PSD10-＊-1212

EVALUATION DATA

型式データ

DWG.No. C211-53-01		
承認	査閲	担当
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18. Apr. '05	14. Apr. '05	14. Apr. '05

DENSEI-LAMBDA

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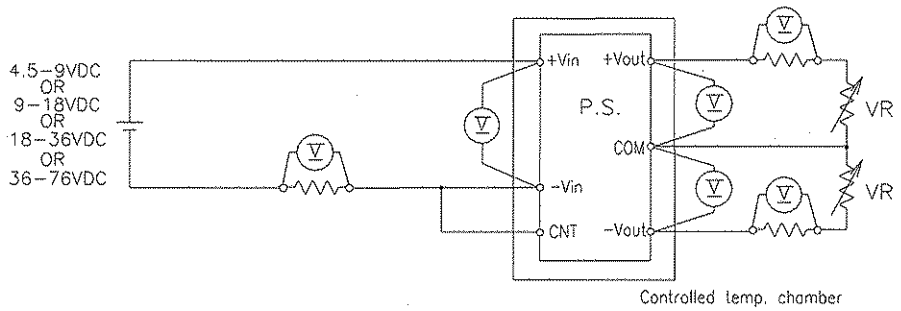
使用記号　Terminology used

	Definition		
Vin	.....	入力電圧	Input Voltage
Vout	.....	出力電圧	Output Voltage
Von/off	.....	ON/OFF電圧	ON/OFF Voltage
Iin	.....	入力電流	Input Current
Iout	.....	出力電流	Output Current
Ta	.....	周囲温度	Ambient Temperature

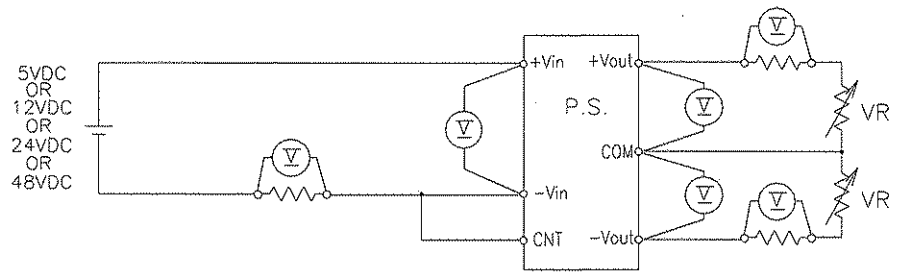
1. 測定方法　　Evaluation Method

1.1 測定回路　　Circuits used for determination

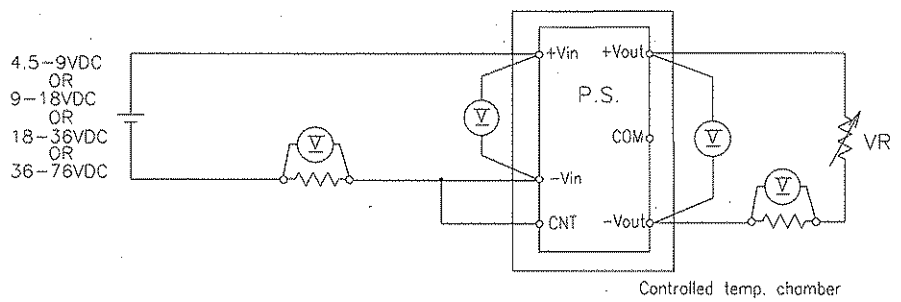
(1) 静特性　Steady state data



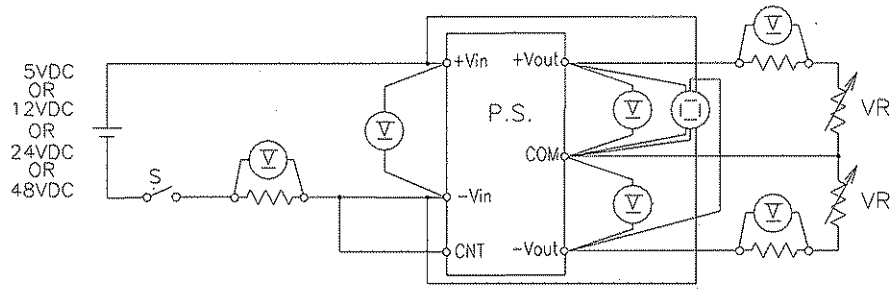
(2) 通電ドリフト特性　Warm up voltage drift characteristics



(3) 過電流保護特性　Over current protection (OCP) characteristics



(4) 出力立ち上がり特性　Output rise characteristics

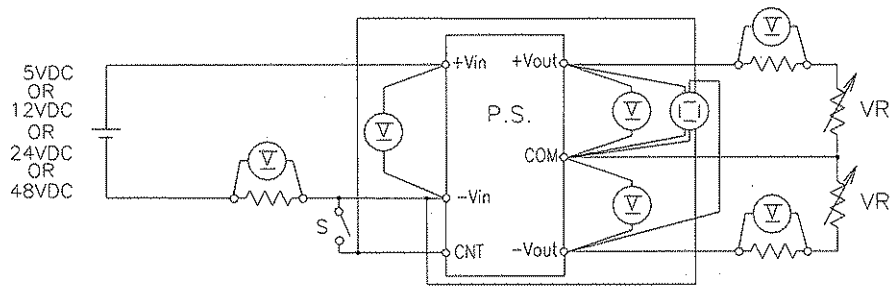


(5) 出力立ち下がり特性 Output fall characteristics

出力立ち上がり特性と同じ

Same as output rise characteristics

(6) 出力立ち上がり特性　(ON/OFF コントロール時)　Output rise characteristics with ON/OFF control

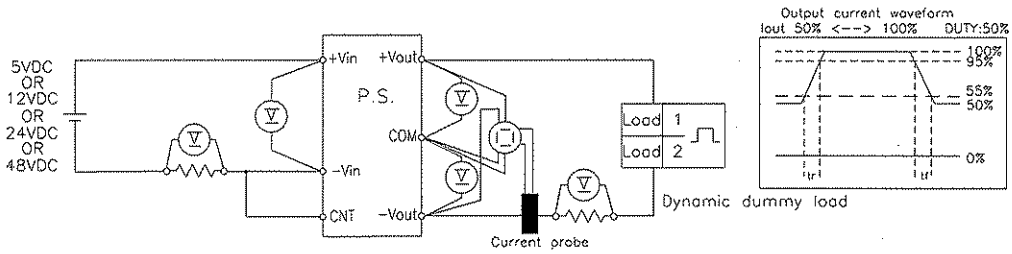


(7) 出力立ち下がり特性 (ON/OFF コントロール時)　Output fall characteristics with ON/OFF control

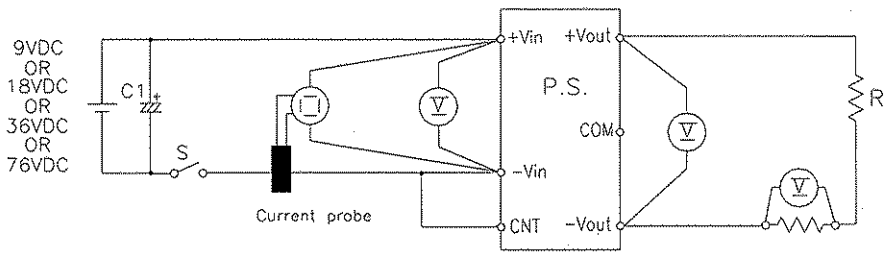
出力立ち上がり特性 (ON/OFF コントロール時) と同じ

Same as output rise characteristics with ON/OFF control

(8) 過渡応答(負荷急変)特性 Dynamic load response characteristics

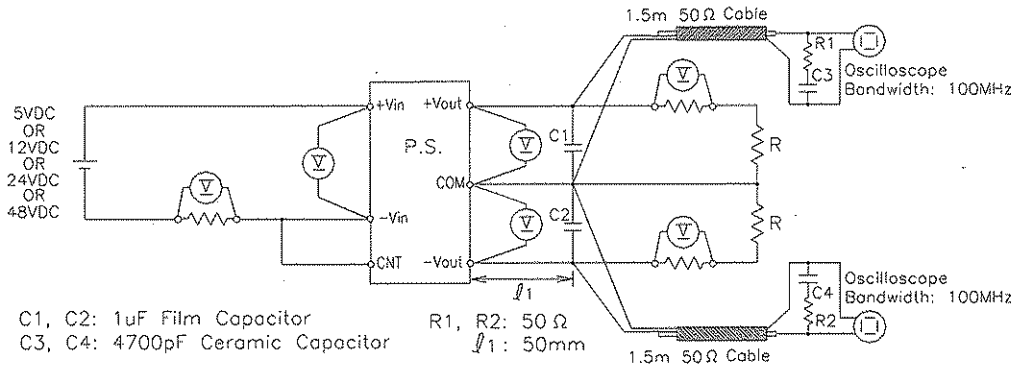


(9) 入力サージ電流（突入電流）特性 Inrush current characteristics



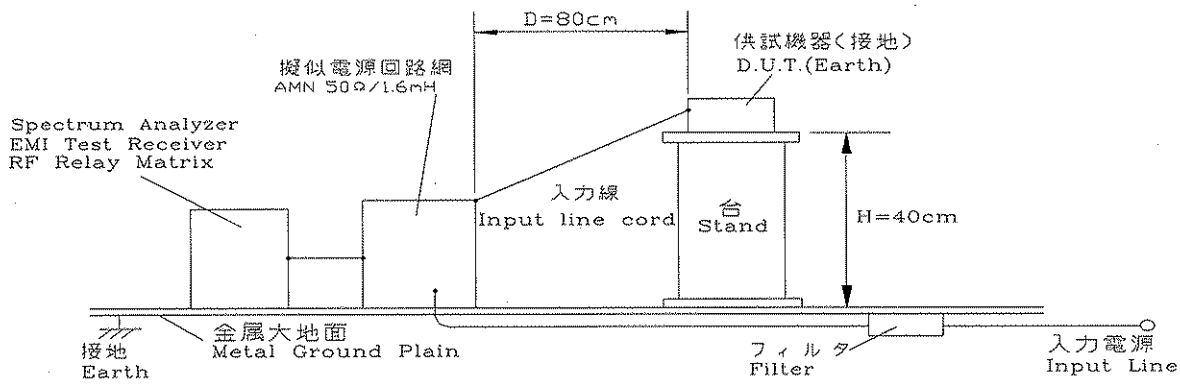
C1: 4000uF Electrolytic Capacitor

(10) 出力リップル、ノイズ波形 Output ripple and noise waveform

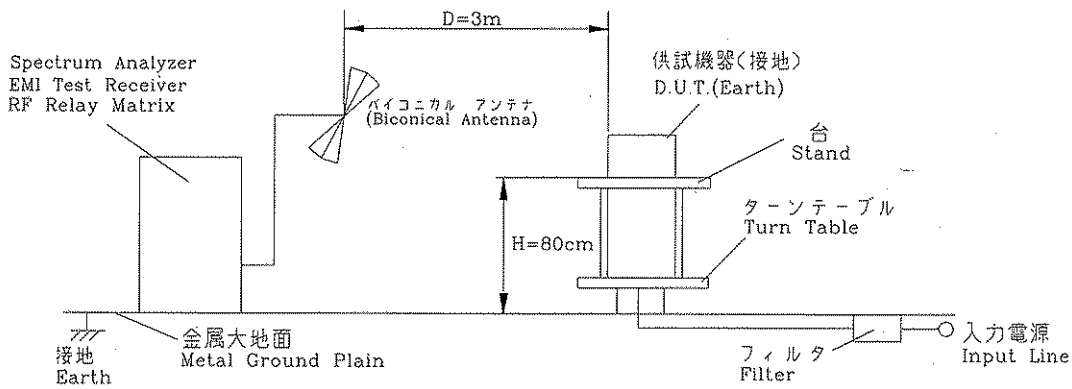


(11) ＥＭＩ特性 Electro-Magnetic Interference characteristics

(a) 雑音端子電圧（帰還ノイズ） Conducted Emission Noise

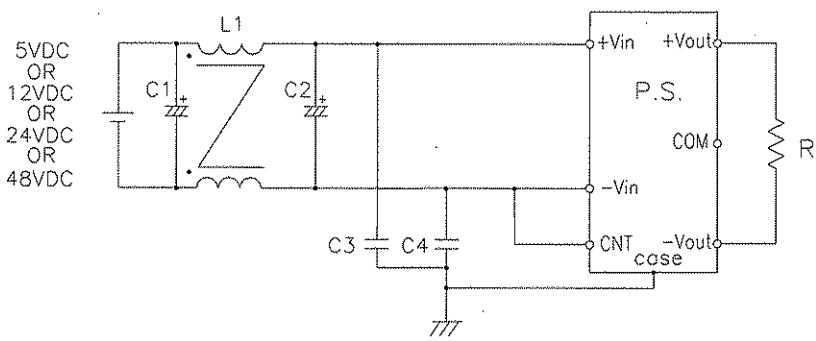


(b) 雑音電界強度（輻射ノイズ） Radiated Emission Noise



(1) VCCI class A 対応アプリケーションシステム

VCCI class A application system



model	C1	L1	C2	C3,C4
PSD10-5-*	10uF	0.3mH	1000uF	4700pF
PSD10-12-*	10uF	0.3mH	220uF	4700pF
PSD10-24-*	1uF	0.3mH	47uF	4700pF
PSD10-48-*	0.47uF	0.5mH	22uF	4700pF

