参考資料

COSEL

TEST DATA OF RMC30A-2
(100V INPUT)

Regulated DC Power Supply

Date : June 3, 1999

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コーセル株式会社

COSEL CO.,LTD.

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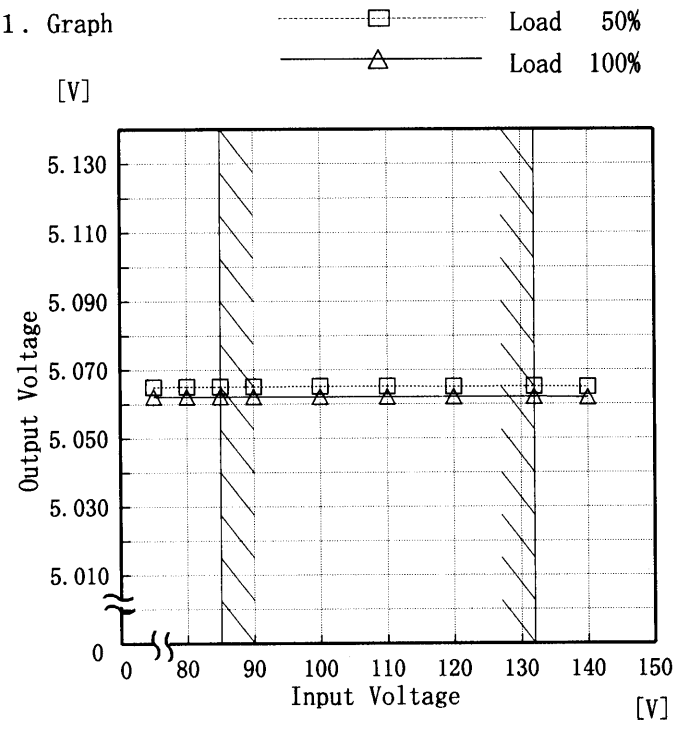
Model	RMC30A-2
Item	Line Regulation 静的入力変動

Temperature 25℃
Testing Circuitry Figure A

Object +5.0V3A

1. Graph

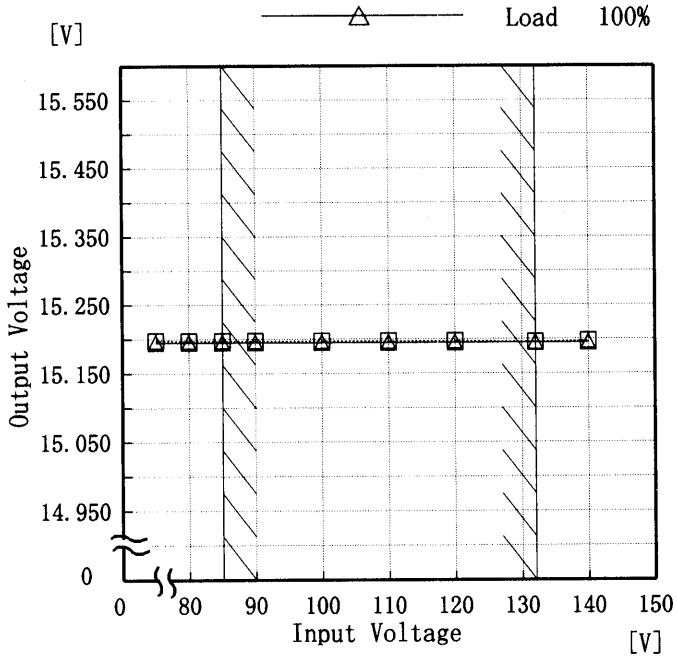


2. Values

Input Voltage [V]	Load 50% Output Volt. [V]	Load 100% Output Volt. [V]
75	5.065	5.062
80	5.065	5.062
85	5.065	5.062
90	5.065	5.062
100	5.065	5.062
110	5.065	5.062
120	5.065	5.062
132	5.065	5.062
140	5.065	5.062

Object +15V0.50A

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]	Load 50% Output Volt. [V]	Load 100% Output Volt. [V]
75	15.198	15.195
80	15.197	15.195
85	15.197	15.195
90	15.197	15.195
100	15.197	15.195
110	15.197	15.195
120	15.197	15.195
132	15.196	15.195
140	15.197	15.195

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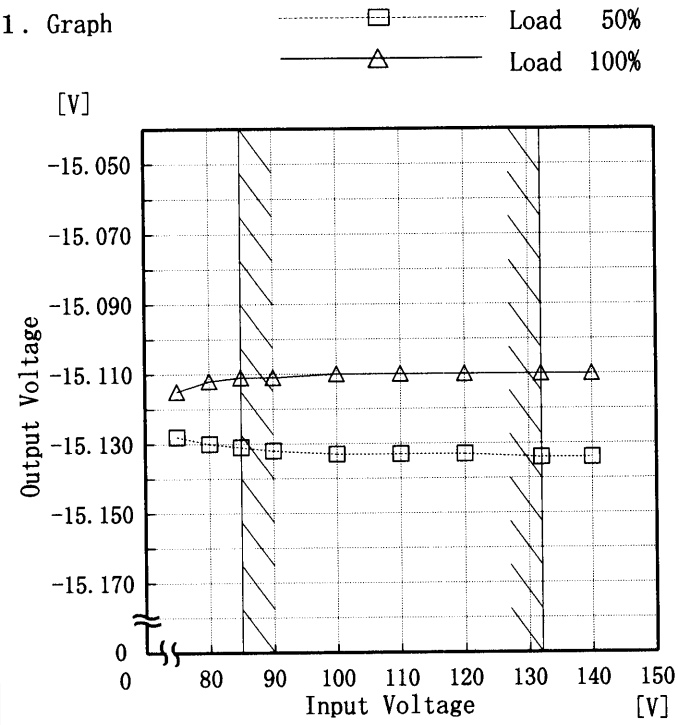
Model	RMC30A-2
Item	Line Regulation 静的入力変動
Object	-15.0V0.5A

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]	Load 50% Output Volt. [V]	Load 100% Output Volt. [V]
75	-15.128	-15.115
80	-15.130	-15.112
85	-15.131	-15.111
90	-15.132	-15.111
100	-15.133	-15.110
110	-15.133	-15.110
120	-15.133	-15.110
132	-15.134	-15.110
140	-15.134	-15.110

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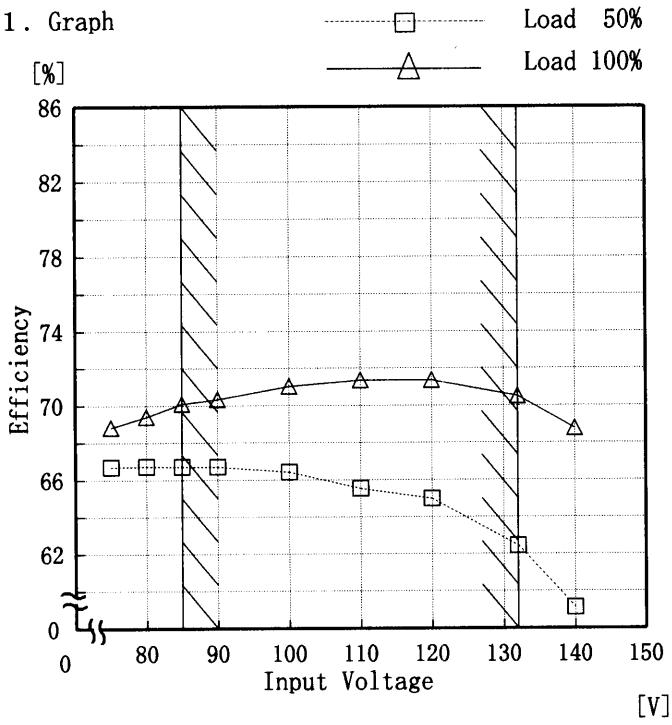
Model	RMC30A-2
Item	Efficiency 効率
Object	———————

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]	Load 50% Efficiency [%]	Load 100% Efficiency [%]
75	66.7	68.8
80	66.7	69.4
85	66.7	70.1
90	66.7	70.3
100	66.4	71.0
110	65.5	71.4
120	65.0	71.4
132	62.4	70.5
140	59.1	68.8

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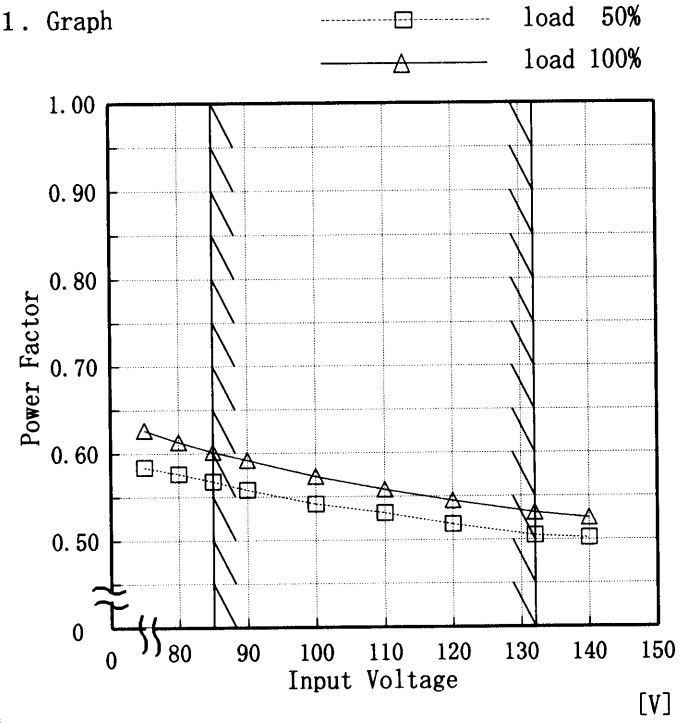
Model	RMC30A-2
Item	Power Factor (by Input Voltage) 力率（入力電圧特性）
Object	———————————

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]	load 50% Power Factor	load 100% Power Factor
75	0.58	0.63
80	0.58	0.61
85	0.57	0.60
90	0.56	0.59
100	0.54	0.57
110	0.53	0.56
120	0.52	0.54
132	0.51	0.53
140	0.50	0.53

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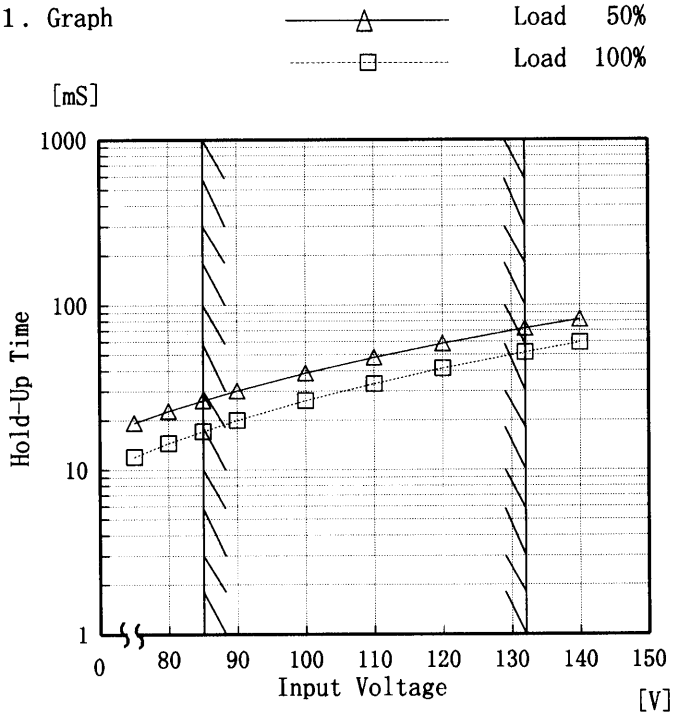
Model	RMC30A-2
Item	Hold-Up Time 出力保持時間
Object	+5.0V3A

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]	Load 50% Hold-Up Time [mS]	Load 100% Hold-Up Time [mS]
75	19	12
80	23	15
85	26	17
90	30	20
100	39	26
110	48	33
120	59	41
132	72	52
140	82	59

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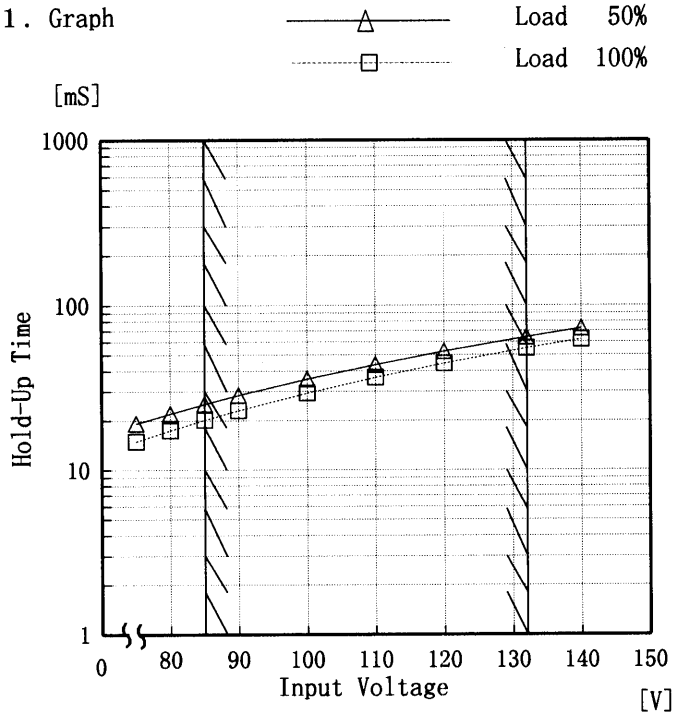
Model	RMC30A-2
Item	Hold-Up Time 出力保持時間
Object	+15.0V0.5A

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]	Load 50% Hold-Up Time [mS]	Load 100% Hold-Up Time [mS]
75	19	15
80	22	17
85	25	20
90	28	23
100	36	29
110	44	37
120	53	44
132	64	55
140	73	62

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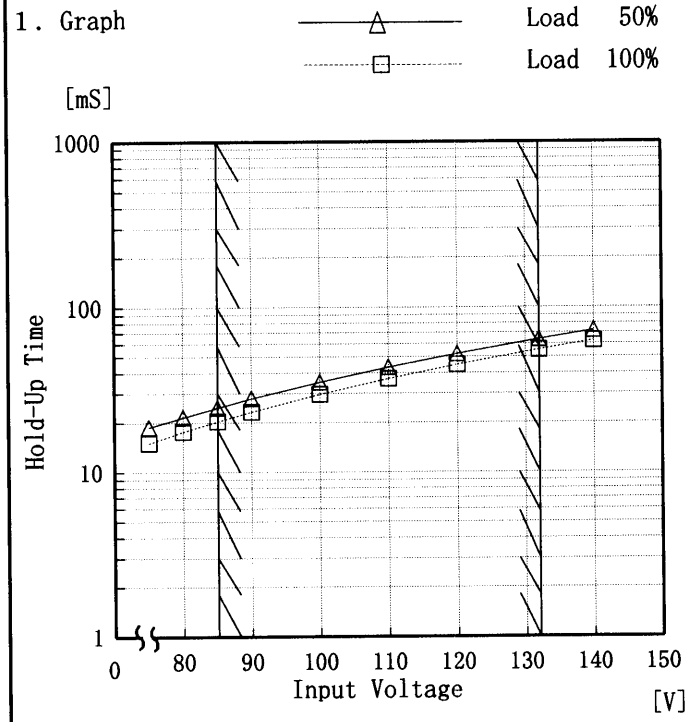
Model	RMC30A-2
Item	Hold-Up Time 出力保持時間
Object	-15.0V0.5A

