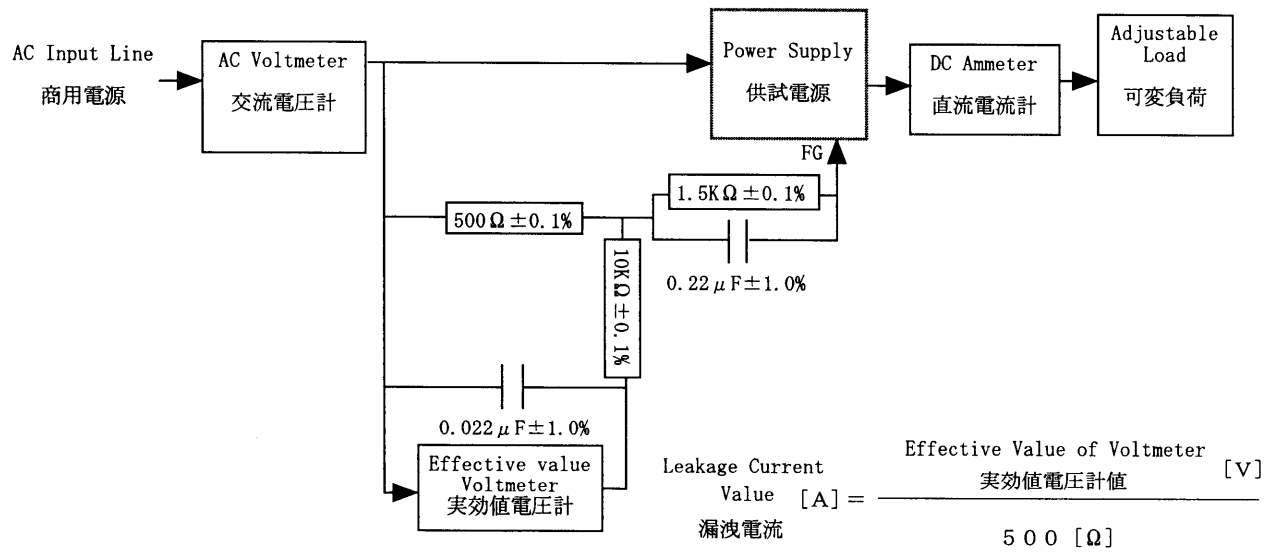


Figure B（ＩＥＣ６０９５０）

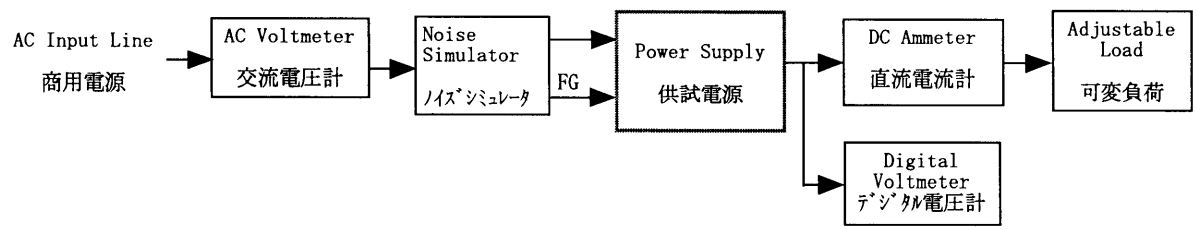


Figure C

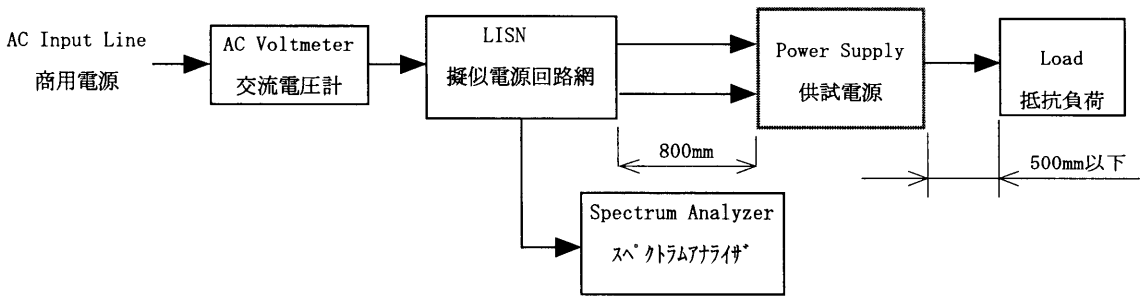


Figure D

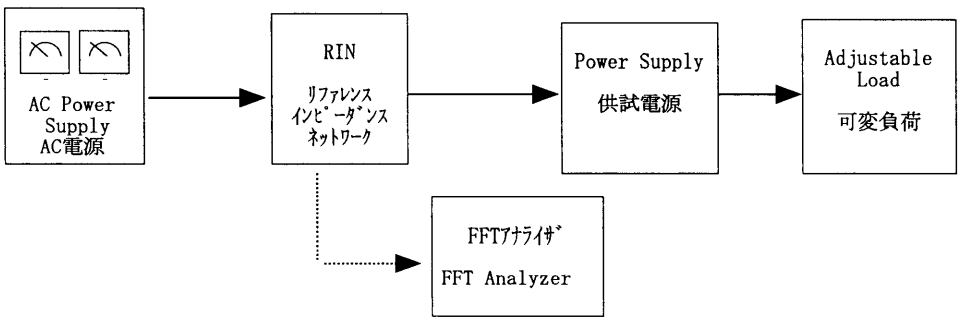


Figure E