L1: Common mode choke coil
C1: Electrolytic Capacitor
C2: Electrolytic Capacitor
C3,C4 : Ceramic Capacitor

1.2 使用測定機器　List of equipment used

	EQUIPMENT USED	MANUFACTURER	MODEL NO.
1	OSCILLO SCOPE	HITACHI DENSHI	V-1100A
2	DIGITAL STORAGE OSCILLOSCOPE	YOKOGAWA ELECT. IWATSU-LeCroy	DL1740 LT364L
3	DIGITAL MULTIMETER	AGILENT	34970A
4	CURRENT PROBE/AMPLIFIER	TEKTRONIX	A6303/TM503B
5	SHUNT RESISTER	YOKOGAWA ELECT.	2215
6	DYNAMIC DUMMY LOAD	TAKASAGO	FK-400L
7	INPUT POWER SUPPLY	DENSEI-LAMBDA	GEN100-7.5
8	CONTROLLED TEMP. CHAMBER	TABAI ESPEC	SU-261
9	SPECTRUM ANALYZER	ROHDE & SCHWARZ	FSA
10	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESHS10
11	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESVS10
12	RF RELAY MATRIX	ROHDE & SCHWARZ	PSU
13	AMN	KYORITU DENSHI	KNW-242
14	ANTENNA(BICONICAL ANTENNA)	SCHWARZBECK	BBA9106

2. 特性データ　Characteristics

2. 1 静特性　Steady state data

(1) 入力・負荷・温度変動　Regulation - line and load, temperature drift

PSD10-5-1212

12V (CH1)

1. Regulation - line and load　　Condition Ta : 25℃

Iout \ Vin	4.5VDC	5VDC	9VDC	line regulation	
0%	12.086V	12.088V	12.087V	2.0mV	0.017%
50%	12.089V	12.090V	12.089V	1.0mV	0.008%
100%	12.092V	12.092V	12.091V	1.0mV	0.008%
load	6.0mV	4.0mV	4.0mV		
regulation	0.05%	0.03%	0.03%		

2. Temperature drift　　Conditions Vin : 5VDC

Iout : 100%

Ta	-40℃	25℃	85℃	temperature stability	
Vout	12.041V	12.092V	12.091V	51.0mV	0.42%

−12V (CH2)

1. Regulation - line and load　　Condition Ta : 25℃

Iout \ Vin	4.5VDC	5VDC	9VDC	line regulation	
0%	-12.081V	-12.082V	-12.084V	3.0mV	0.025%
50%	-12.079V	-12.080V	-12.081V	2.0mV	0.017%
100%	-12.077V	-12.077V	-12.079V	2.0mV	0.017%
load	4.0mV	5.0mV	5.0mV		
regulation	0.03%	0.04%	0.04%		

2. Temperature drift　　Conditions Vin : 5VDC

Iout : 100%

Ta	-40℃	25℃	85℃	temperature stability	
Vout	-12.030V	-12.077V	-12.074V	47.0mV	0.39%

2. 1 静特性　Steady state data

(1) 入力・負荷・温度変動　Regulation - line and load, temperature drift

PSD10-12-1212

12V (CH1)

1. Regulation - line and load　　Condition　Ta : 25℃

Iout \ Vin	9VDC	12VDC	18VDC	line regulation	
0%	12.188V	12.181V	12.185V	7.0mV	0.057%
50%	12.193V	12.193V	12.193V	0.0mV	0.000%
100%	12.205V	12.203V	12.202V	3.0mV	0.025%
load	17.0mV	22.0mV	17.0mV		
regulation	0.14%	0.18%	0.14%		

2. Temperature drift　　Conditions Vin : 12VDC

Iout : 100%

Ta	-40℃	25℃	85℃	temperature stability	
Vout	12.118V	12.203V	12.233V	115.0mV	0.94%

−12V (CH2)

1. Regulation - line and load　　Condition　Ta : 25℃

Iout \ Vin	9VDC	12VDC	18VDC	line regulation	
0%	-12.153V	-12.157V	-12.156V	4.0mV	0.033%
50%	-12.148V	-12.148V	-12.149V	1.0mV	0.008%
100%	-12.137V	-12.139V	-12.141V	4.0mV	0.033%
load	16.0mV	18.0mV	15.0mV		
regulation	0.13%	0.15%	0.12%		

2. Temperature drift　　Conditions Vin : 12VDC

Iout : 100%

Ta	-40℃	25℃	85℃	temperature stability	
Vout	-12.066V	-12.139V	-12.159V	93.0mV	0.77%

2. 1 静特性　Steady state data

(1) 入力・負荷・温度変動　Regulation - line and load, temperature drift

PSD10-24-1212

12V (CH1)

1. Regulation - line and load　　Condition Ta : 25℃

Iout \ Vin	18VDC	24VDC	36VDC	line regulation	
0%	12.221V	12.223V	12.222V	2.0mV	0.016%
50%	12.224V	12.225V	12.224V	1.0mV	0.008%
100%	12.236V	12.235V	12.234V	2.0mV	0.016%
load	15.0mV	12.0mV	12.0mV		
regulation	0.12%	0.10%	0.10%		

2. Temperature drift　　Conditions Vin : 24VDC
Iout : 100%

Ta	-40℃	25℃	85℃	temperature stability	
Vout	12.146V	12.235V	12.266V	120.0mV	0.98%

−12V (CH2)

1. Regulation - line and load　　Condition Ta : 25℃

Iout \ Vin	18VDC	24VDC	36VDC	line regulation	
0%	-12.173V	-12.176V	-12.179V	6.0mV	0.049%
50%	-12.173V	-12.175V	-12.176V	3.0mV	0.025%
100%	-12.162V	-12.164V	-12.166V	4.0mV	0.033%
load	11.0mV	12.0mV	13.0mV		
regulation	0.09%	0.10%	0.11%		

2. Temperature drift　　Conditions Vin : 24VDC
Iout : 100%

Ta	-40℃	25℃	85℃	temperature stability	
Vout	-12.092V	-12.164V	-12.182V	90.0mV	0.74%

2. 1 静特性　Steady state data

（1）入力・負荷・温度変動　Regulation - line and load, temperature drift

PSD10-48-1212

12V（CH1）

1. Regulation - line and load　　Condition　Ta : 25℃

Iout \ Vin	36VDC	48VDC	76VDC	line regulation	
0%	12.092V	12.090V	12.090V	2.0mV	0.017%
50%	12.097V	12.096V	12.098V	2.0mV	0.017%
100%	12.104V	12.103V	12.104V	1.0mV	0.008%
load	12.0mV	13.0mV	14.0mV		
regulation	0.10%	0.11%	0.12%		

2. Temperature drift　　Conditions Vin : 48VDC
Iout : 100%

Ta	-40℃	25℃	85℃	temperature stability	
Vout	12.043V	12.103V	12.102V	60.0mV	0.50%

－12V（CH2）

1. Regulation - line and load　　Condition　Ta : 25℃

Iout \ Vin	36VDC	48VDC	76VDC	line regulation	
0%	-12.057V	-12.058V	-12.058V	1.0mV	0.008%
50%	-12.051V	-12.051V	-12.051V	0.0mV	0.000%
100%	-12.045V	-12.044V	-12.044V	1.0mV	0.008%
load	12.0mV	14.0mV	14.0mV		
regulation	0.10%	0.12%	0.12%		

2. Temperature drift　　Conditions Vin : 48VDC
Iout : 100%

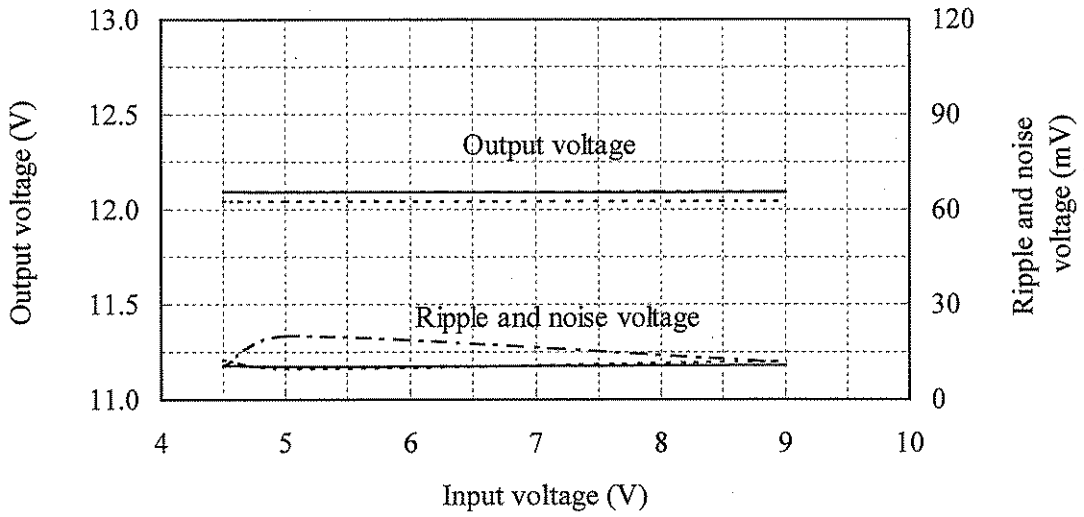
Ta	-40℃	25℃	85℃	temperature stability	
Vout	-11.993V	-12.044V	-12.034V	51.0mV	0.42%