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]	Load 50% Hold-Up Time [mS]	Load 100% Hold-Up Time [mS]
75	19	15
80	22	18
85	25	20
90	28	23
100	35	30
110	43	37
120	52	45
132	64	55
140	72	63

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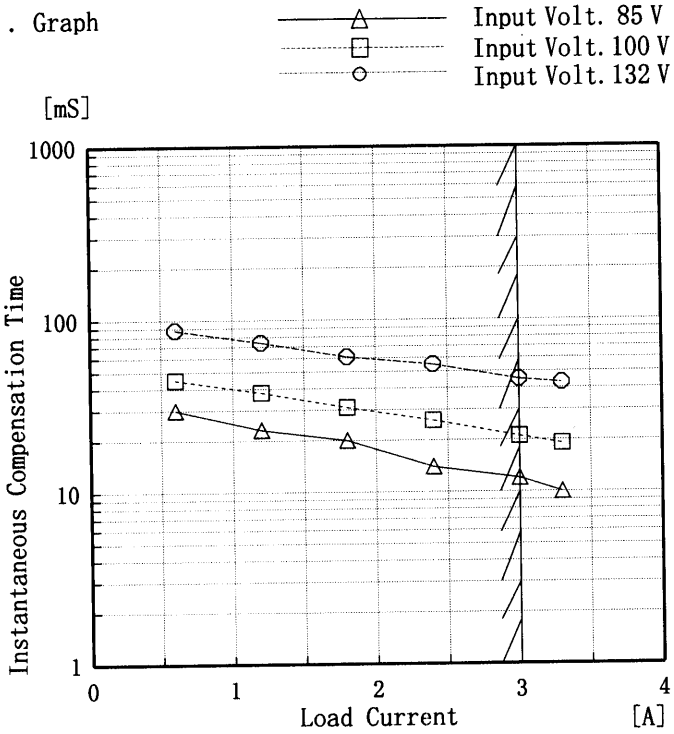
Model	RMC30A-2
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	+5.0V3A

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]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Time [mS]		
0.0	—	—	—
0.6	30	45	88
1.2	23	38	74
1.8	20	31	61
2.4	14	26	55
3.0	12	21	45
3.3	10	19	43
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

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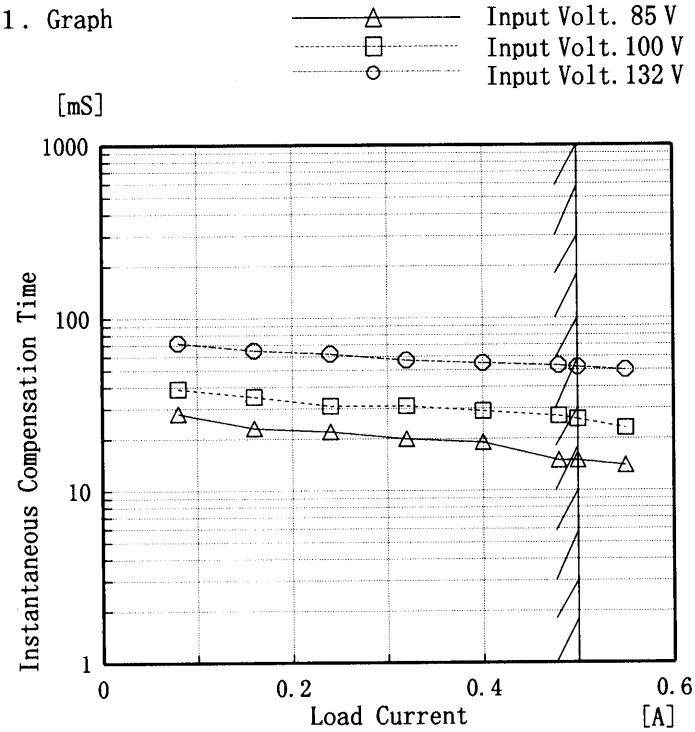
Model	RMC30A-2	Temperature	25℃
Item	Instantaneous Interruption Compensation 瞬時停電保障	Testing Circuitry	Figure A
Object	+15.0V0.5A		

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

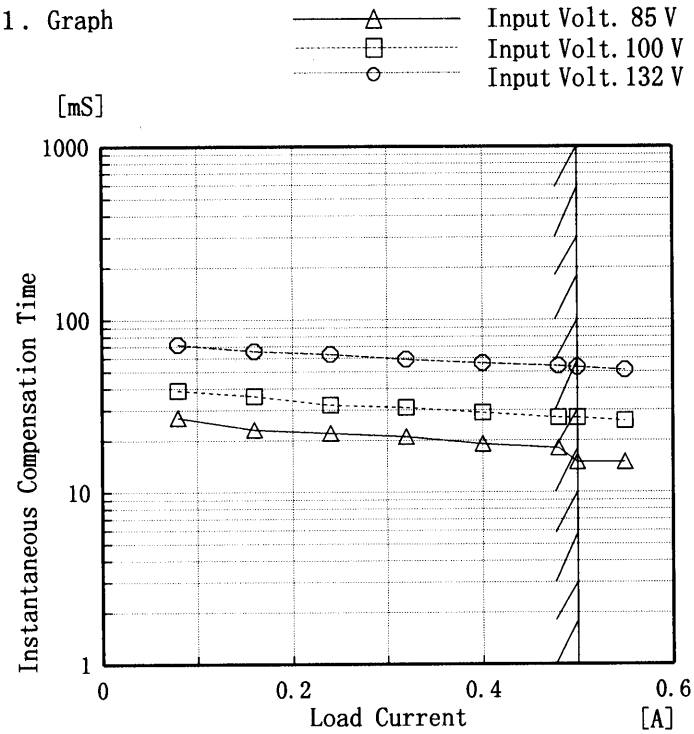
Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Time [mS]		
0.00	—	—	—
0.08	28	39	72
0.16	23	35	65
0.24	22	31	62
0.32	20	31	57
0.40	19	29	55
0.48	15	27	53
0.50	15	26	52
0.55	14	23	50
—	—	—	—
—	—	—	—

COSEL

Model	RMC30A-2
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	-15.0V0.5A

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]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Time [mS]		
0.00	—	—	—
0.08	27	39	72
0.16	23	36	66
0.24	22	32	63
0.32	21	31	59
0.40	19	29	56
0.48	18	27	54
0.50	15	27	53
0.55	15	26	51
—	—	—	—
—	—	—	—

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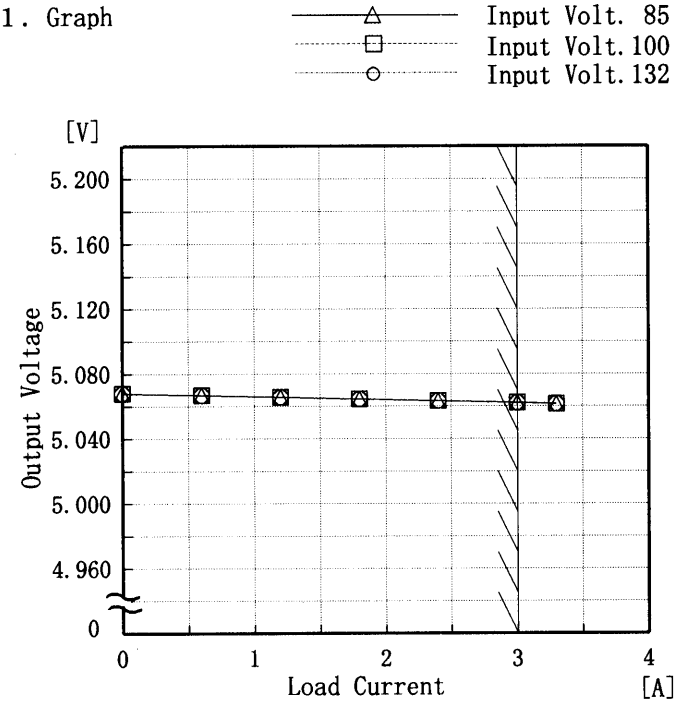
Model	RMC30A-2
Item	Load Regulation 静的負荷変動

Temperature 25℃
Testing Circuitry Figure A

Object +5.0V3A

1. Graph

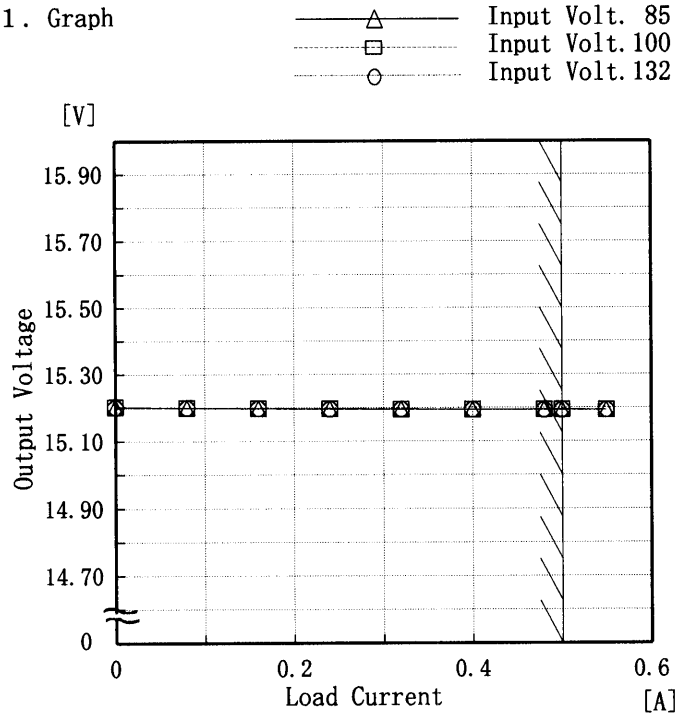


2. Values

Load Current [A]	Input Volt. 85[V] Output Volt. [V]	Input Volt. 100[V] Output Volt. [V]	Input Volt. 132[V] Output Volt. [V]
0.0	5.068	5.068	5.068
0.6	5.067	5.067	5.067
1.2	5.066	5.066	5.066
1.8	5.065	5.065	5.065
2.4	5.063	5.063	5.063
3.0	5.062	5.062	5.062
3.3	5.062	5.062	5.062
—	—	—	—
—	—	—	—
—	—	—	—

Object +15V0.5A

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] Output Volt. [V]	Input Volt. 100[V] Output Volt. [V]	Input Volt. 132[V] Output Volt. [V]
0.00	15.203	15.203	15.202
0.08	15.200	15.200	15.200
0.16	15.198	15.198	15.198
0.24	15.197	15.197	15.196
0.32	15.196	15.195	15.195
0.40	15.194	15.194	15.194
0.48	15.194	15.194	15.193
0.50	15.194	15.194	15.193
0.55	15.193	15.193	15.193
—	—	—	—

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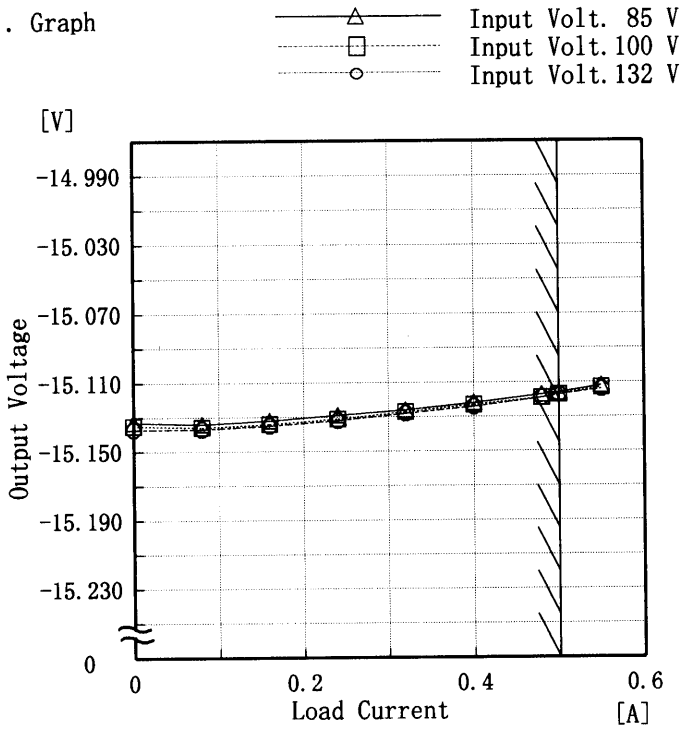
COSEL

Model	RMC30A-2	Temperature	25℃
Item	Load Regulation 静的負荷変動	Testing Circuitry	Figure A
Object	-15.0V0.5A		

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

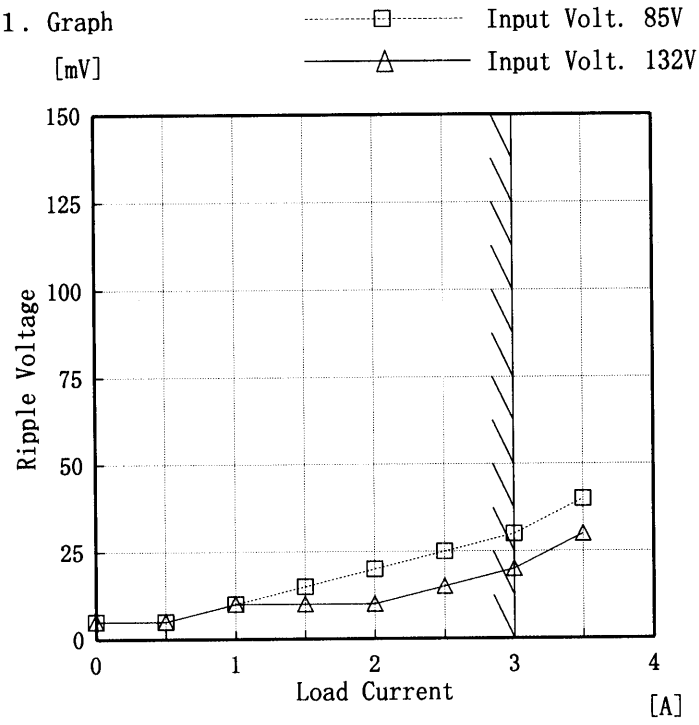
Load Current [A]	Input Volt. 85[V] Output Volt. [V]	Input Volt. 100[V] Output Volt. [V]	Input Volt. 132[V] Output Volt. [V]
0.00	-15.133	-15.135	-15.137
0.08	-15.134	-15.136	-15.137
0.16	-15.132	-15.134	-15.135
0.24	-15.129	-15.131	-15.132
0.32	-15.126	-15.127	-15.128
0.40	-15.122	-15.123	-15.124
0.48	-15.117	-15.119	-15.119
0.50	-15.116	-15.117	-15.117
0.55	-15.112	-15.113	-15.114
—	—	—	—