2.1 (2) 出力電圧・リップル電圧対入力電圧
Output voltage and ripple voltage v.s. input voltage

PSD10-5-1212

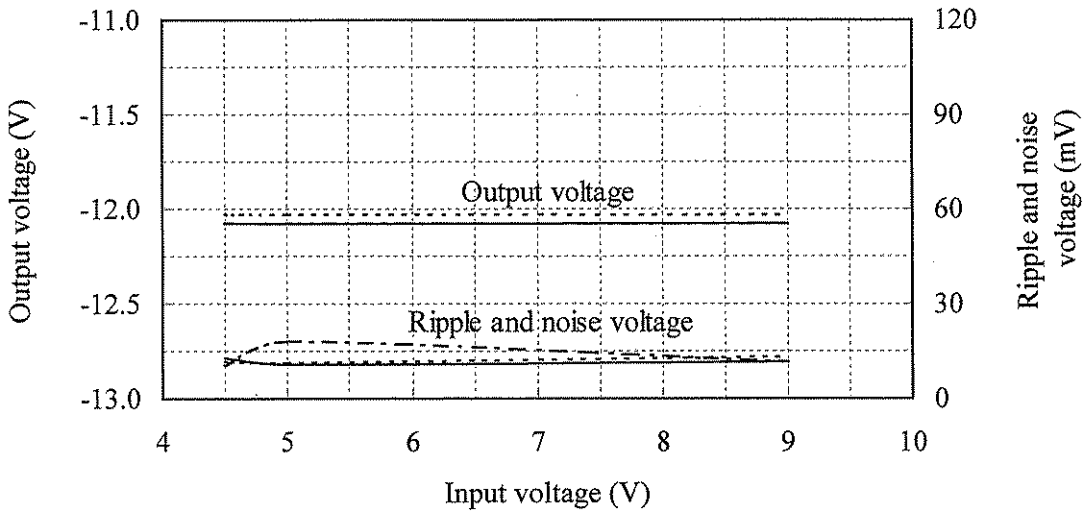
Conditions Iout : 100 %
Ta : -40 ℃
25 ℃
85 ℃

12V (CH1)



Ta : -40 ℃
25 ℃
85 ℃

−12V (CH2)

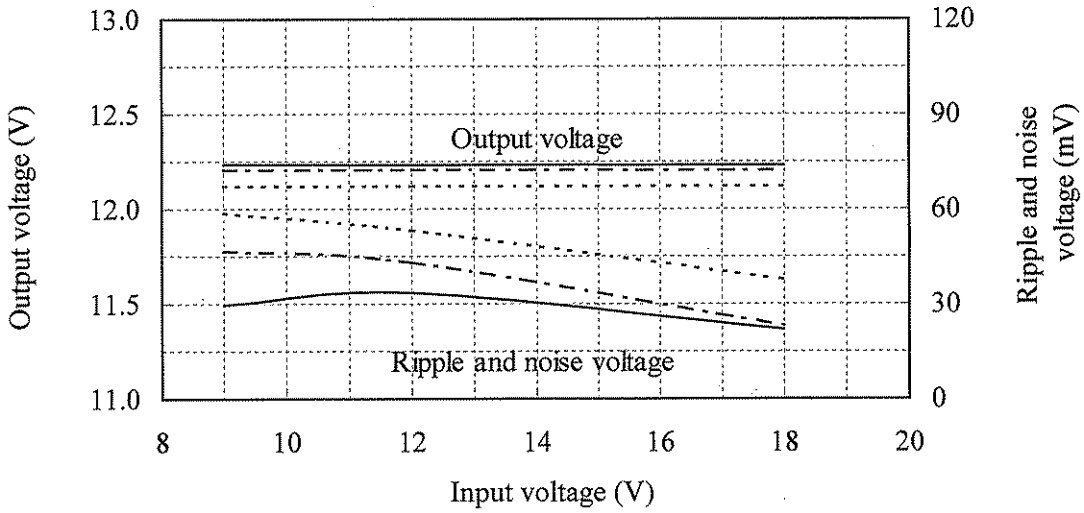


2.1 (2) 出力電圧・リップル電圧対入力電圧
Output voltage and ripple voltage v.s. input voltage

PSD10-12-1212

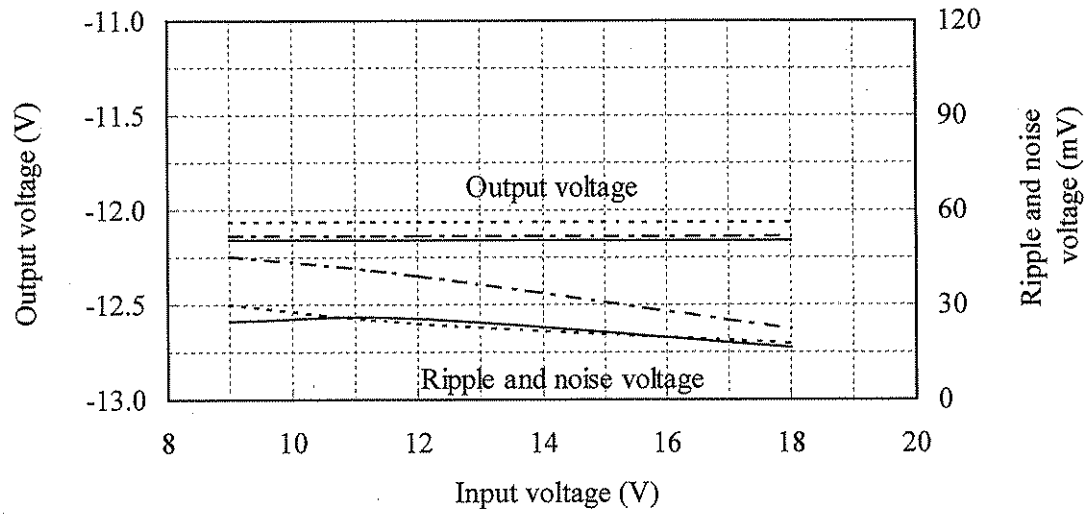
Conditions Iout : 100 %
Ta : -40 ℃
25 ℃
85 ℃

12V (CH1)



Ta : -40 ℃
25 ℃
85 ℃

−12V (CH2)

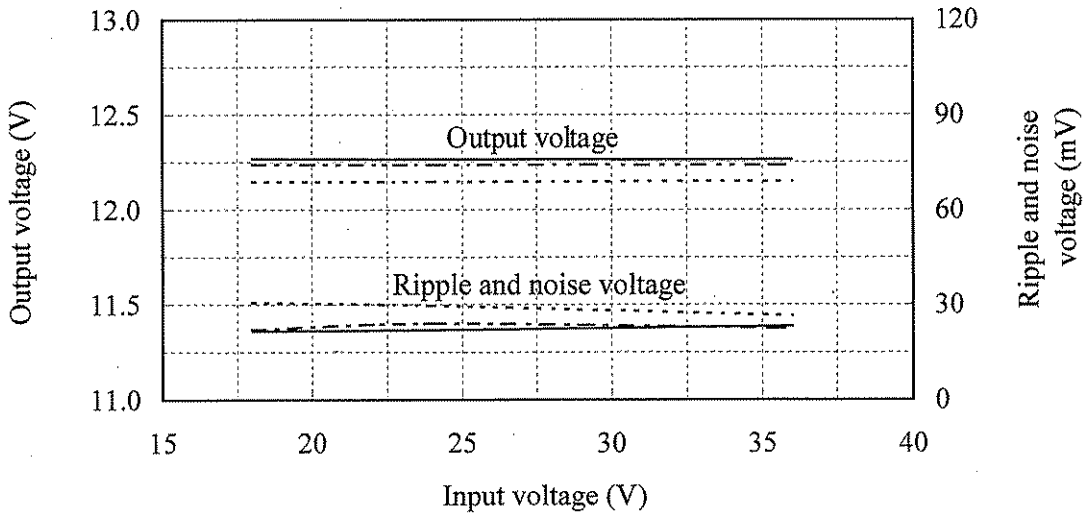


2.1 (2) 出力電圧・リップル電圧対入力電圧
Output voltage and ripple voltage v.s. input voltage

PSD10-24-1212

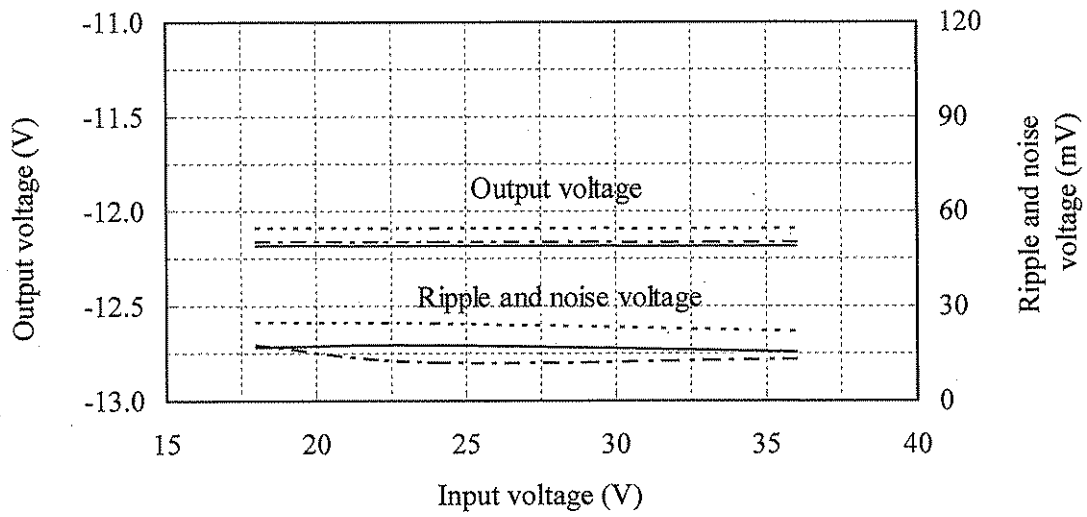
Conditions Iout : 100 %
Ta : -40 ℃
25 ℃
85 ℃

12V (CH1)



Ta : -40 ℃
25 ℃
85 ℃

−12V (CH2)

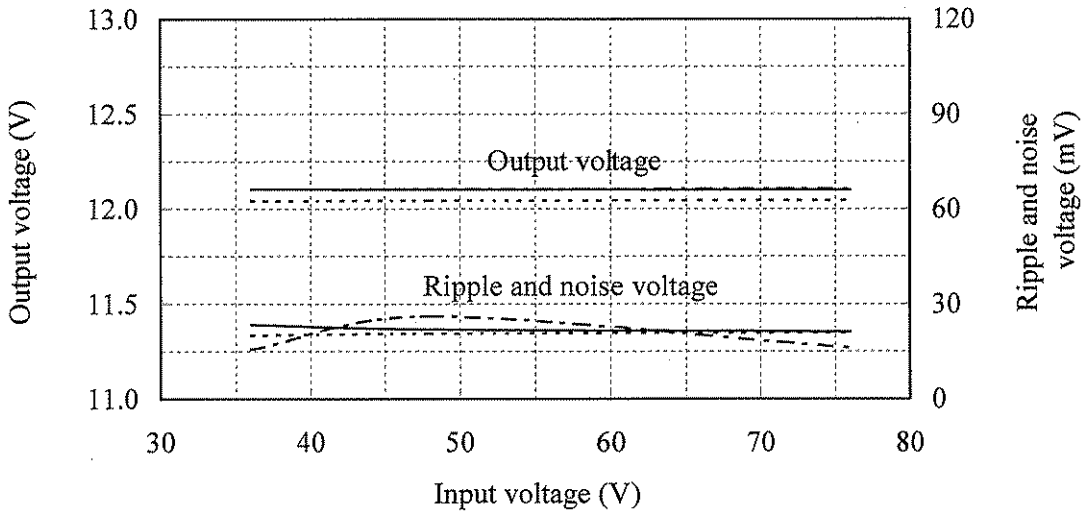


2.1 (2) 出力電圧・リップル電圧対入力電圧
Output voltage and ripple voltage v.s. input voltage

PSD10-48-1212

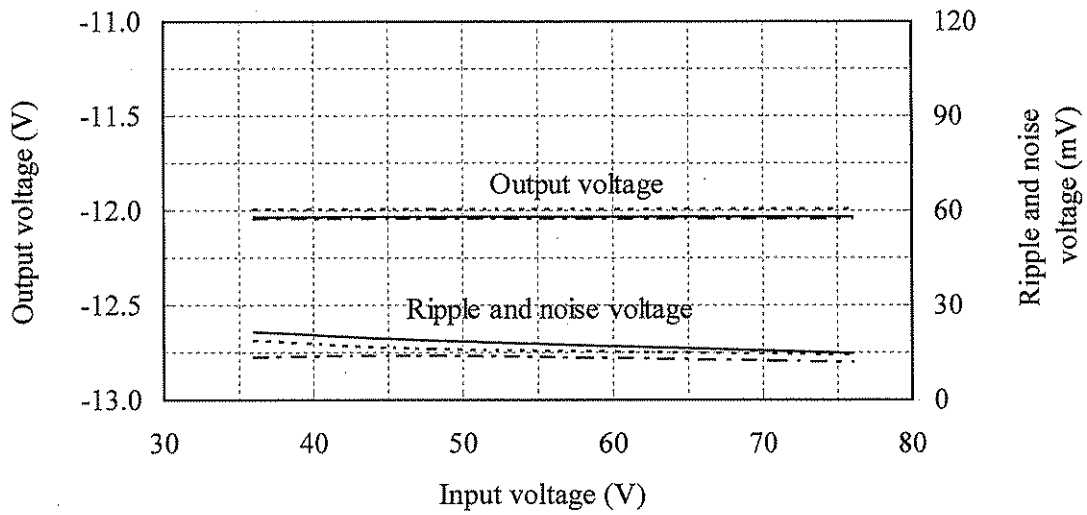
Conditions Iout : 100 %
Ta : -40 ℃
25 ℃
85 ℃