COSEL

Model	RMC30A-2
Item	Ripple Voltage(by Load Current) リップル電圧(負荷電流特性)
Object	+5.0V3.00A

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

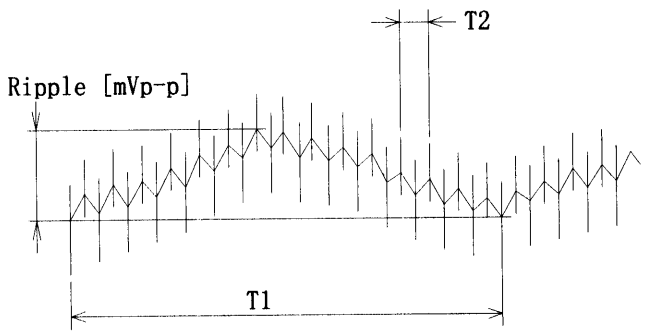


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

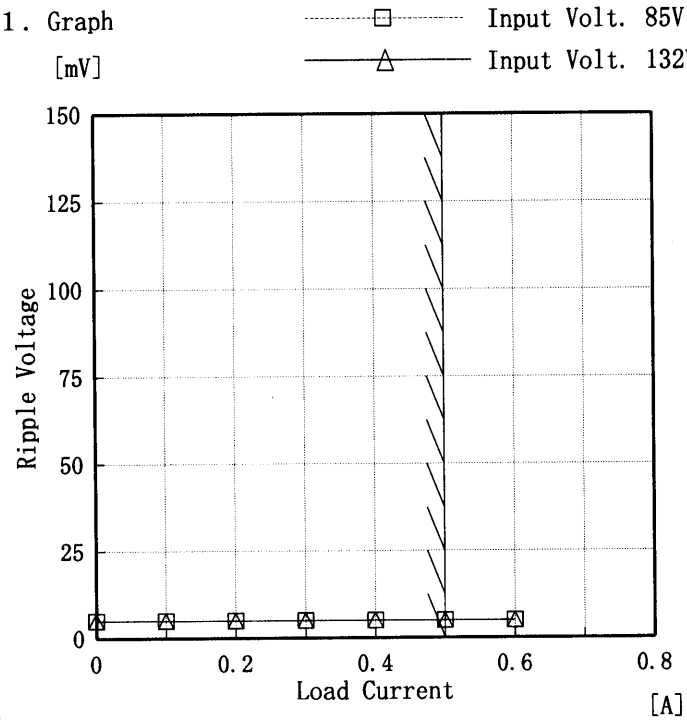
Load Current [A]	Input Volt. 85 [V] Ripple Output Volt. [mV]	Input Volt. 132 [V] Ripple Output Volt. [mV]
0.0	5	5
0.5	5	5
1.0	10	10
1.5	15	10
2.0	20	10
2.5	25	15
3.0	30	20
3.5	40	30
—	—	—
—	—	—
—	—	—

BC—3239

COSEL

Model	RMC30A-2	
Item	Ripple Voltage(by Load Current) リップル電圧(負荷電流特性)	Temperature 25℃ Testing Circuitry Figure A
Object	+15.0V0.50A	

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

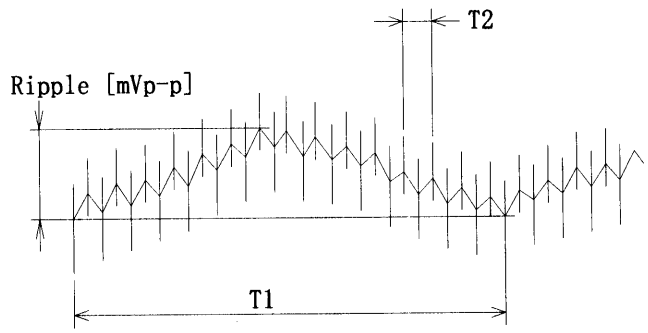


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2.Values

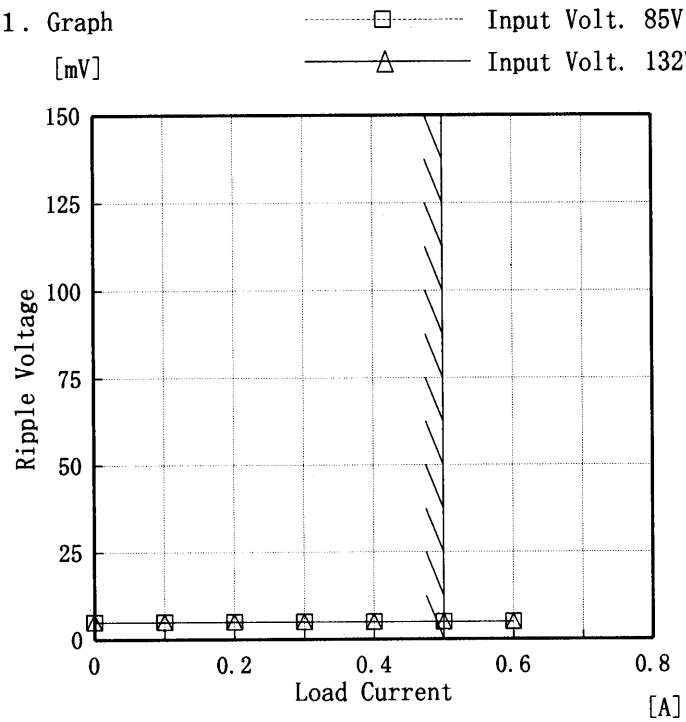
Load Current [A]	Input Volt. 85 [V] Ripple Output Volt. [mV]	Input Volt. 132 [V] Ripple Output Volt. [mV]
0.0	5	5
0.1	5	5
0.2	5	5
0.3	5	5
0.4	5	5
0.5	5	5
0.6	5	5
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

Model	RMC30A-2
Item	Ripple Voltage(by Load Current) リップル電圧(負荷電流特性)
Object	-15.0V0.50A

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

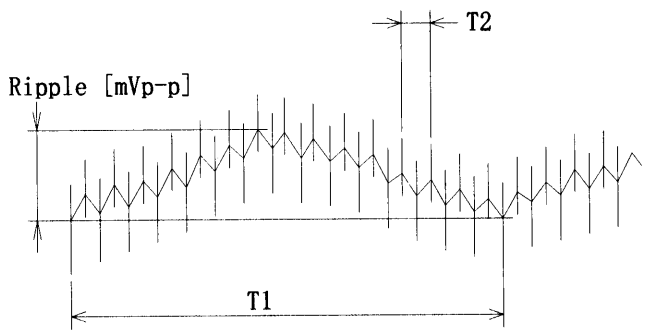


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2.Values

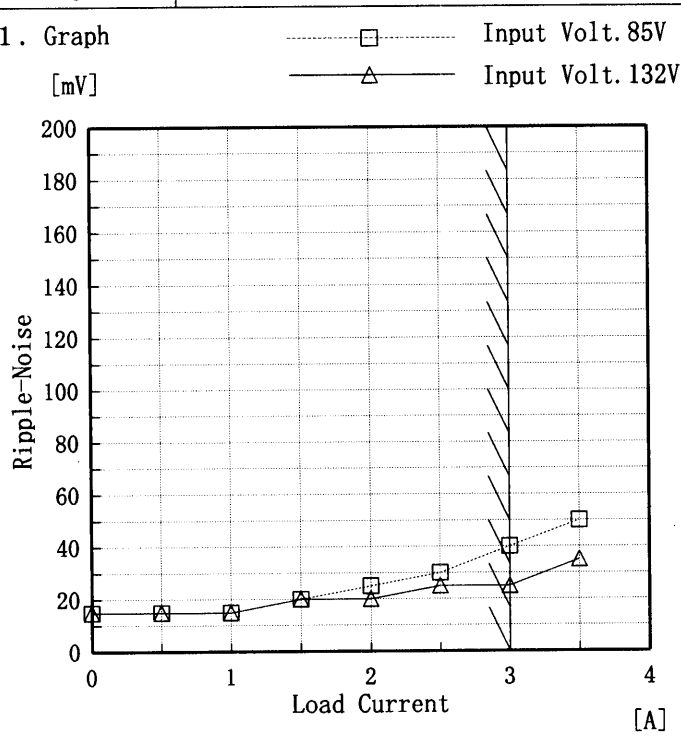
Load Current [A]	Input Volt. 85 [V] Ripple Output Volt. [mV]	Input Volt. 132 [V] Ripple Output Volt. [mV]
0.0	5	5
0.1	5	5
0.2	5	5
0.3	5	5
0.4	5	5
0.5	5	5
0.6	5	5
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

Model	RMC30A-2
Item	Ripple-Noise リップルノイズ
Object	+5.0V3.00A

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

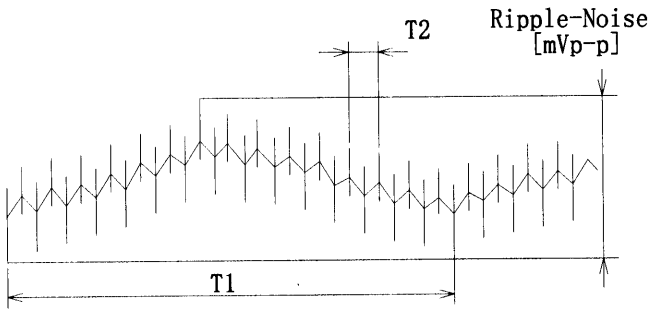


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

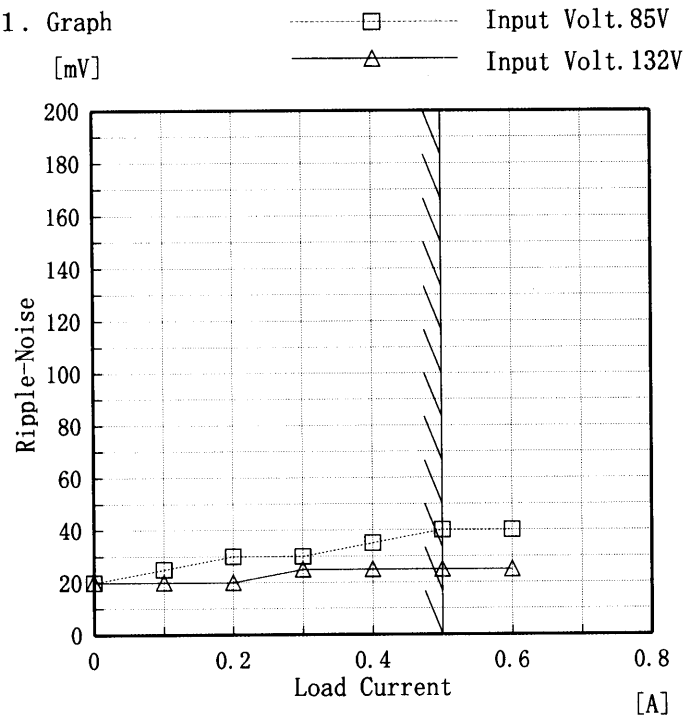
Load current [A]	Input Volt. 85 [V] Ripple-Noise [mV]	Input Volt. 132 [V] Ripple-Noise [mV]
0.0	15	15
0.5	15	15
1.0	15	15
1.5	20	20
2.0	25	20
2.5	30	25
3.0	40	25
3.5	50	35
—	—	—
—	—	—
—	—	—

COSEL

Model	RMC30A-2
Item	Ripple-Noise リップルノイズ
Object	+15.0V0.50A

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

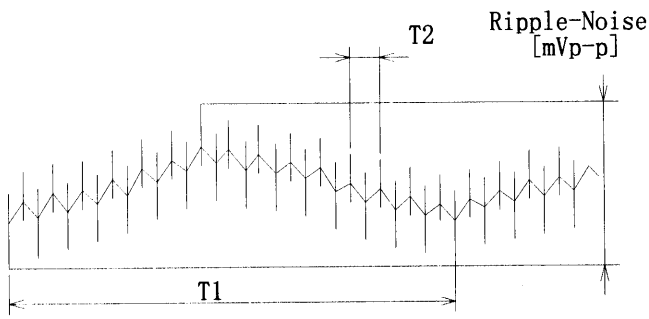


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

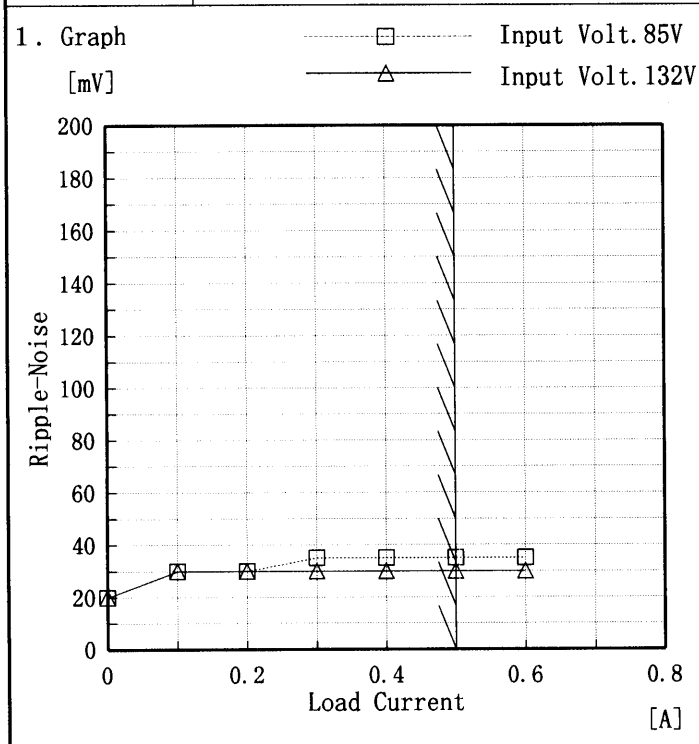
Load current [A]	Ripple-Noise [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.0	20	20
0.1	25	20
0.2	30	20
0.3	30	25
0.4	35	25
0.5	40	25
0.6	40	25
—	—	—
—	—	—
—	—	—
—	—	—