12V (CH1)



Ta : -40 ℃
25 ℃
85 ℃

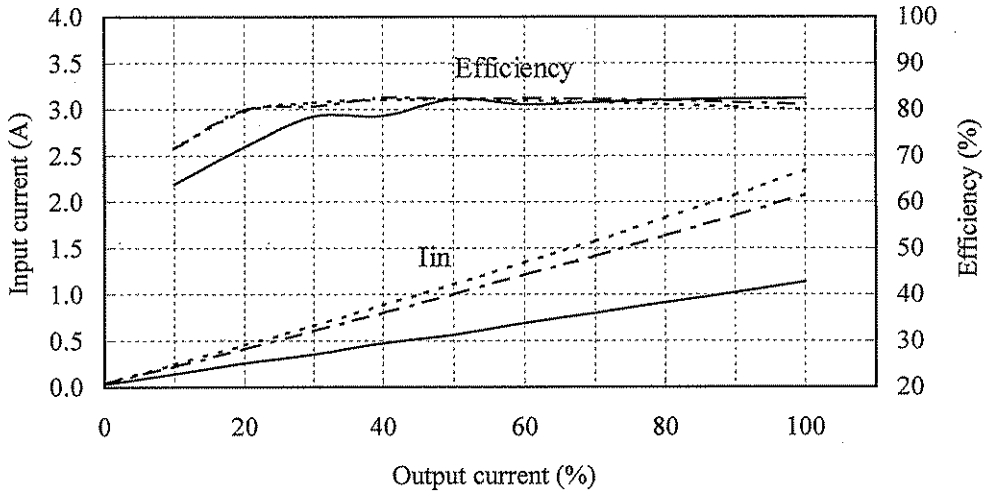
－12V (CH2)



2.1 (3) 効率・入力電流対出力電流
Efficiency and input current v.s. output current

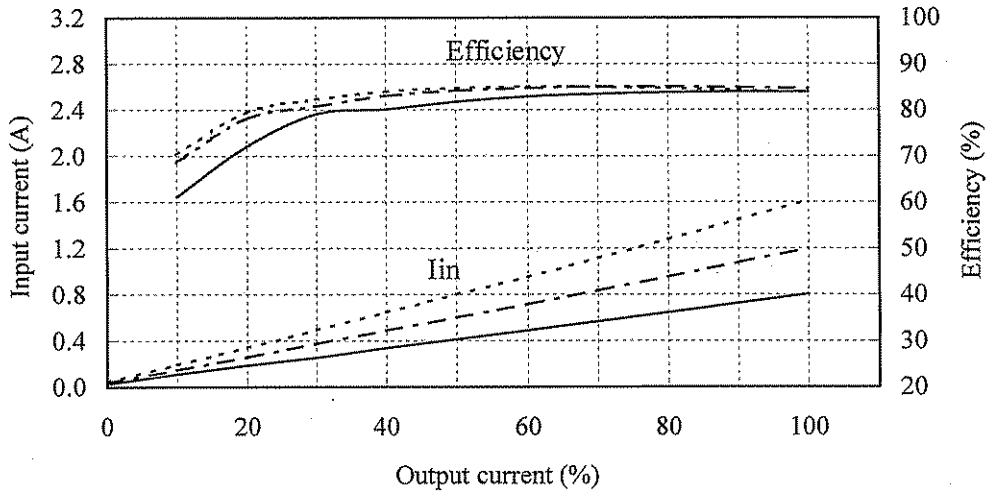
Conditions Vin : 4.5 VDC -------
: 5 VDC -·-·-·-
: 9 VDC ———
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 9 VDC -------
: 12 VDC -·-·-·-
: 18 VDC ———
Ta : 25 ℃

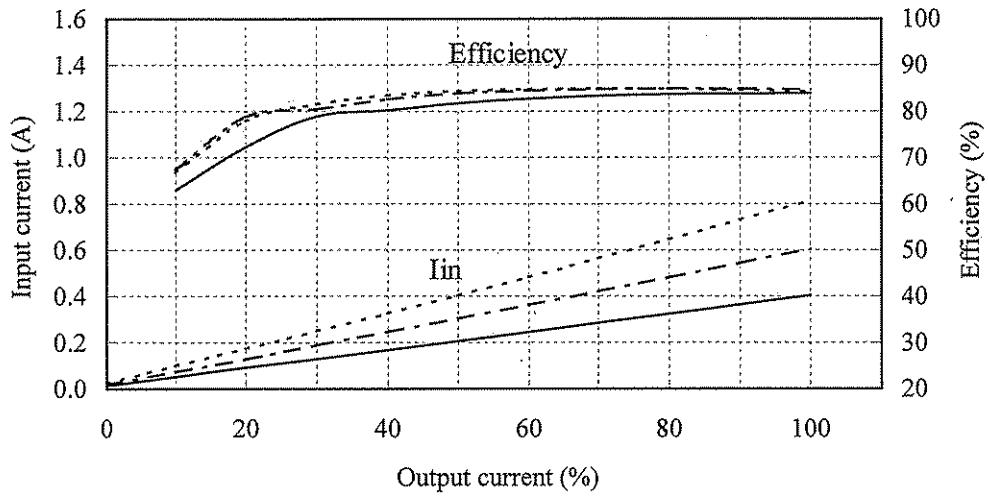
PSD10-12-1212



2.1 (3) 効率・入力電流対出力電流
Efficiency and input current v.s. output current

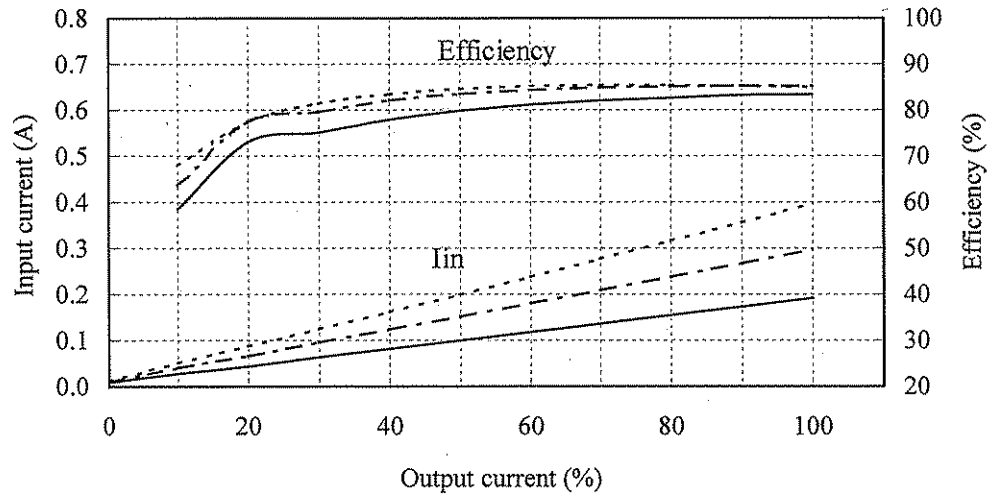
Conditions Vin : 18 VDC
: 24 VDC
: 36 VDC
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 36 VDC
: 48 VDC
: 76 VDC
Ta : 25 ℃

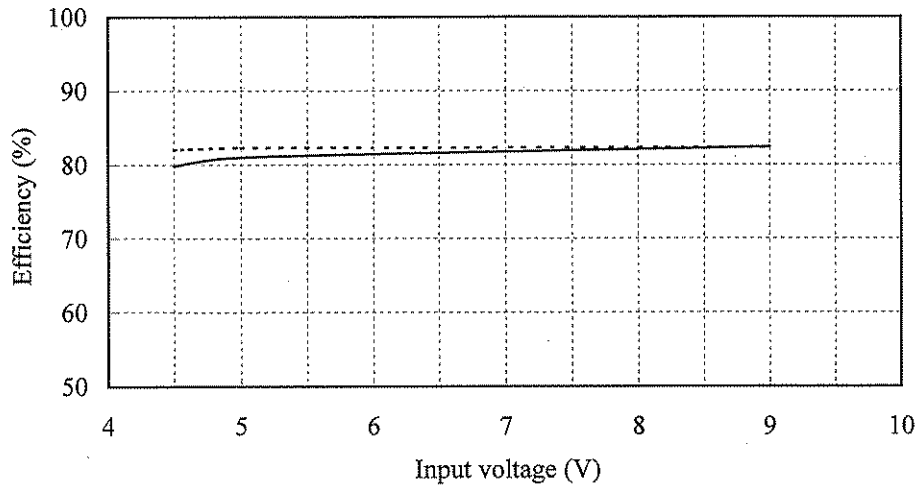
PSD10-48-1212



2.1 (4) 効率対入力電圧
Efficiency v.s. input voltage

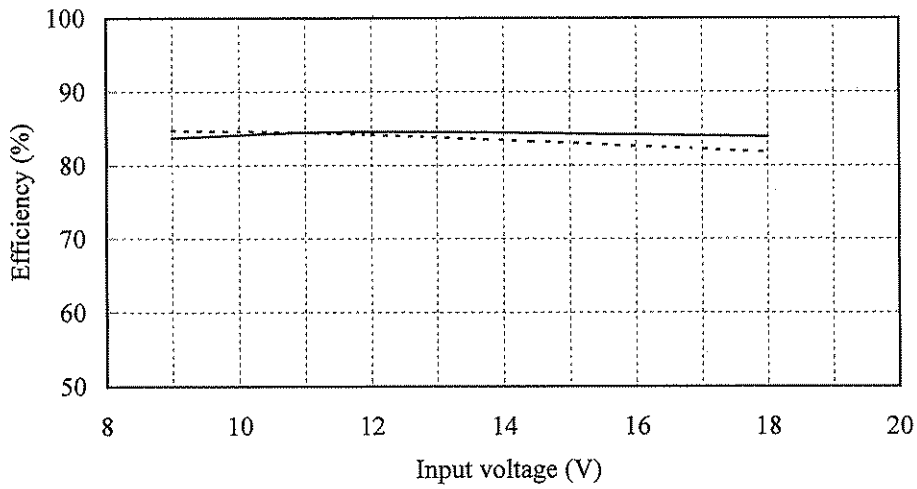
Conditions Ta : 25 ℃
Iout : 50 % -------
100 % ———