COSEL

Model	RMC30A-2
Item	Ripple-Noise リップルノイズ
Object	-15.0V0.50A

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

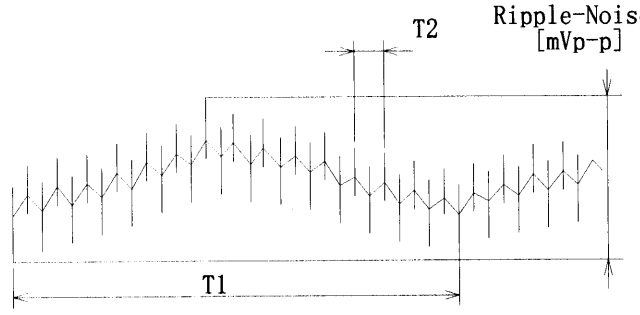


Fig. Complex Ripple Wave Form
図 リップル波形詳細図

2. Values

Load current [A]	Ripple-Noise [mV]	
	Input Volt. 85 [V]	Input Volt. 132 [V]
0.0	20	20
0.1	30	30
0.2	30	30
0.3	35	30
0.4	35	30
0.5	35	30
0.6	35	30
—	—	—
—	—	—
—	—	—
—	—	—

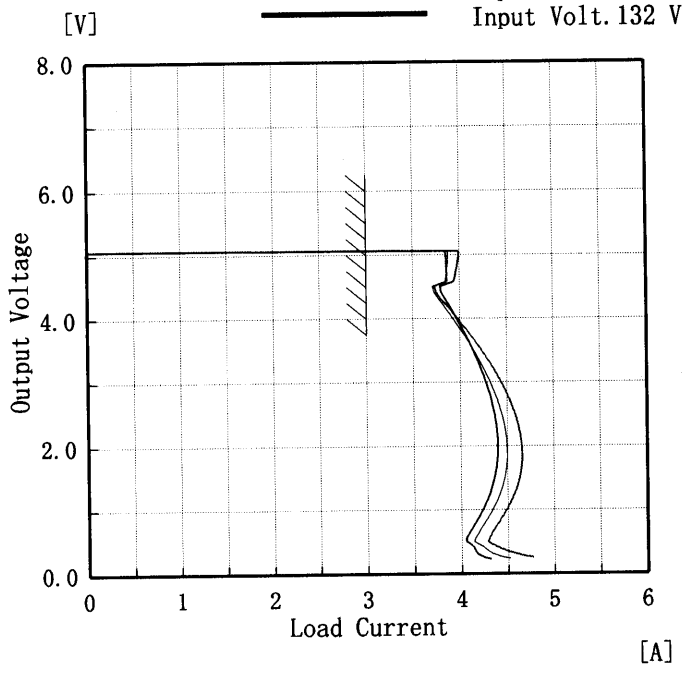
COSEL

Model	RMC30A-2
Item	Overcurrent Protection 過電流保護

Temperature 25℃
Testing Circuitry Figure A

Object +5.0V3A

1. Graph

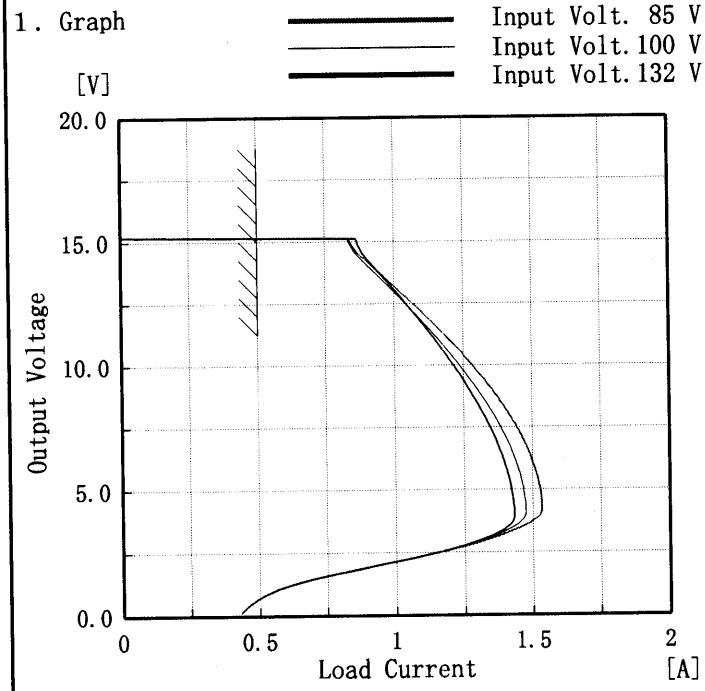


2. Values

Output Voltage [V]	Input Volt. 85[V] Load Current [A]	Input Volt. 100[V] Load Current [A]	Input Volt. 132[V] Load Current [A]
5.00	3.85	3.88	3.99
4.75	3.86	3.86	3.96
4.50	3.74	3.72	3.80
4.00	3.99	3.94	3.97
3.50	4.24	4.15	4.15
3.00	4.46	4.32	4.28
2.50	4.59	4.44	4.37
2.00	4.66	4.50	4.40
1.50	4.62	4.47	4.35
1.00	4.48	4.32	4.22
0.50	4.29	4.16	4.08
0.00	4.77	4.52	4.32

Object +15V0.5A

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]	Input Volt. 85[V] Load Current [A]	Input Volt. 100[V] Load Current [A]	Input Volt. 132[V] Load Current [A]
15.00	0.846	0.841	0.870
14.25	0.893	0.881	0.902
13.50	0.977	0.954	0.970
12.00	1.120	1.087	1.085
10.50	1.252	1.208	1.182
9.00	1.356	1.302	1.273
7.50	1.447	1.387	1.349
6.00	1.507	1.445	1.402
4.50	1.532	1.472	1.428
3.00	1.309	1.293	1.287
1.50	0.683	0.683	0.681
0.00	0.426	0.425	0.425

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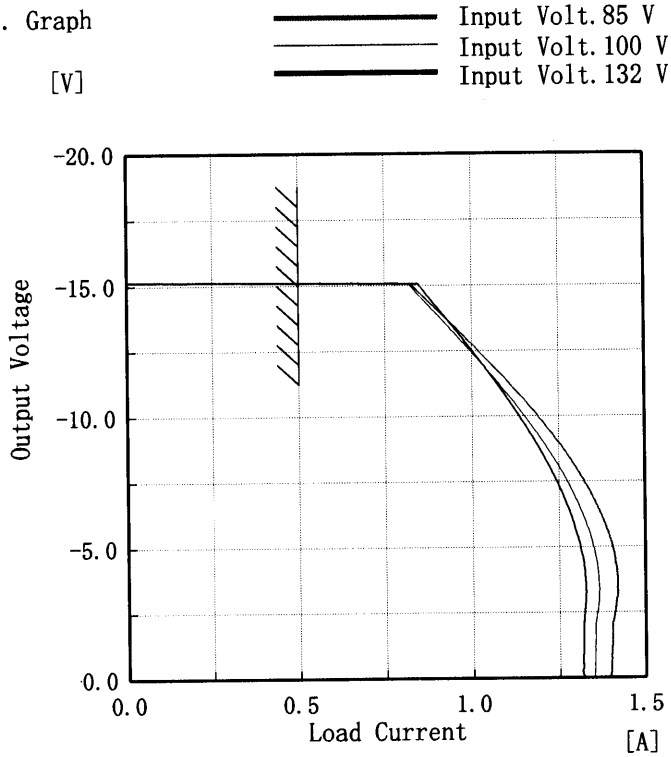
COSEL

Model	RMC30A-2
Item	Overcurrent Protection 過電流保護
Object	-15.0V0.50A

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

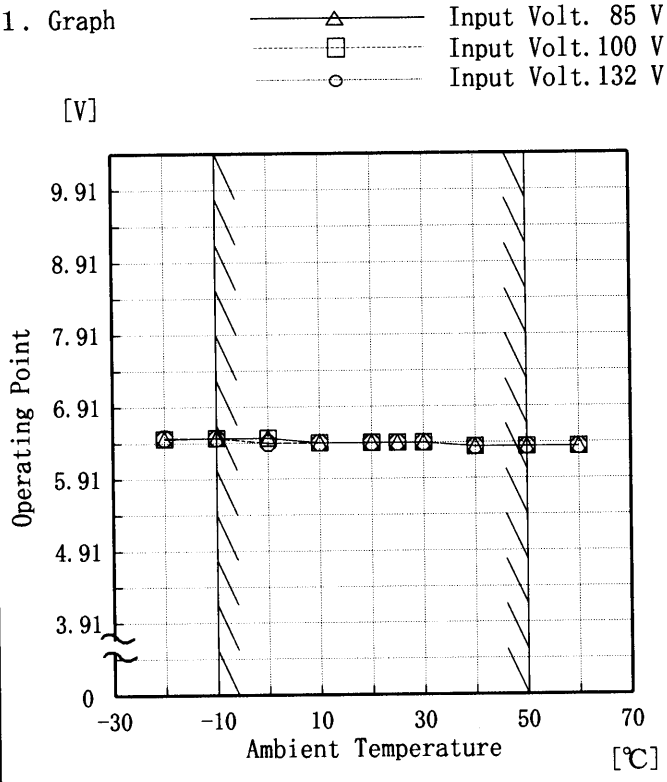
Output Voltage [V]	Input Volt. 85[V] Load Current [A]	Input Volt. 100[V] Load Current [A]	Input Volt. 132[V] Load Current [A]
-15.00	0.83	0.83	0.85
-14.25	0.88	0.87	0.89
-13.50	0.95	0.93	0.95
-12.00	1.06	1.04	1.04
-10.50	1.16	1.13	1.11
-9.00	1.25	1.21	1.19
-7.50	1.32	1.28	1.24
-6.00	1.38	1.33	1.29
-4.50	1.41	1.36	1.32
-3.00	1.42	1.36	1.33
-1.50	1.40	1.35	1.32
0.00	1.40	1.35	1.32

COSEL

Model	RMC30A-2
Item	Overvoltage Protection 過電圧保護
Object	+5.0V3A

Testing Circuitry Figure A

1. Graph



Load 0%

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

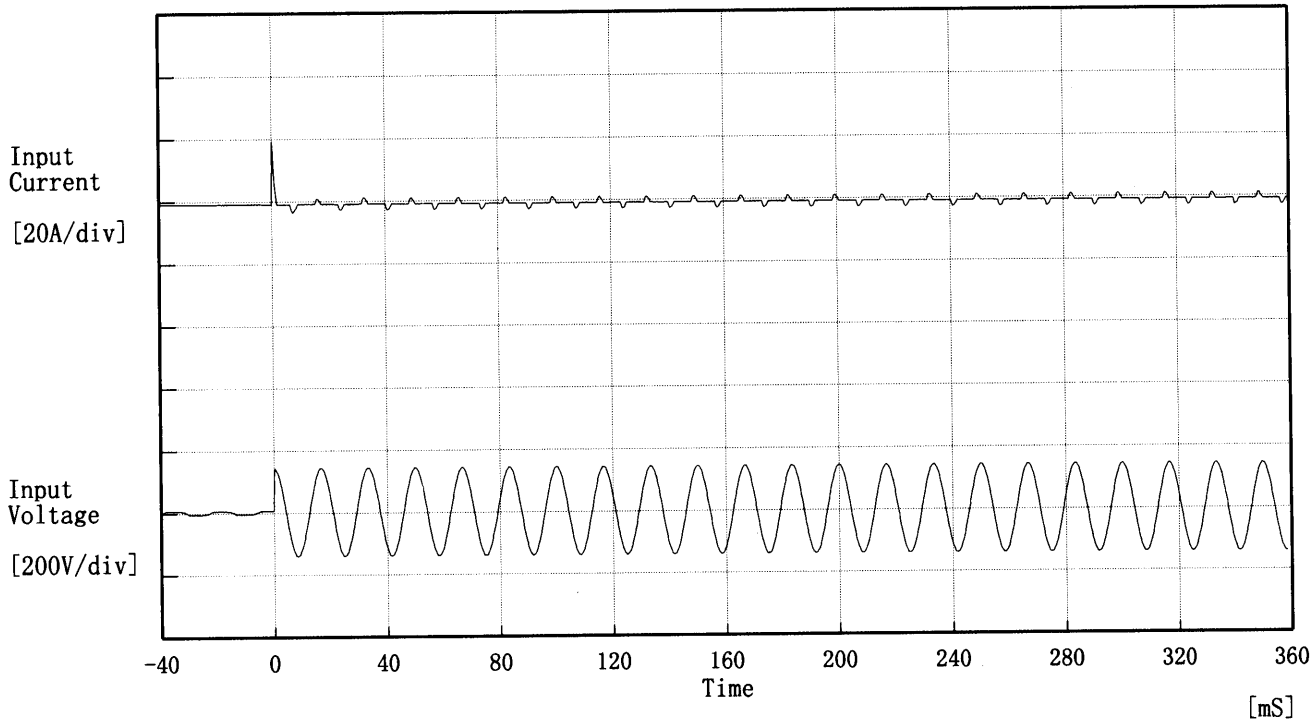
(注)斜線は定格周囲温度範囲を示す。

2. Values

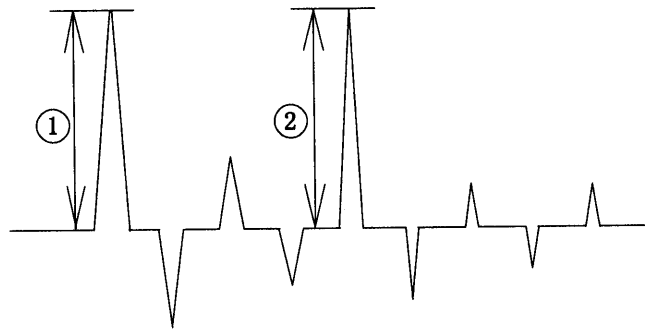
Ambient Temp. [℃]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Operating Point [V]		
-20	6.47	6.47	6.48
-10	6.48	6.48	6.48
0	6.48	6.48	6.41
10	6.41	6.41	6.41
20	6.41	6.41	6.41
25	6.41	6.41	6.41
30	6.41	6.41	6.41
40	6.35	6.35	6.35
50	6.35	6.35	6.35
60	6.35	6.35	6.35
—	—	—	—

COSEL

Model	RMC30A-2	Temperature	25℃
Item	Inrush Current 突入電流	Testing Circuitry	Figure A
Object	———————		



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



COSEL

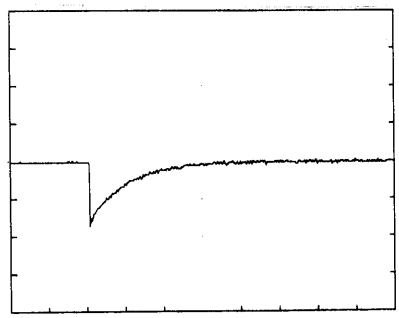
Model	RMC30A-2
Item	Dynamic Load Responce 動的負荷変動
Object	+5.0V3.00A

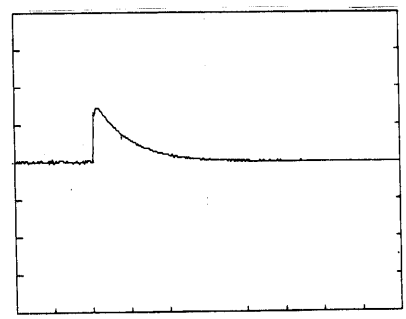
Temperature 25℃
Testing Circuitry Figure A

Input Volt. 100 V
Cycle 1000 mS

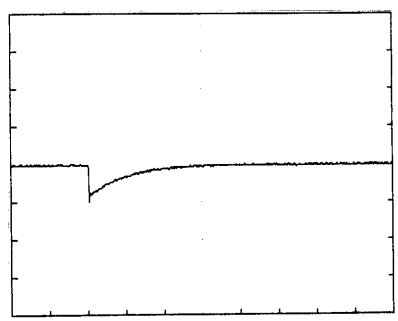
Load Current

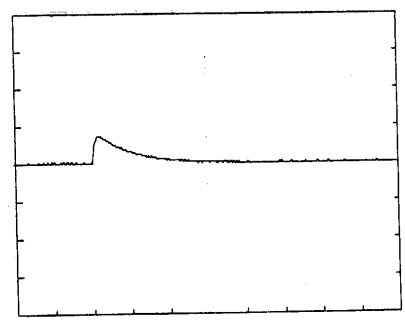
Load 0% ⟷
Load 100 %





Load 0% ⟷
Load 50 %





100 mV/div

10 mS/div

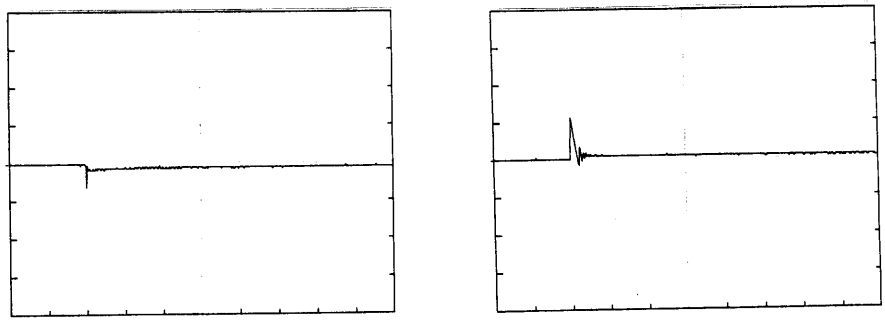
COSEL

Model	RMC30A-2		
Item	Dynamic Load Responce 動的負荷変動	Temperature Testing Circuitry	25℃ Figure A
Object	+15.0V0.50A		

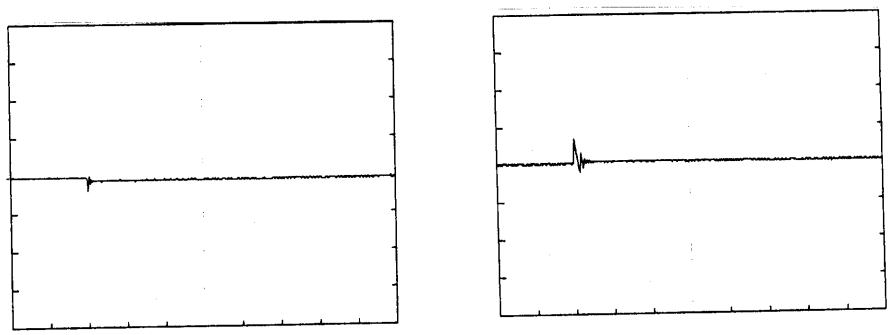
Input Volt. 100 V
Cycle 1000 mS

Load Current

Load 0% ⟷
Load 100 %



Load 0% ⟷
Load 50 %



100 mV/div

10 mS/div

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COSEL

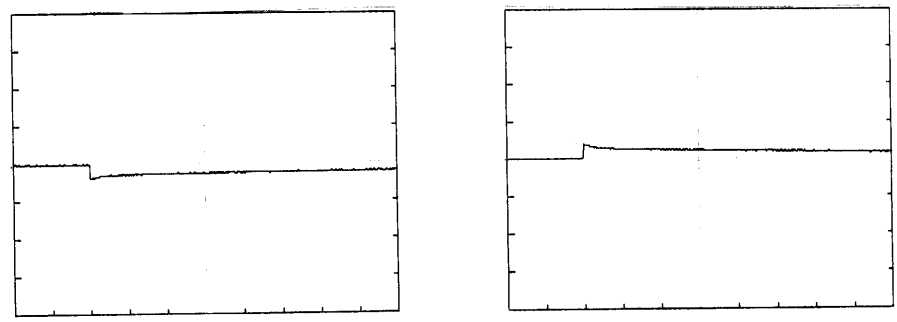
Model	RMC30A-2		
Item	Dynamic Load Responce 動的負荷変動	Temperature Testing Circuitry	25℃ Figure A
Object	-15.0V0.50A		

Input Volt. 100 V

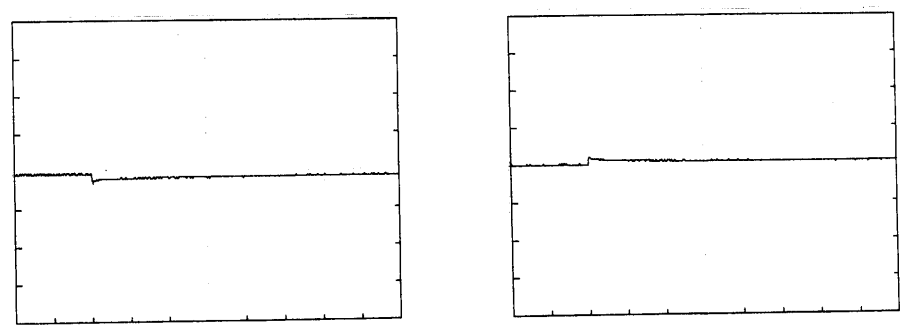
Cycle 1000 mS

Load Current

Load 0% ⟷
Load 100 %



Load 0% ⟷
Load 50 %



100 mV/div

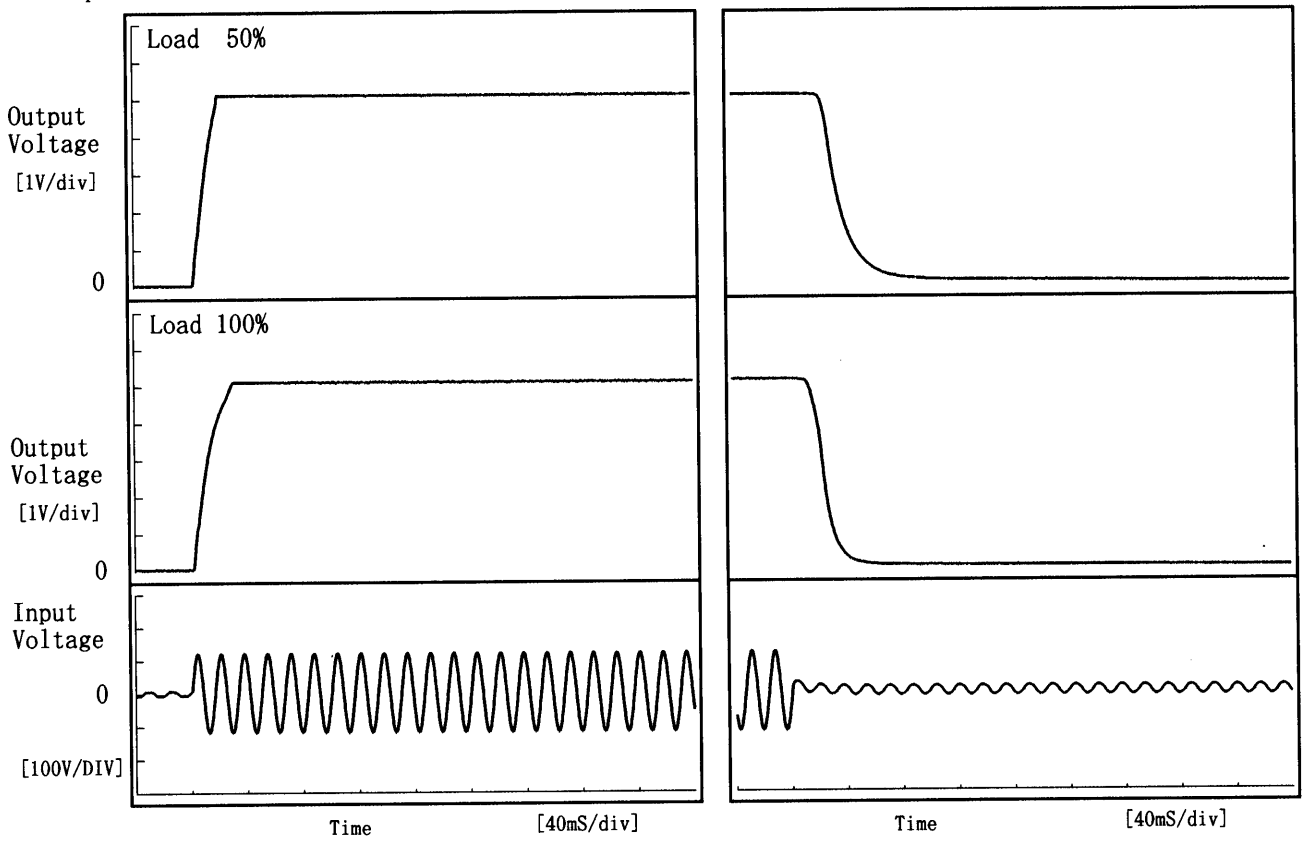
10 mS/div

COSEL

Model	RMC30A-2		
Item	Rise and Fall Time 立上り、立下り時間	Temperature Testing Circuitry	25℃ Figure A
Object	+5.0V3.00A		

1. Graph

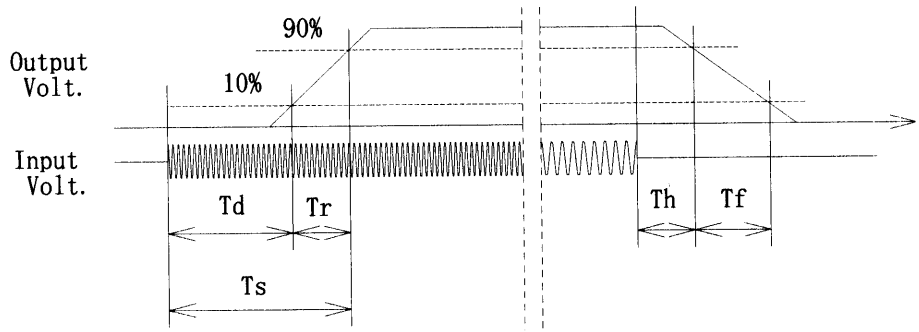
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	3.2	14.4	17.6	26.0	32.4
100 %	3.2	20.8	24.0	16.8	20.6



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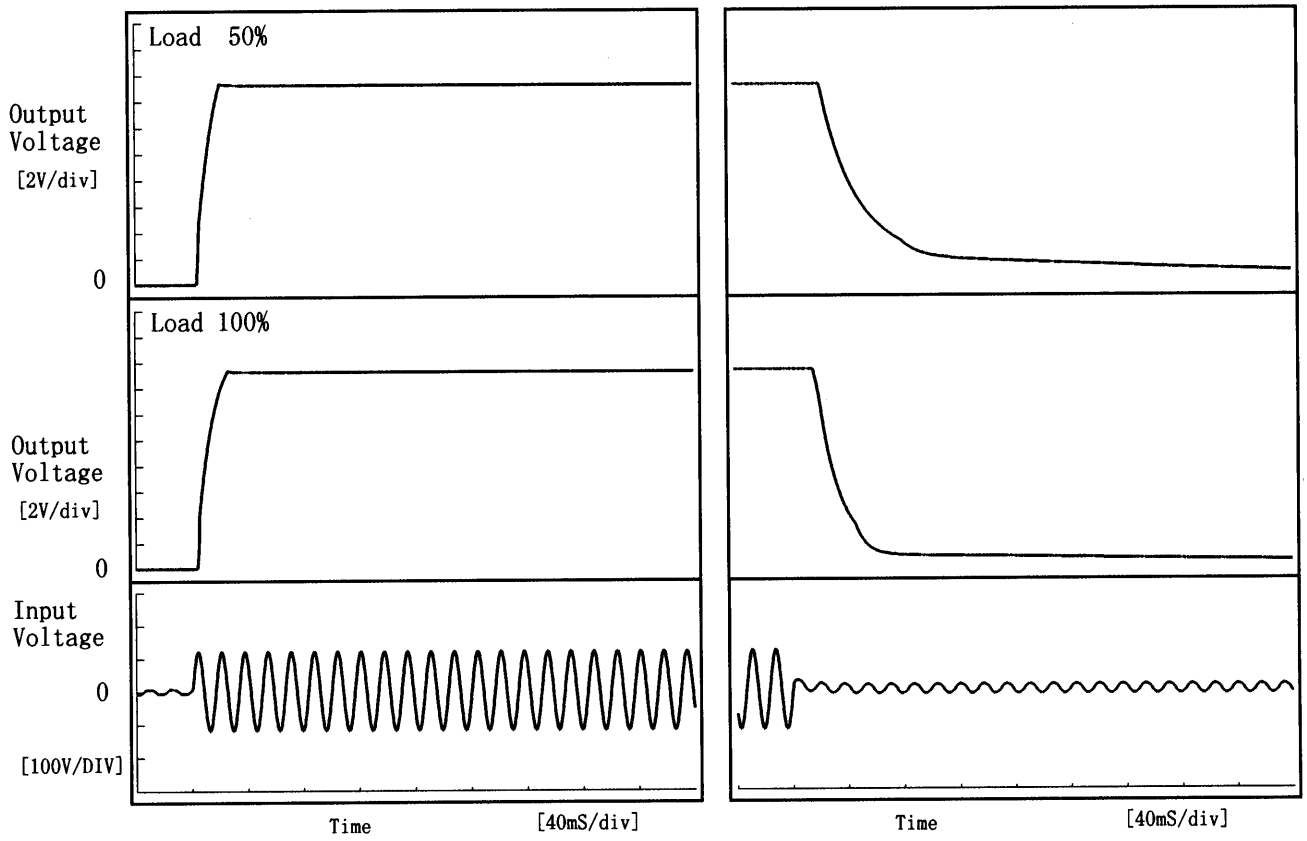
COSEL