PSD10-5-1212



Conditions Ta : 25 ℃
Iout : 50 % -------
100 % ———

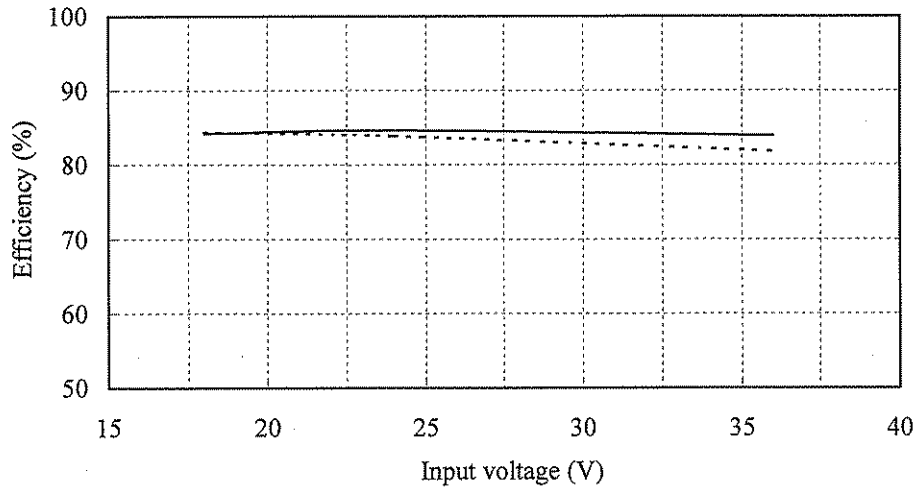
PSD10-12-1212



2.1 (4) 効率対入力電圧
Efficiency v.s. input voltage

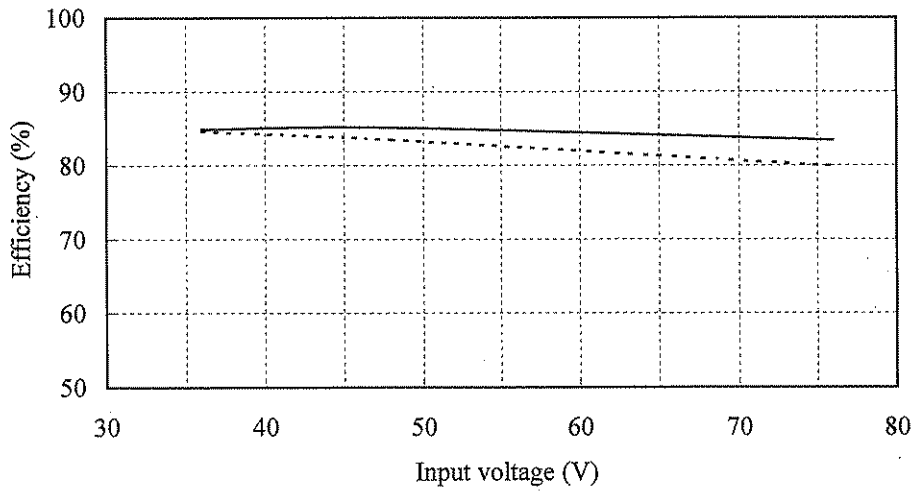
Conditions Ta : 25 ℃
Iout : 50 % -------
100 % ———

PSD10-24-1212



Conditions Ta : 25 ℃
Iout : 50 % -------
100 % ———

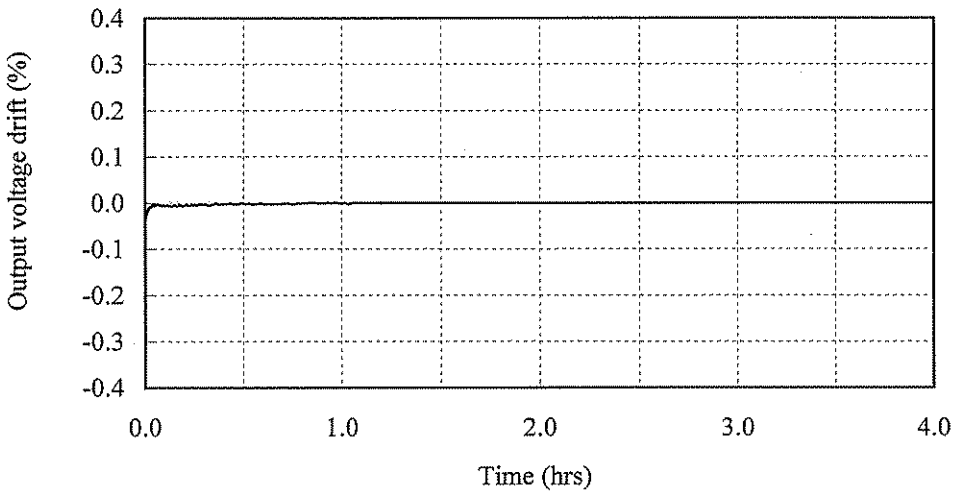
PSD10-48-1212



2.2 通電ドリフト特性
Warm up voltage drift characteristics

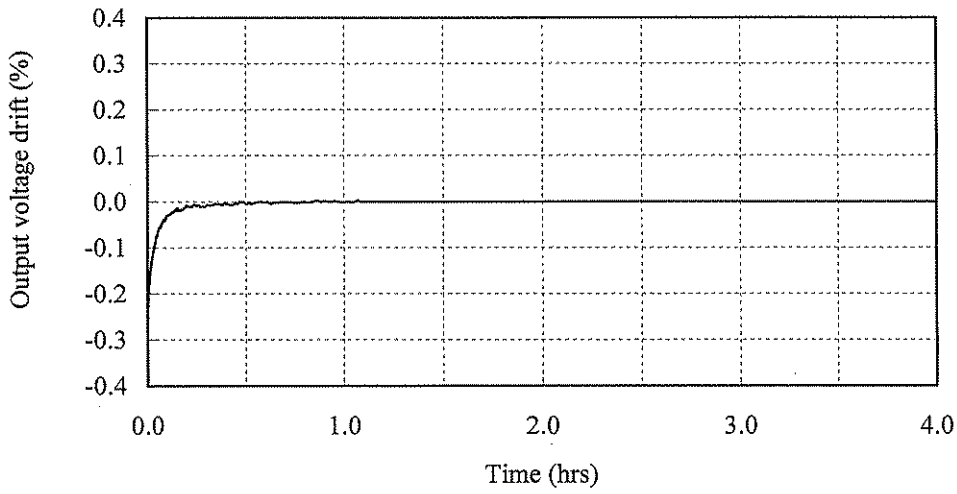
Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

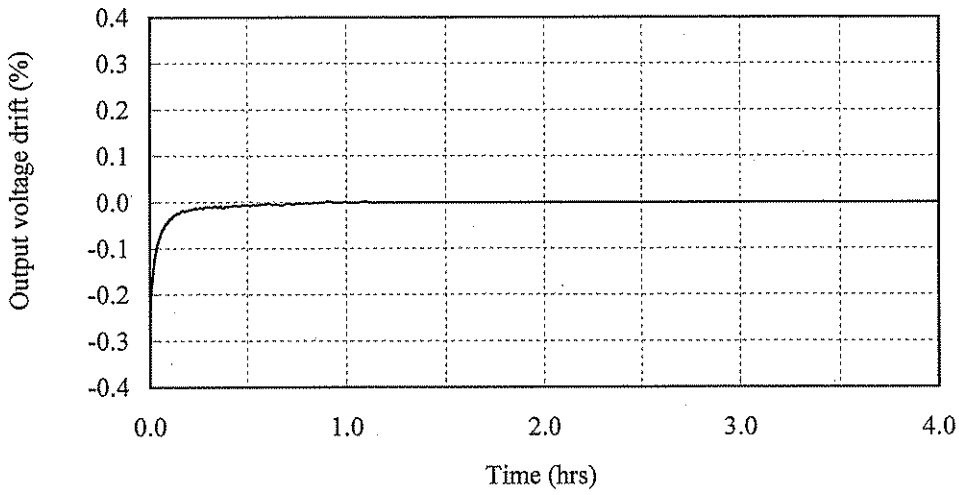
PSD10-12-1212



2.2 通電ドリフト特性
Warm up voltage drift characteristics

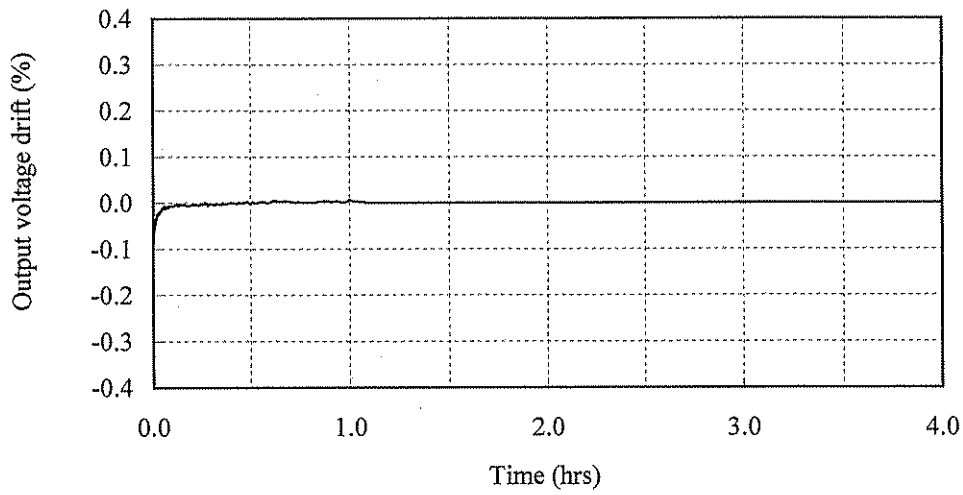
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

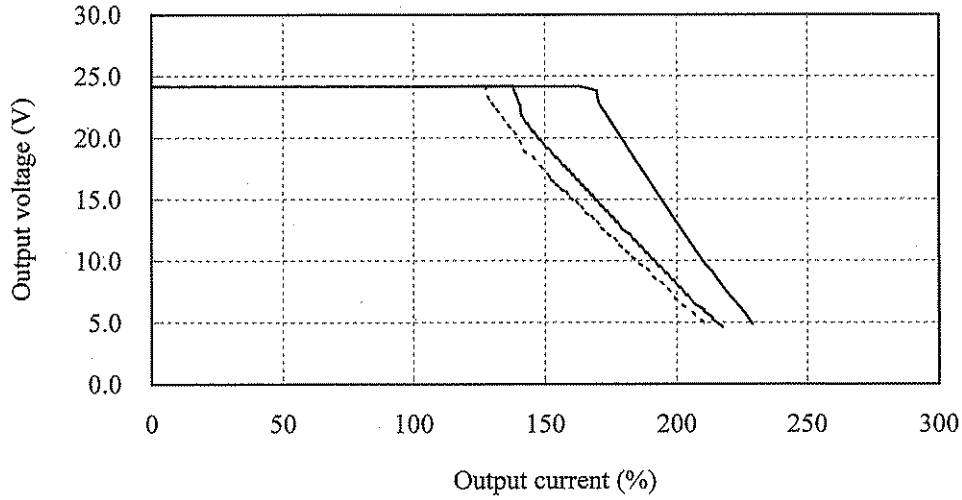
PSD10-48-1212



2. 3 過電流保護特性
Over current protection (OCP) characteristics

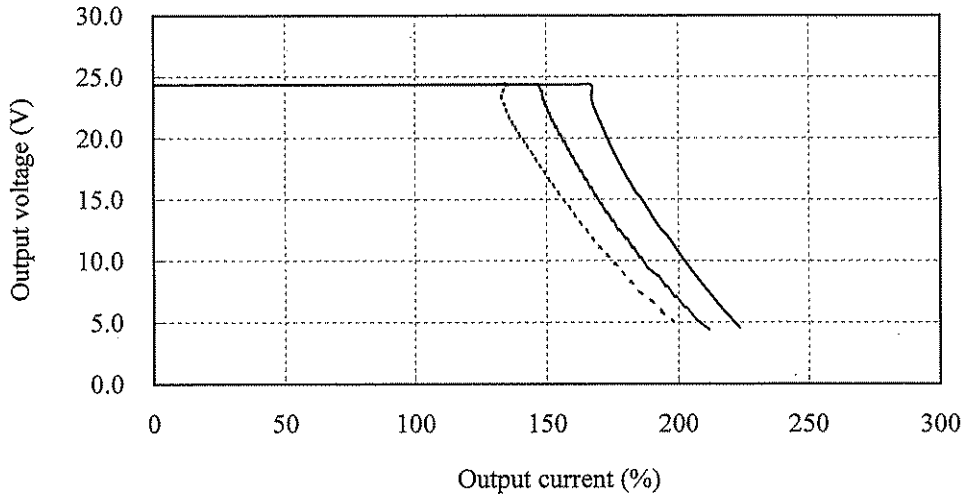
Conditions Vin : 4.5 VDC -------
5 VDC -·-·-·-·-
9 VDC ————
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 9 VDC -------
12 VDC -·-·-·-·-
18 VDC ————
Ta : 25 ℃