Model	RMC30A-2		
Item	Rise and Fall Time 立上り、立下り時間	Temperature	25℃
		Testing Circuitry	Figure A
Object	+15.0V0.50A		

1. Graph

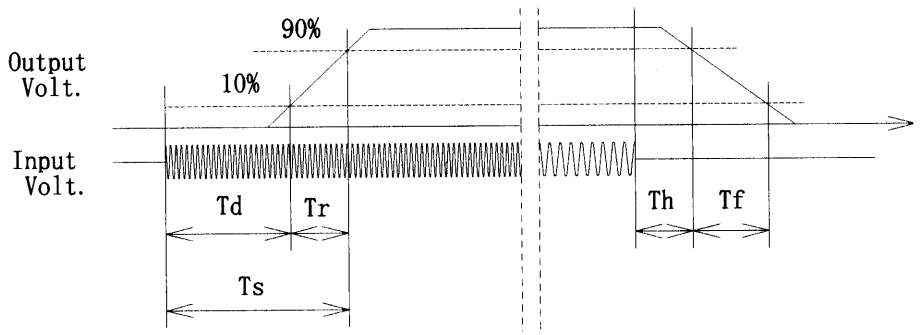
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	4.8	12.2	17.0	24.8	162.4
100 %	5.0	14.6	19.6	19.6	37.2



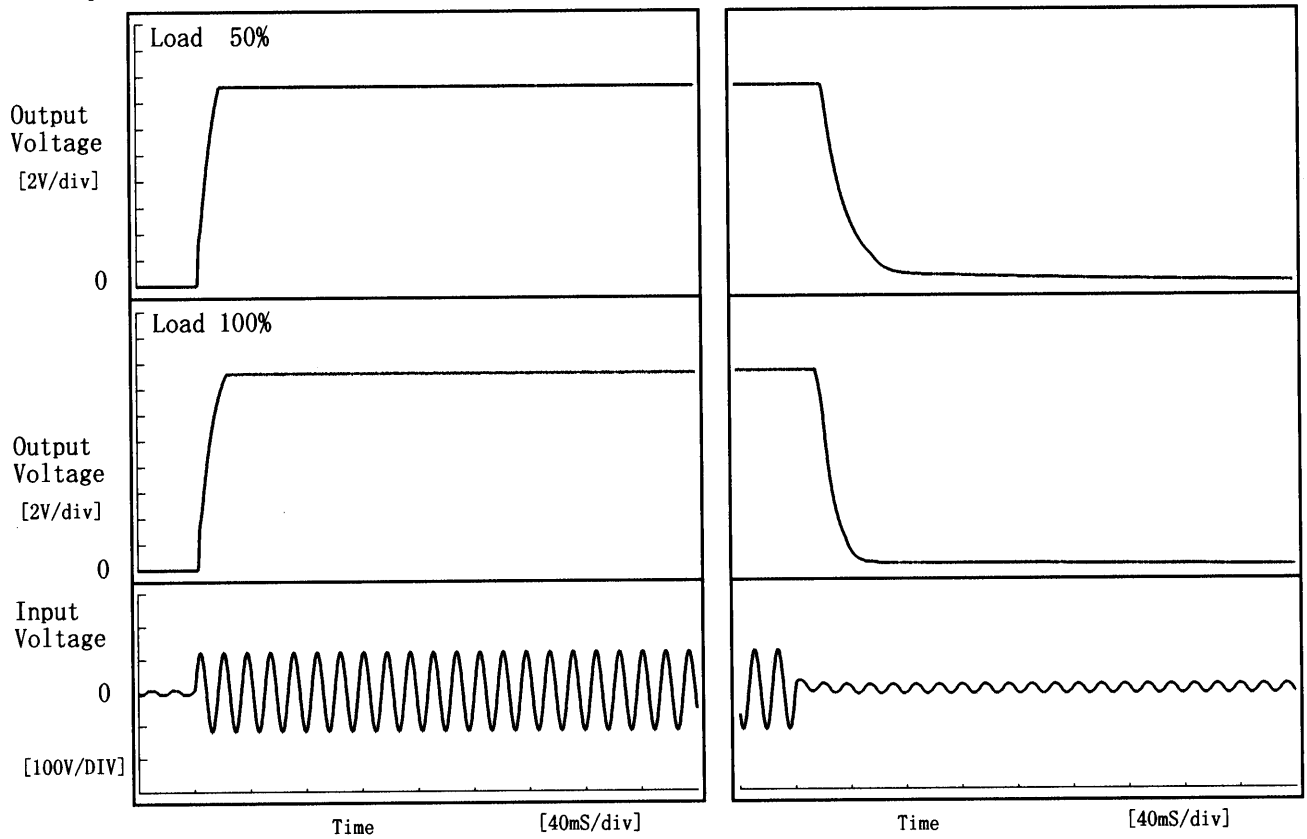
BC−3239

COSEL

Model	RMC30A-2		
Item	Rise and Fall Time 立上り、立下り時間	Temperature	25℃
		Testing Circuitry	Figure A
Object	-15.0V0.50A		

1. Graph

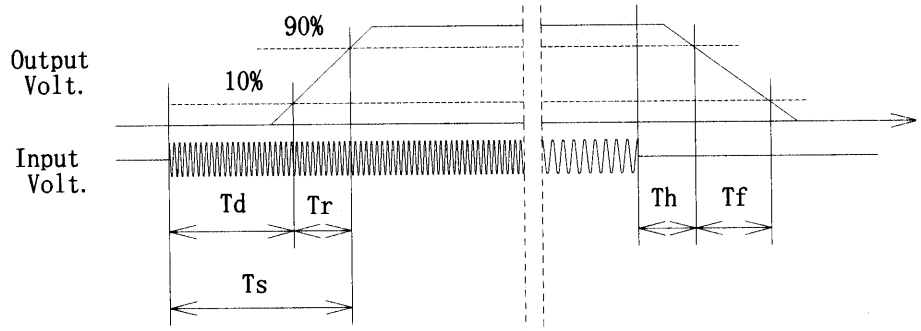
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	3.6	12.8	16.4	24.2	39.2
100 %	3.6	15.2	18.8	19.8	20.8



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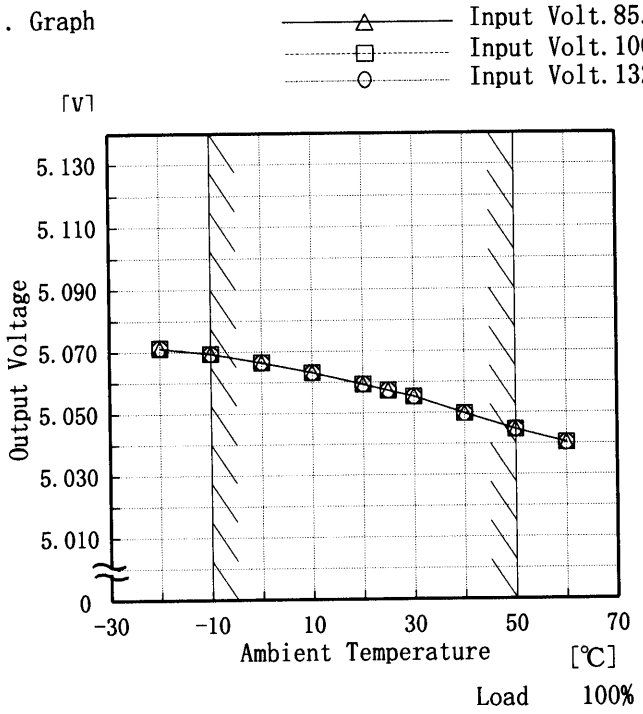
COSEL

Model	RMC30A-2
Item	Ambient Temperature Drift 周囲温度変動

Testing Circuitry Figure A

Object +5.0V3.00A

1. Graph

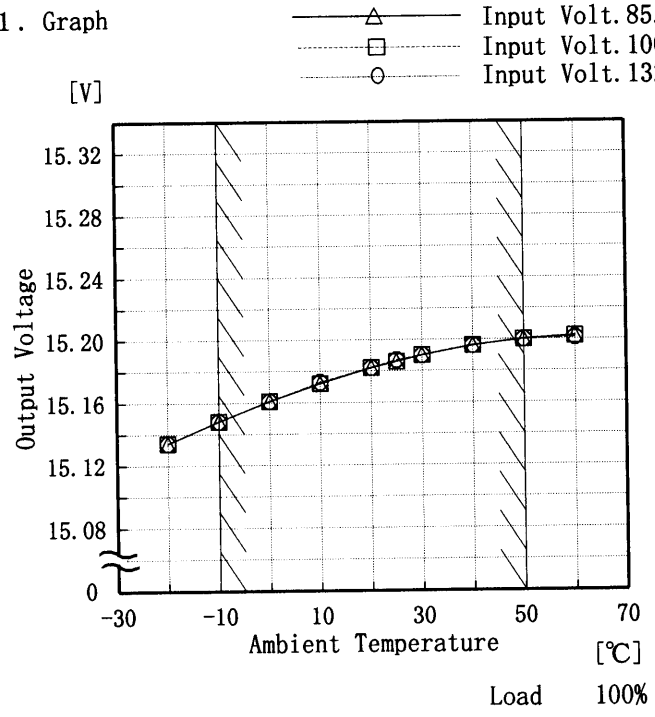


2. Values

Temperature [℃]	Input Volt. 85.0[V] Output Volt. [V]	Input Volt. 100.0[V] Output Volt. [V]	Input Volt. 132.0[V] Output Volt. [V]
-20	5.071	5.071	5.071
-10	5.069	5.069	5.069
0	5.066	5.067	5.067
10	5.063	5.063	5.063
20	5.059	5.059	5.059
25	5.057	5.057	5.057
30	5.055	5.055	5.055
40	5.050	5.050	5.050
50	5.045	5.045	5.045
60	5.040	5.040	5.040
—	—	—	—

Object +15V0.50A

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

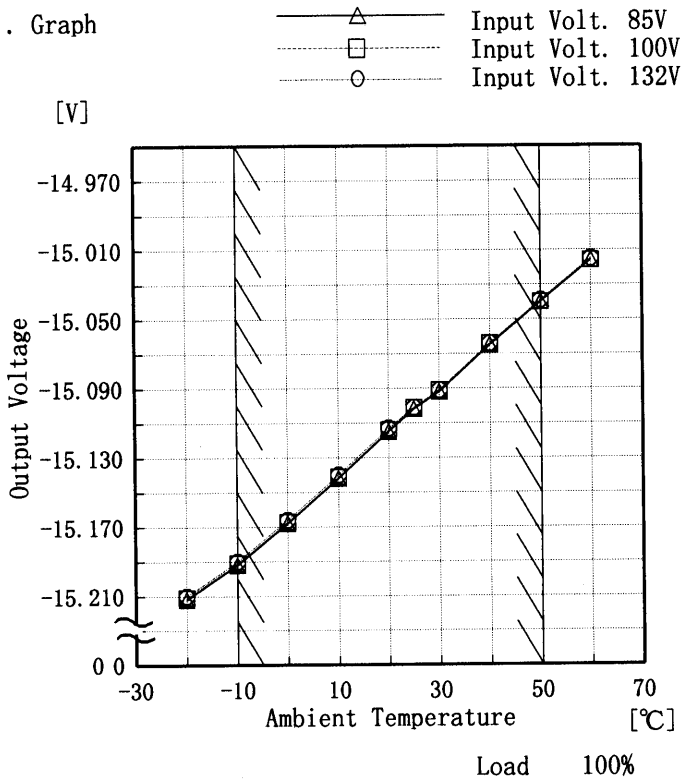
Temperature [℃]	Input Volt. 85.0[V] Output Volt. [V]	Input Volt. 100.0[V] Output Volt. [V]	Input Volt. 132.0[V] Output Volt. [V]
-20	15.134	15.134	15.134
-10	15.148	15.148	15.148
0	15.161	15.161	15.161
10	15.172	15.172	15.173
20	15.182	15.182	15.182
25	15.186	15.186	15.187
30	15.190	15.190	15.190
40	15.196	15.196	15.196
50	15.200	15.200	15.200
60	15.202	15.202	15.201
—	—	—	—

COSEL

Model	RMC30A-2
Item	Ambient Temperature Drift 周囲温度変動
Object	-15.0V0.50A

Testing Circuitry Figure A

1. Graph



Load 100%

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

Temperature [℃]	Input Volt. 85[V] Output Volt. [V]	Input Volt. 100[V] Output Volt. [V]	Input Volt. 132[V] Output Volt. [V]
-20	-15.212	-15.211	-15.210
-10	-15.192	-15.191	-15.190
0	-15.168	-15.167	-15.166
10	-15.142	-15.141	-15.140
20	-15.115	-15.114	-15.113
25	-15.102	-15.101	-15.101
30	-15.092	-15.091	-15.091
40	-15.065	-15.064	-15.064
50	-15.040	-15.040	-15.039
60	-15.016	-15.016	-15.015
—	—	—	—

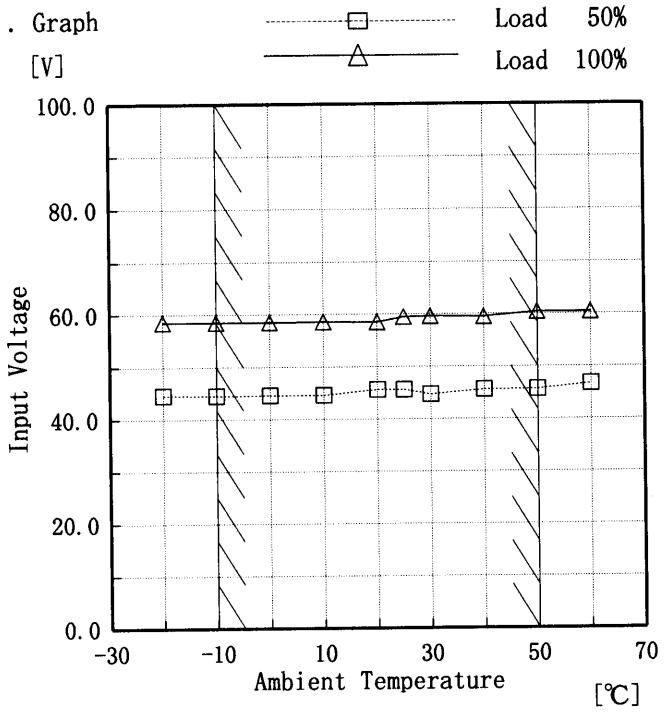
COSEL

Model	RMC30A-2
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 +5.0V3A

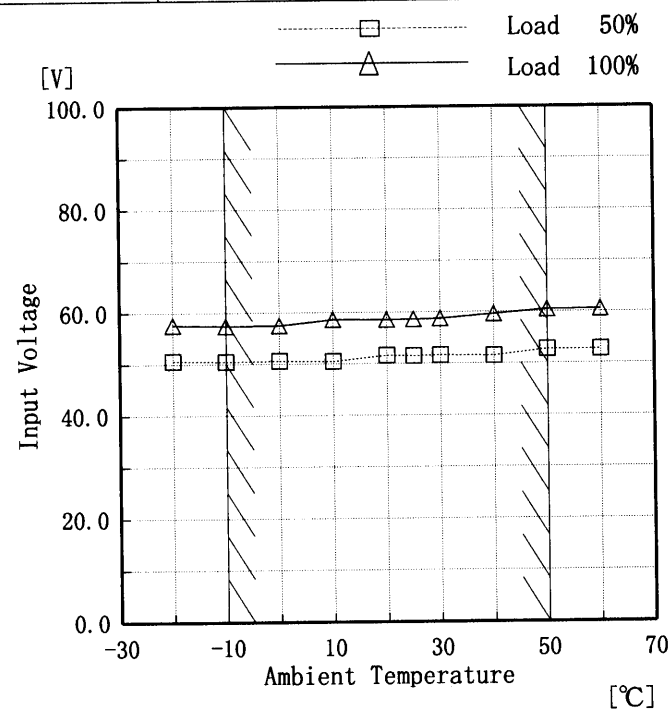
1. Graph



2. Values

Ambient Temp. [℃]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]
-20	44.6	58.5
-10	44.5	58.5
0	44.6	58.5
10	44.6	58.6
20	45.6	58.5
25	45.6	59.5
30	44.7	59.6
40	45.6	59.5
50	45.7	60.4
60	46.7	60.4
—	—	—

Object +15V0.50A



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% Input Volt. [V]	Load 100% Input Volt. [V]
-20	50.6	57.6
-10	50.5	57.4
0	50.6	57.5
10	50.5	58.6
20	51.6	58.5
25	51.5	58.6
30	51.6	58.7
40	51.5	59.6
50	52.7	60.4
60	52.7	60.5
—	—	—

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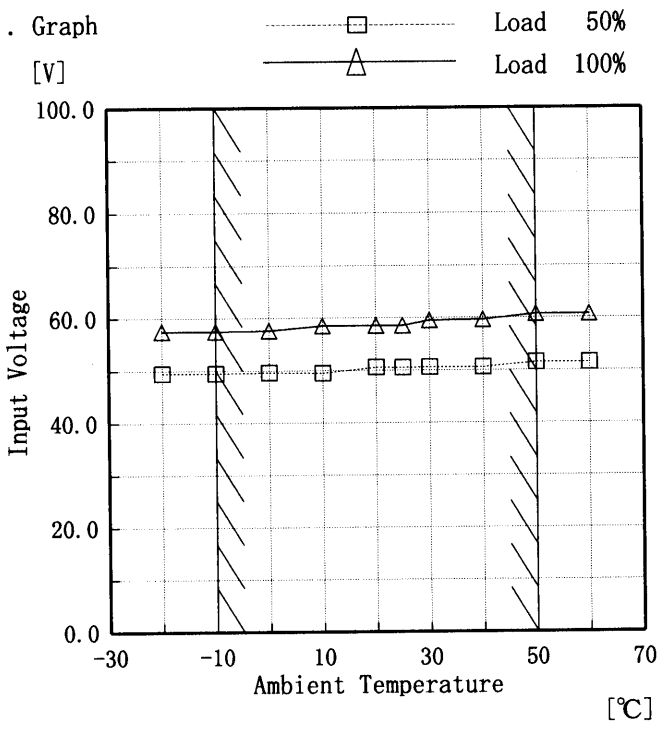
COSEL

Model	RMC30A-2
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	-15.0V0.50A

Testing Circuitry Figure A

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 Temp. [℃]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]
-20	50	58
-10	50	58
0	50	58
10	50	59
20	51	59
25	51	59
30	51	60
40	51	60
50	52	61
60	52	61
—	—	—

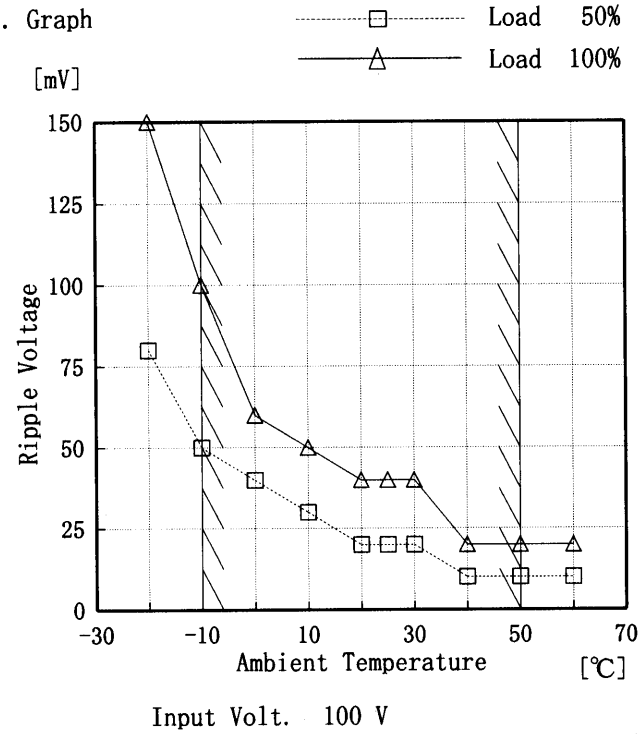
COSEL

Model	RMC30A-2
Item	Ripple Voltage (by Ambient Temp.) リップル電圧 (周囲温度特性)

Testing Circuitry Figure A

Object +5.0V3.00A

1. Graph



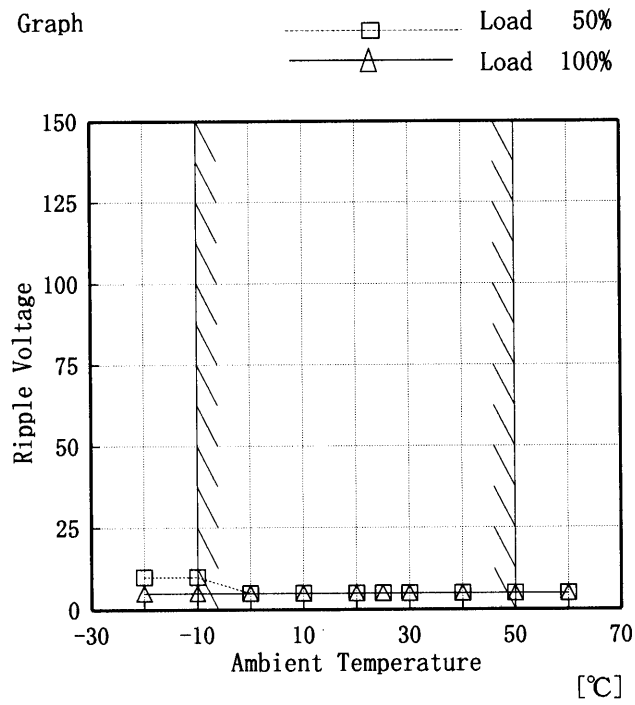
Input Volt. 100 V

2. Values

Ambient Temp. [℃]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]
-20	80	150
-10	50	100
0	40	60
10	30	50
20	20	40
25	20	40
30	20	40
40	10	20
50	10	20
60	10	20
—	—	—

Object +15V0.50A

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

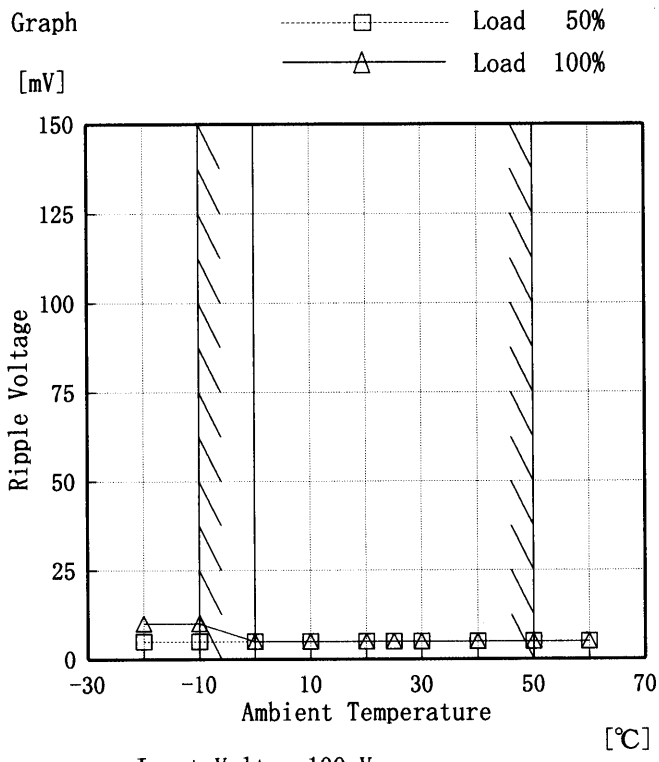
Ambient Temp. [℃]	Load 50% Ripple Output Volt. [mV]	Load 100% Ripple Output Volt. [mV]
-20	5	10
-10	5	10
0	5	5
10	5	5
20	5	5
25	5	5
30	5	5
40	5	5
50	5	5
60	5	5
—	—	—

COSEL

Model	RMC30A-2
Item	Ripple Voltage (by Ambient Temp.) リップル電圧 (周囲温度特性)
Object	-15.0V0.50A

Testing Circuitry Figure A

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	5	10
-10	5	10
0	5	5
10	5	5
20	5	5
25	5	5
30	5	5
40	5	5
50	5	5
60	5	5
—	—	—

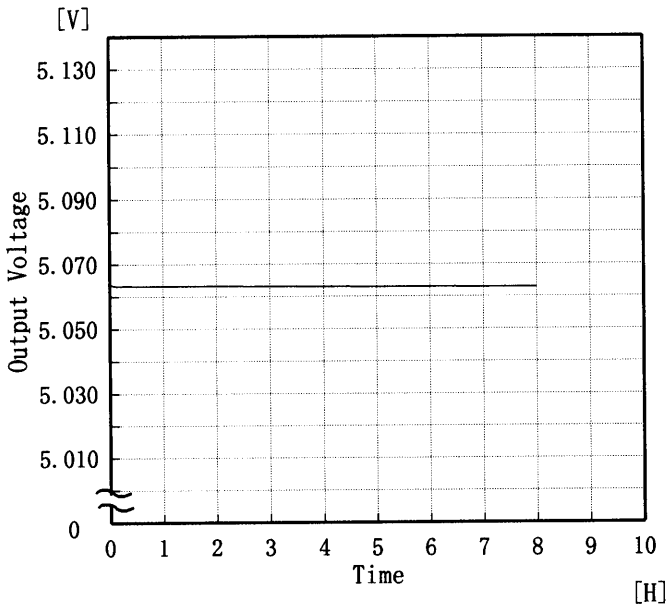
COSEL

Model	RMC30A-2
Item	Time Lapse Drift 経時ドリフト

Temperature 25 ℃
Testing Circuitry Figure A

Object +5.0V3.00A

1. Graph



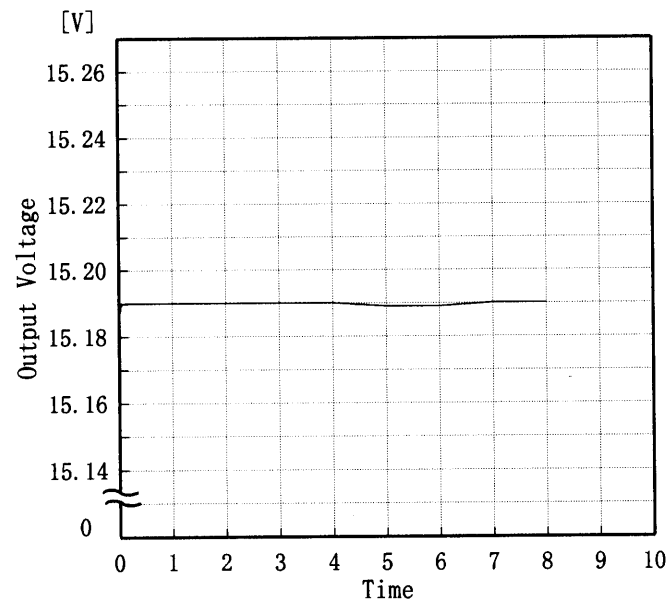
Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	5.064
0.5	5.063
1.0	5.063
2.0	5.063
3.0	5.063
4.0	5.063
5.0	5.063
6.0	5.063
7.0	5.063
8.0	5.063

Object +15V0.50A

1. Graph



Input Volt. 100V
Load 100%

2. Values

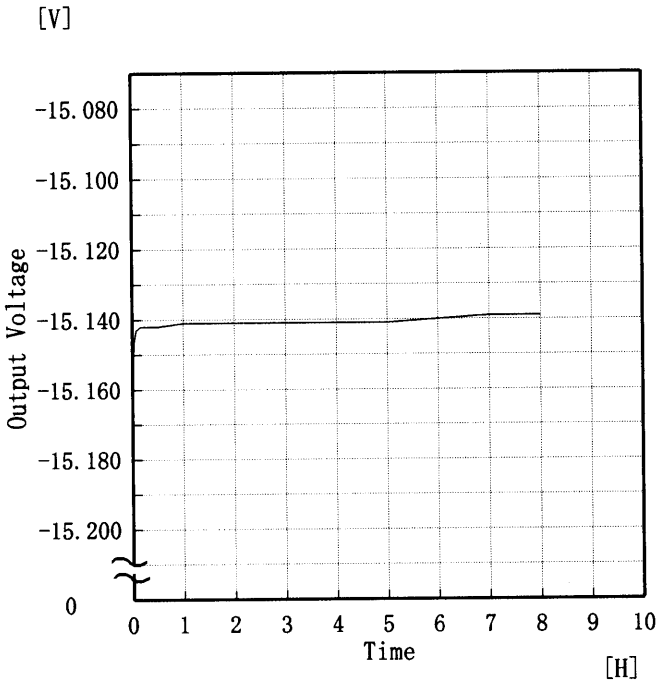
Time since start [H]	Output Voltage [V]
0.0	15.181
0.5	15.190
1.0	15.190
2.0	15.190
3.0	15.190
4.0	15.190
5.0	15.189
6.0	15.189
7.0	15.190
8.0	15.190

COSEL

Model	RMC30A-2
Item	Time Lapse Drift 経時ドリフト
Object	-15.0V0.5A

Temperature 25 ℃
Testing Circuitry Figure A

1. Graph



Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	-15.182
0.5	-15.142
1.0	-15.141
2.0	-15.141
3.0	-15.141
4.0	-15.141
5.0	-15.141
6.0	-15.140
7.0	-15.139
8.0	-15.139