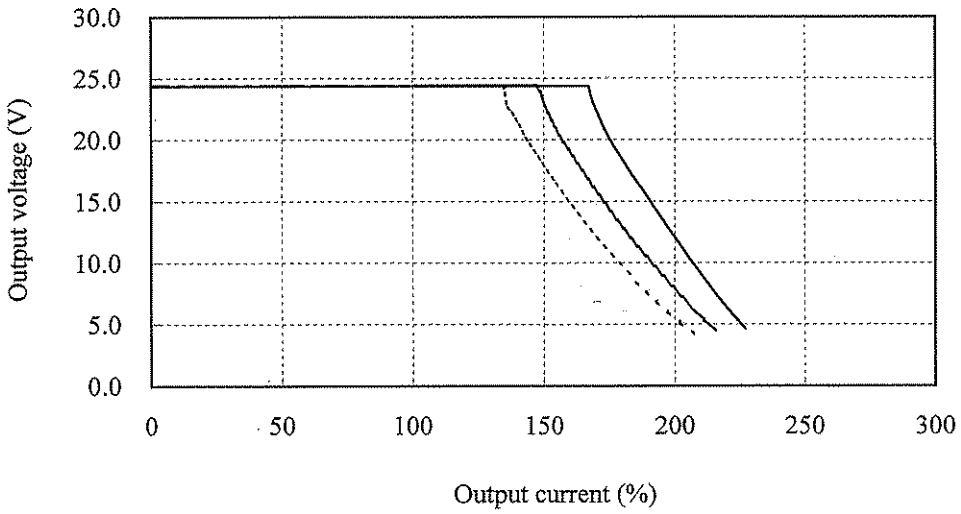
PSD10-12-1212



2. 3 過電流保護特性
Over current protection (OCP) characteristics

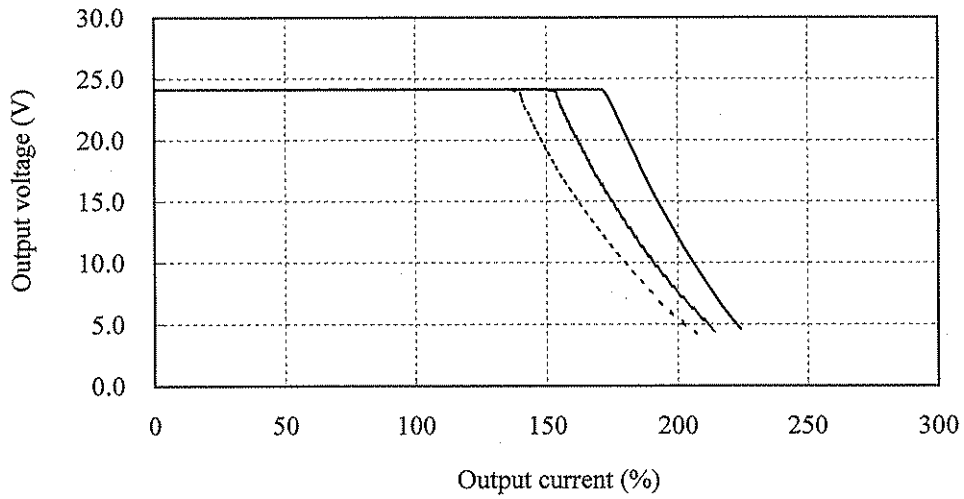
Conditions Vin : 18 VDC -------
24 VDC -·-·-·-·-
36 VDC ————
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 36 VDC -------
48 VDC -·-·-·-·-
76 VDC ————
Ta : 25 ℃

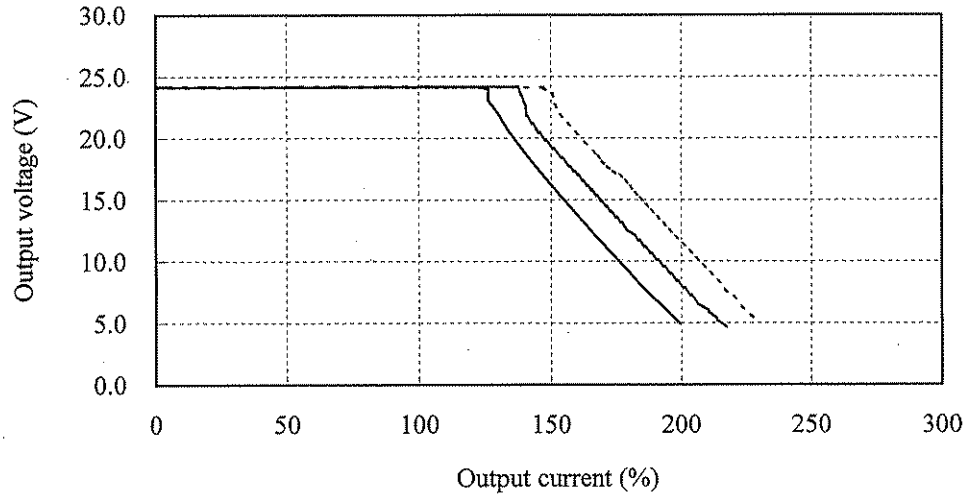
PSD10-48-1212



2. 3 過電流保護特性
Over current protection (OCP) characteristics

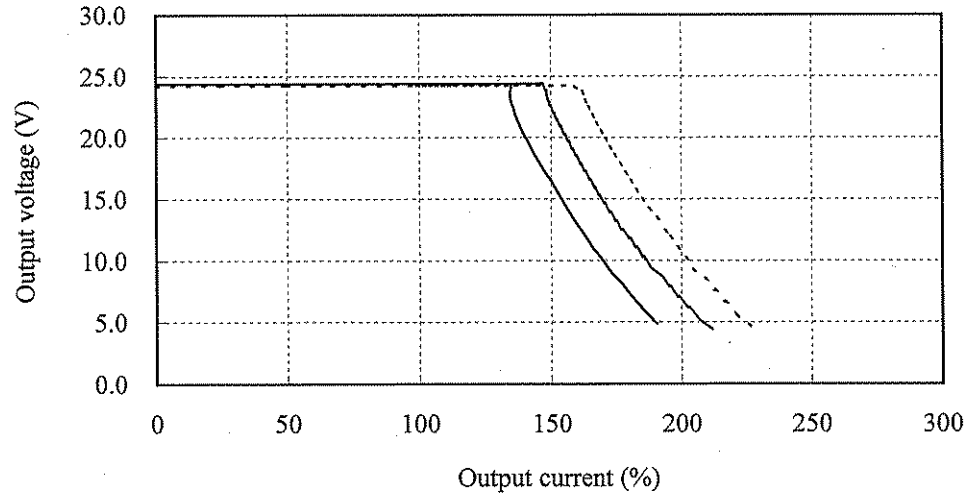
Conditions Vin : 5 VDC
Ta : -40 ℃ - - - - - - -
25 ℃ — · — · —
85 ℃ ———

PSD10-5-1212



Conditions Vin : 12 VDC
Ta : -40 ℃ - - - - - - -
25 ℃ — · — · —
85 ℃ ———

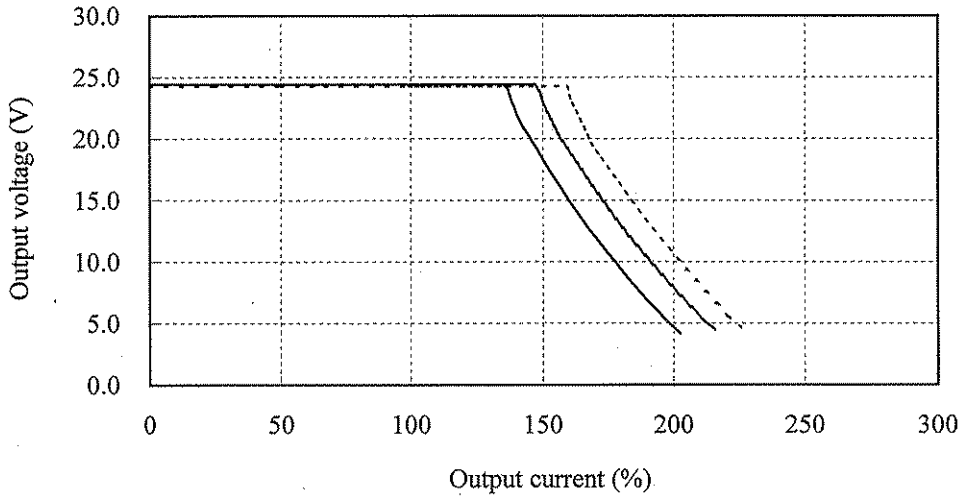
PSD10-12-1212



2. 3 過電流保護特性
Over current protection (OCP) characteristics

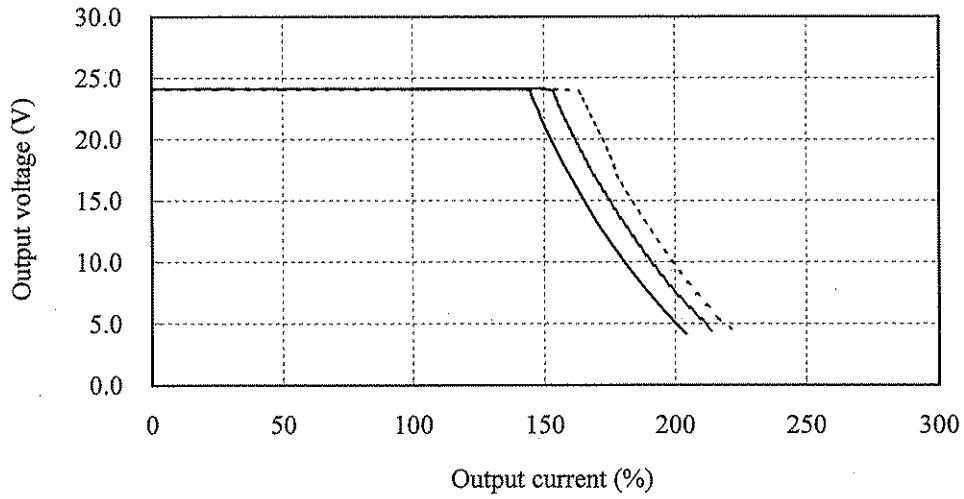
Conditions Vin : 24 VDC
Ta : -40 ℃ - - - - - -
25 ℃ — · — · —
85 ℃ ————