COSEL

Model	RMC30A-2	
Item	Output Voltage Accuracy 定電圧精度	Testing Circuitry Figure A

Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -10～50 ℃

Input Voltage : 85.0～132.0 V

Load Current (AVR 1) : 0.00～3.00 A (AVR 2) : 0.00～0.50 A (AVR 3) : 0.00～0.50 A

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

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

定電圧精度

周囲温度、入力電圧、負荷を下記仕様内で、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 85.0～132.0 V

負荷電流 (AVR 1) 0.00～3.00 A (AVR 2) : 0.00～0.50 A (AVR 3) : 0.00～0.50 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

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

Object	+5.0V3.00A					
Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	-10	85.0	0.000	5.080	±15	±0.3
Minimum Voltage	50	132.0	3.000	5.050		

Object	+15V0.50A					
Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	50	85.0	0.00	15.210	±28	±0.2
Minimum Voltage	-10	85.0	0.00	15.155		

Object	−15V0.50A					
Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	-10	132.0	0.00	-15.224	±88	±0.6
Minimum Voltage	50	132.0	0.50	-15.048		

COSEL

Model	RMC30A-2
Item	Condensation 結露特性
Object	+5.0V3A

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]	5.062	Input Volt.: 100V, Load Current:3A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:3A
Load Regulation [mV]	6	Input Volt.: 100V, Load Current:0～3A

COSEL

Model	RMC30A-2
Item	Condensation 結露特性
Object	+15.0V0.5A

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]	15.194	Input Volt.: 100V, Load Current:0.5A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:0.5A
Load Regulation [mV]	9	Input Volt.: 100V, Load Current:0.0～0.5A

COSEL

Model	RMC30A-2
Item	Condensation 結露特性
Object	-15.0V0.5A

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]	-15.117	Input Volt.: 100V, Load Current:0.5A
Line Regulation [mV]	1	Input Volt.: 85～132V, Load Current:0.5A
Load Regulation [mV]	18	Input Volt.: 100V, Load Current:0.0～0.5A

COSEL

Model	RMC30A-2		
Item	Leakage Current 漏洩電流	Temperature	25℃
		Testing Circuitry	Figure A
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	RMC30A-2
Item	Conducted Emission 雑音端子電圧
Object	————————

Testing Circuitry Figure D

1. Graph

Remarks

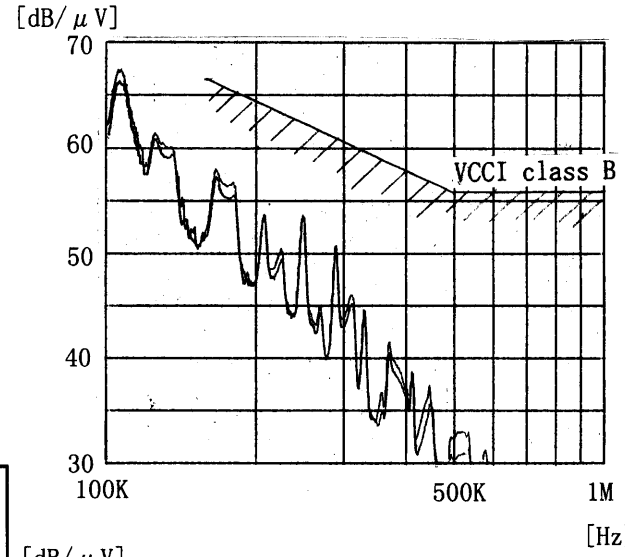
Input Volt. 120 V(VCCI:100V)

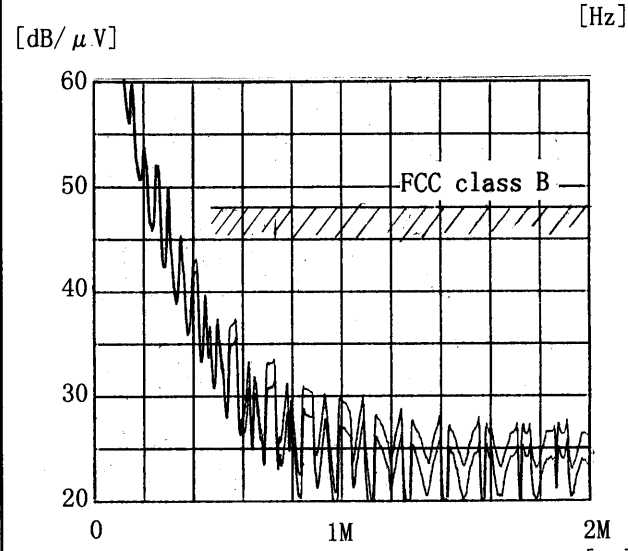
Load 100 %

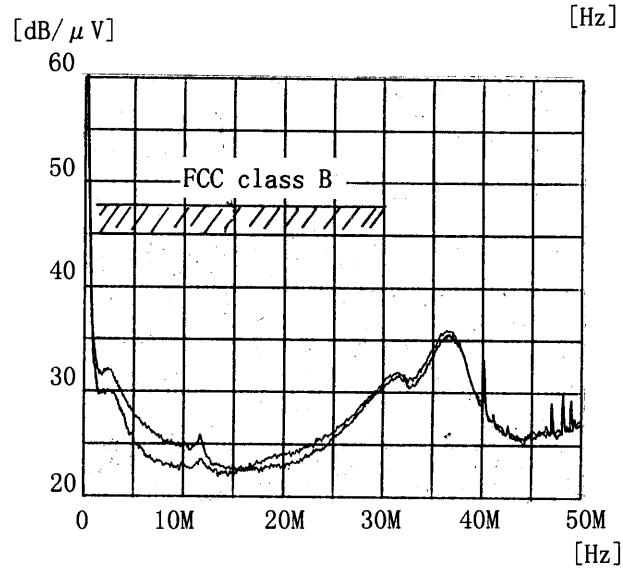
Note: Slanted line shows the range of Tolerance.

(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







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COSEL

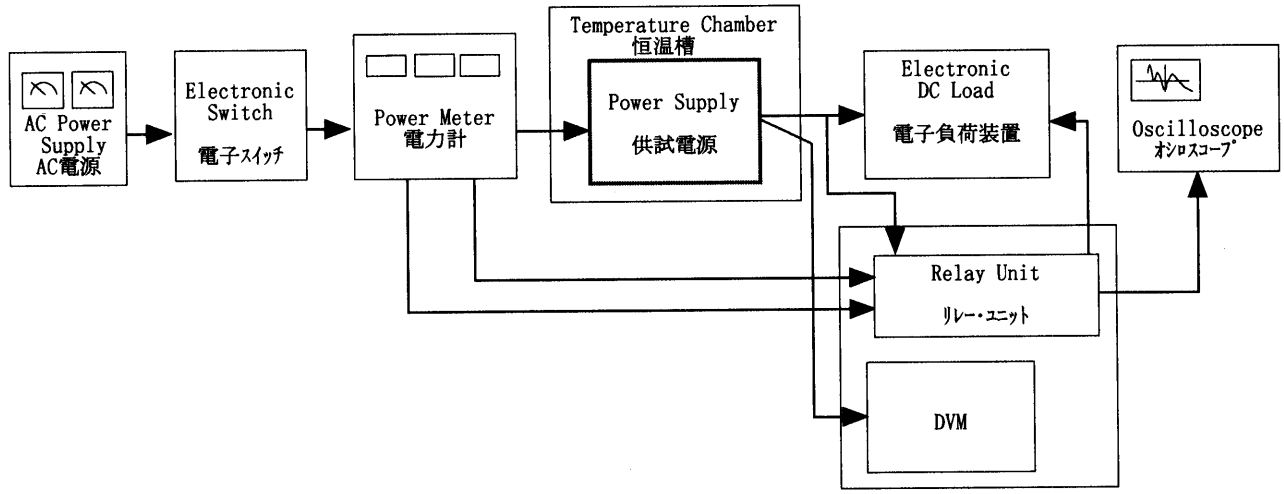

Figure A

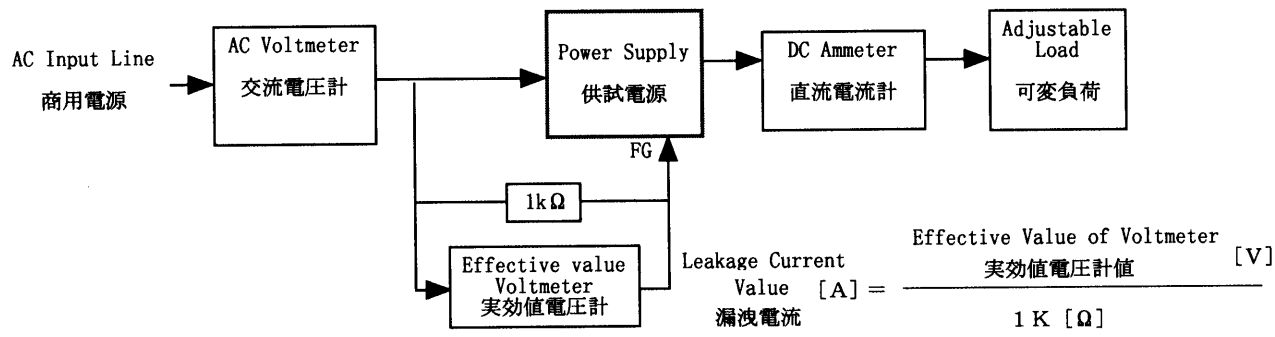

Figure B(DENTORI)

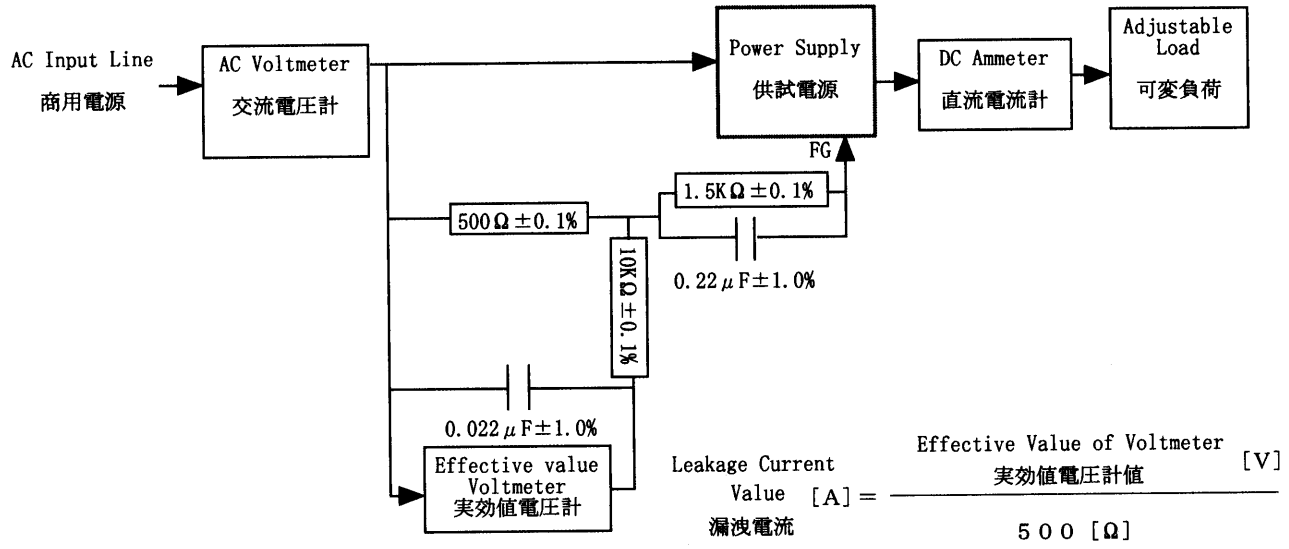

Figure B（IEC60950）

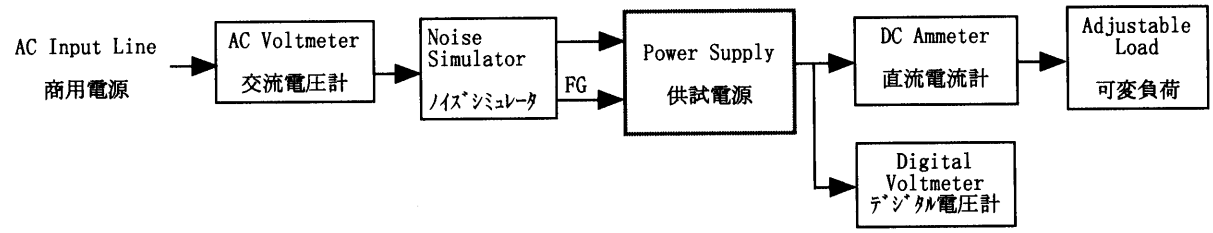

Figure C

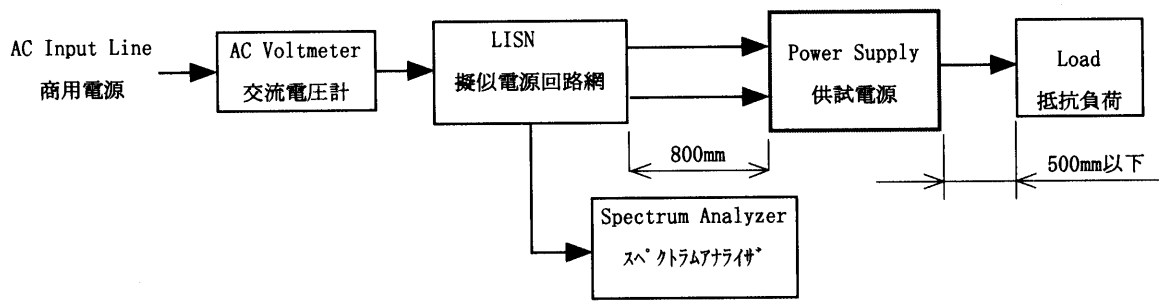

Figure D

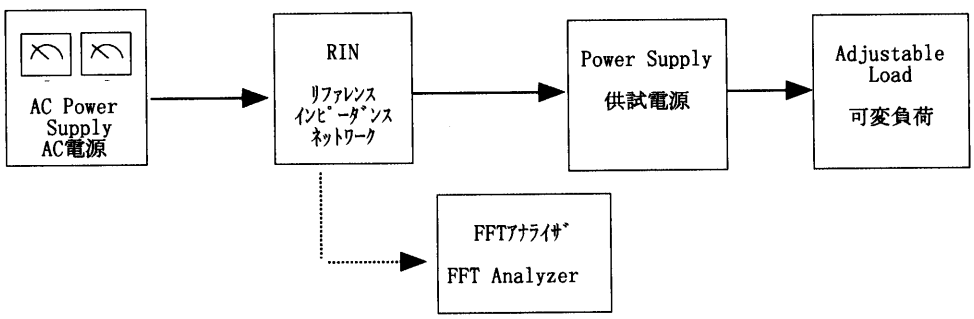

Figure E