PSD10-24-1212



Conditions Vin : 48 VDC
Ta : -40 ℃ - - - - - -
25 ℃ — · — · —
85 ℃ ————

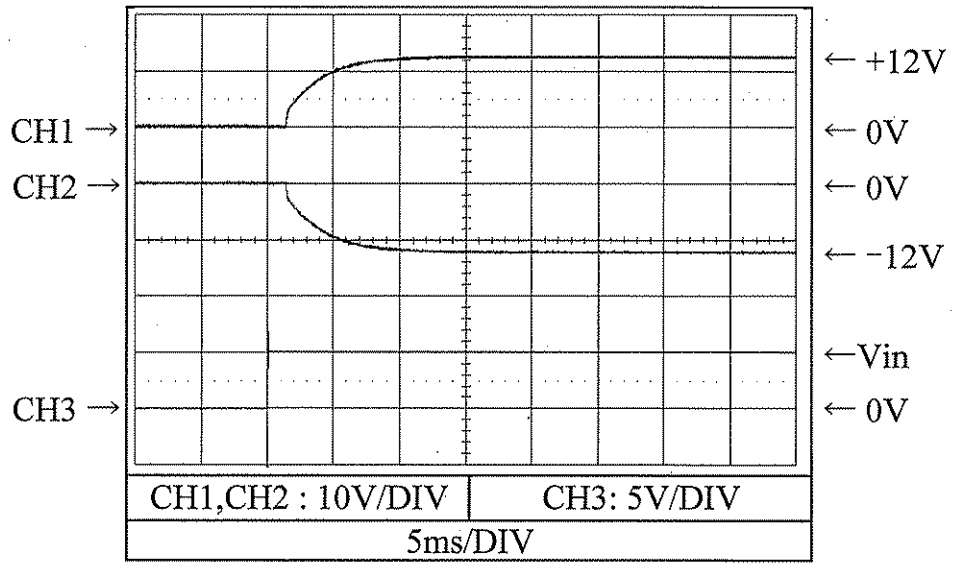
PSD10-48-1212



2.4 出力立ち上がり特性
Output rise characteristics

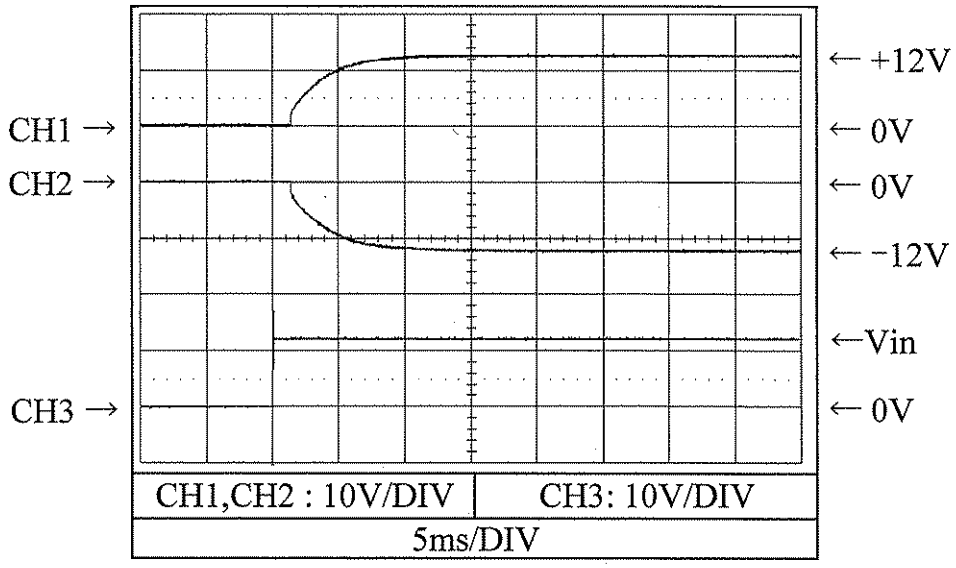
Conditions Vin : 5 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 0 %
Ta : 25 ℃

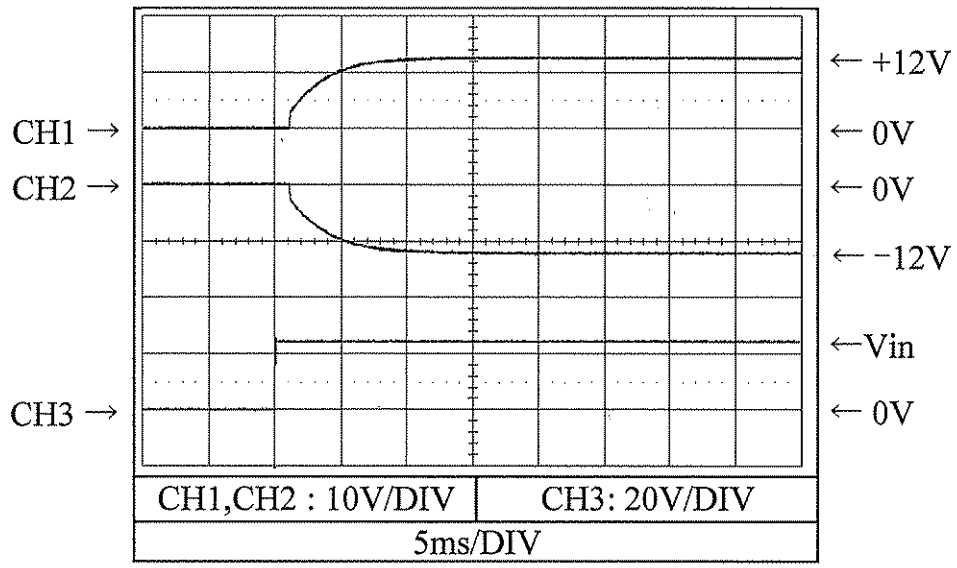
PSD10-12-1212



2.4 出力立ち上がり特性
Output rise characteristics

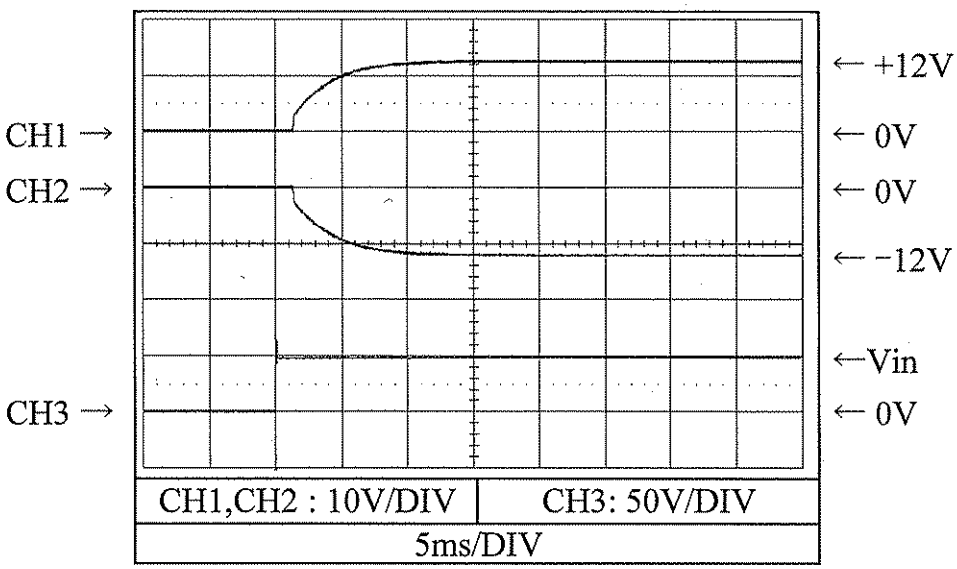
Conditions Vin : 24 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 0 %
Ta : 25 ℃

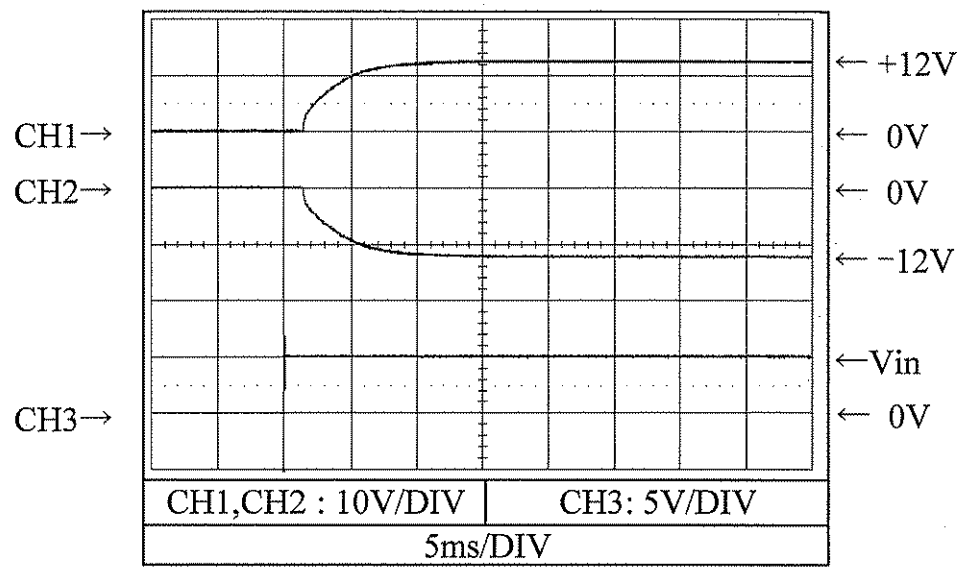
PSD10-48-1212



2.4 出力立ち上がり特性
Output rise characteristics

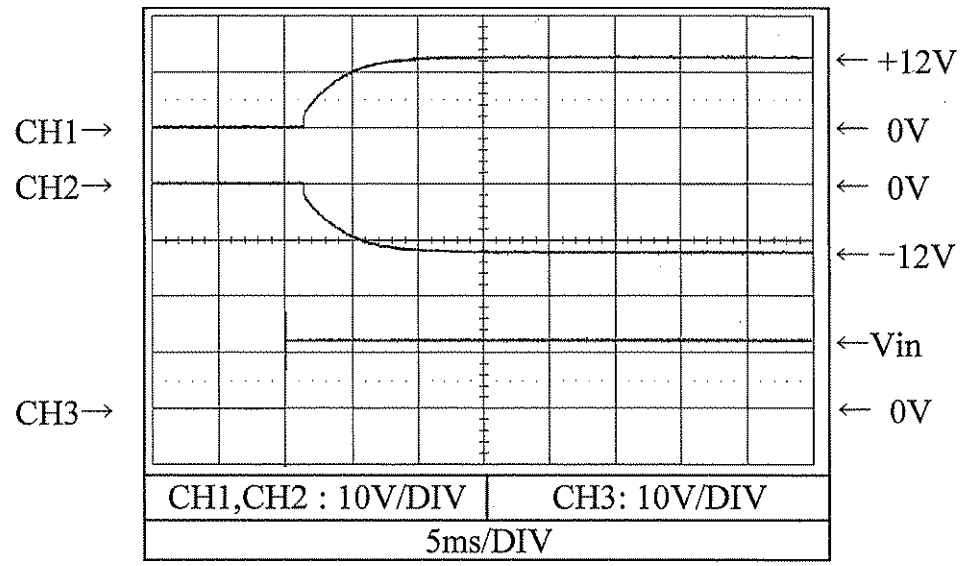
Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

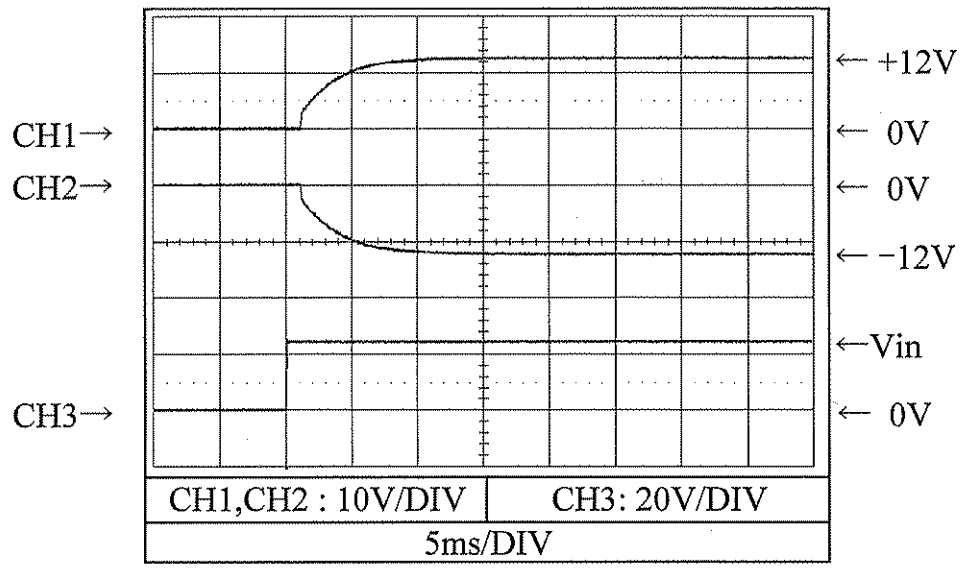
PSD10-12-1212



2.4 出力立ち上がり特性
Output rise characteristics

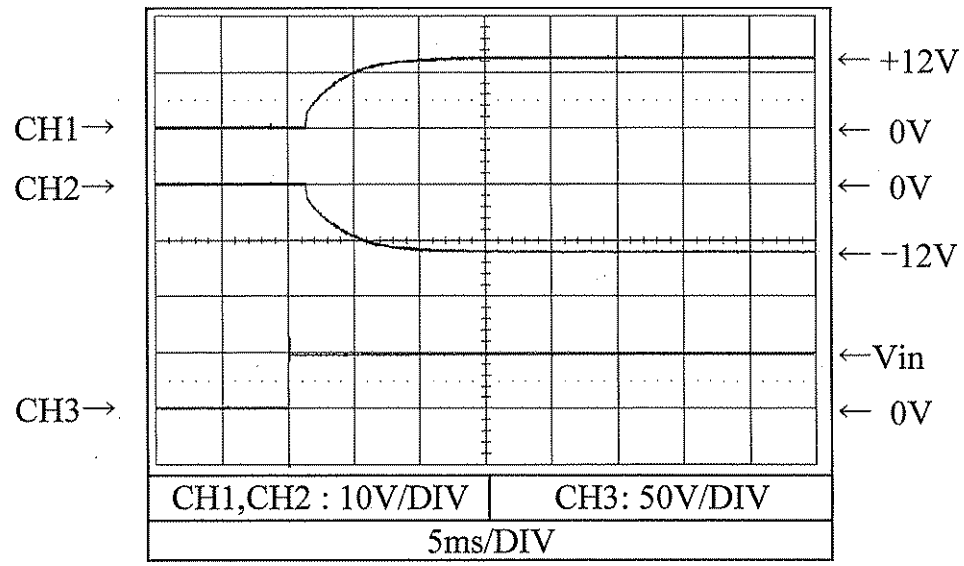
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

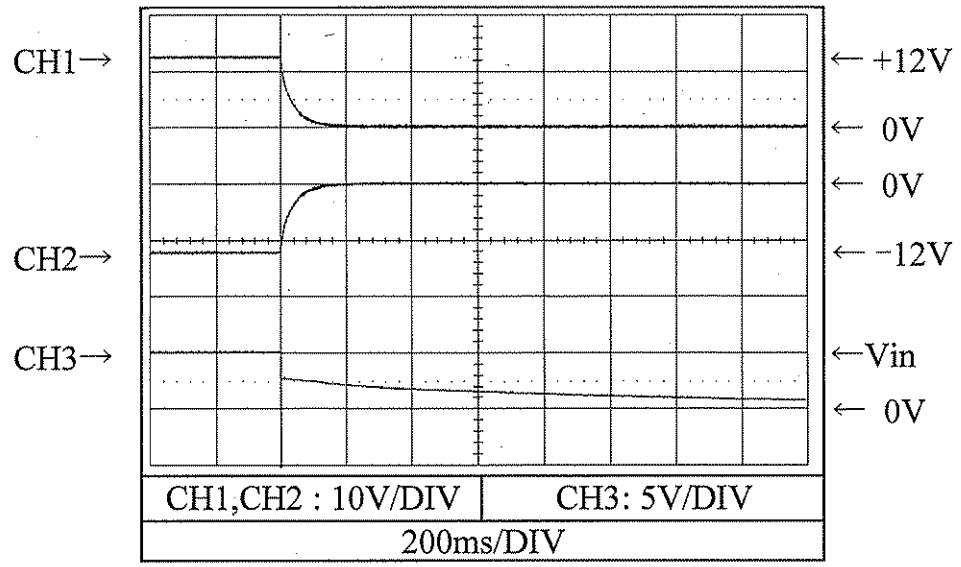
PSD10-48-1212



2.5 出力立ち下がり特性
Output fall characteristics

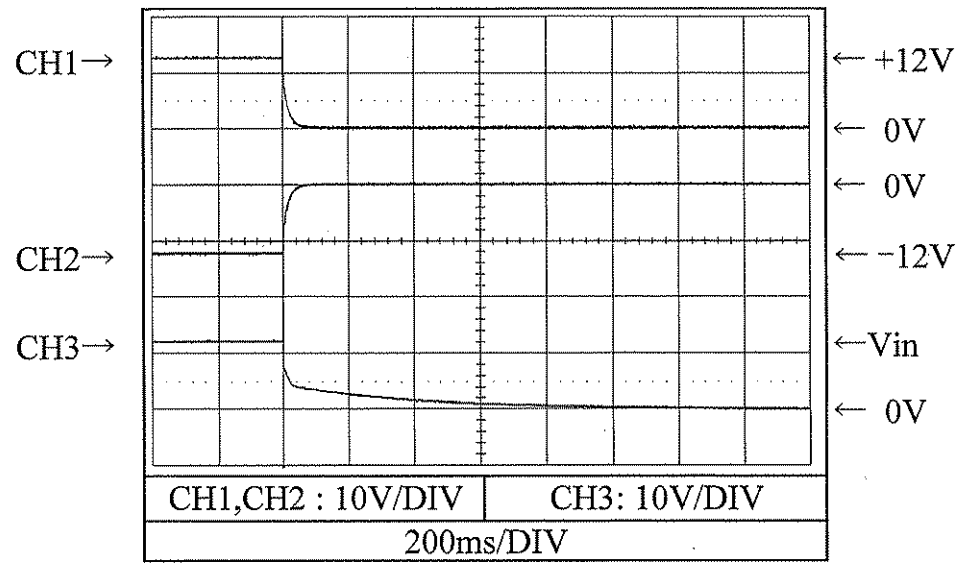
Conditions Vin : 5 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 0 %
Ta : 25 ℃

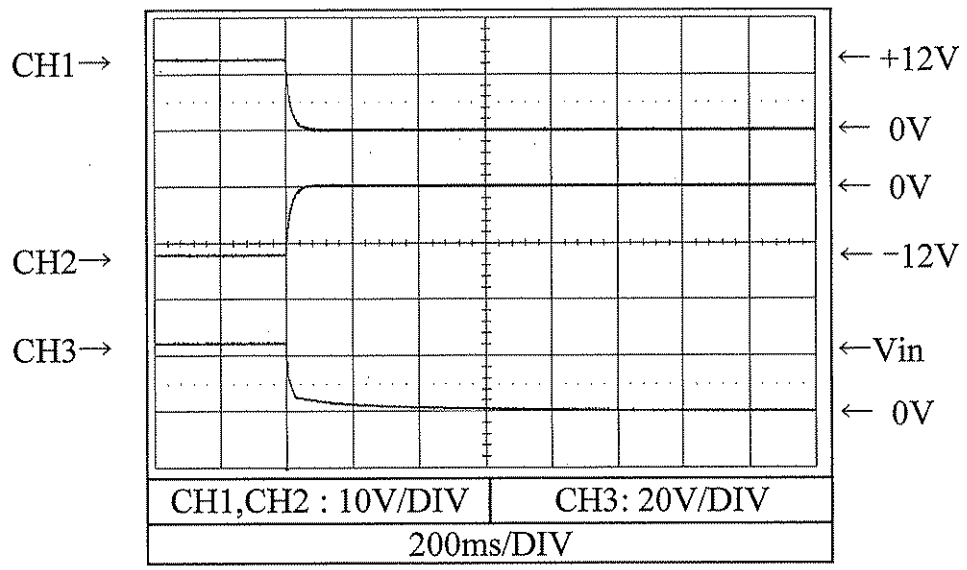
PSD10-12-1212



2.5 出力立ち下がり特性
Output fall characteristics

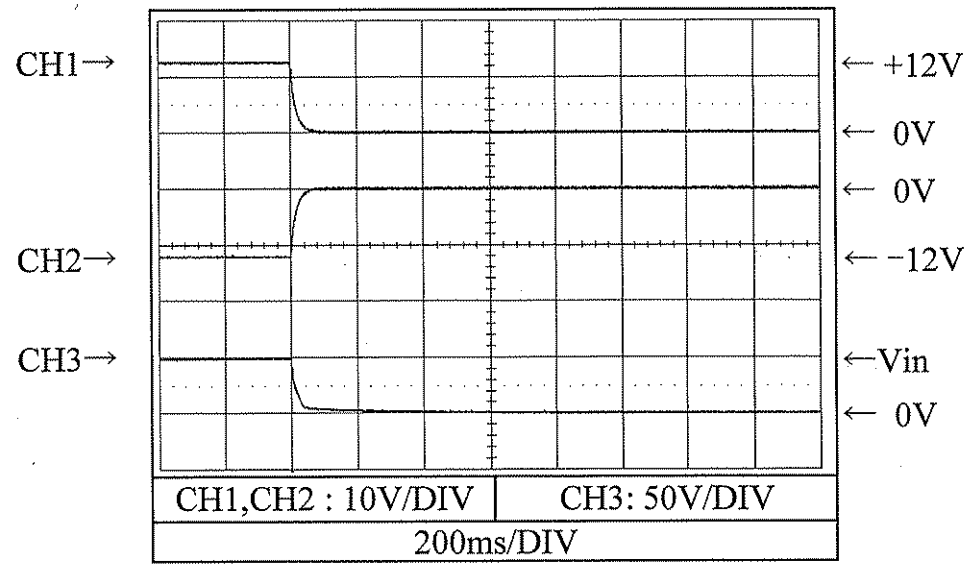
Conditions Vin : 24 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 0 %
Ta : 25 ℃

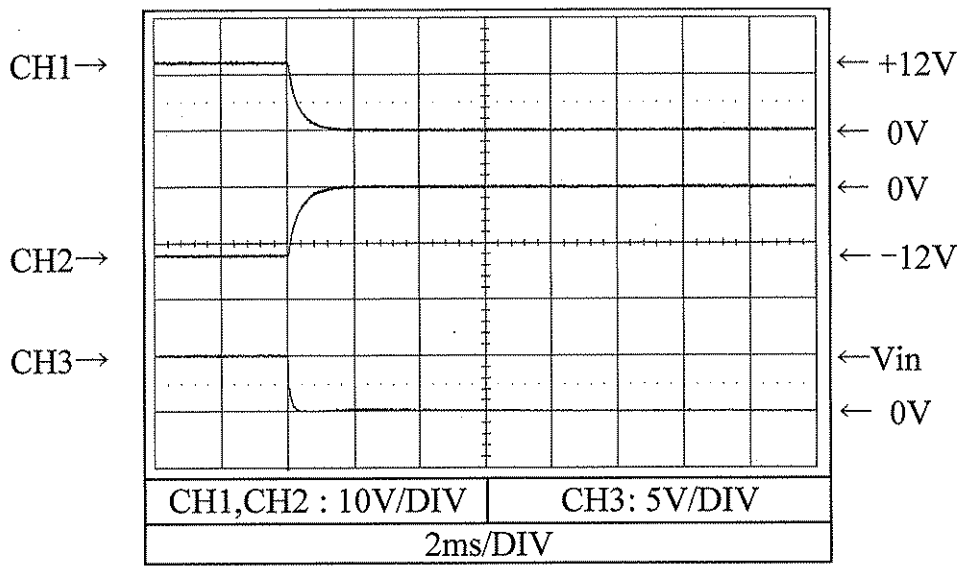
PSD10-48-1212



2.5 出力立ち下がり特性
Output fall characteristics

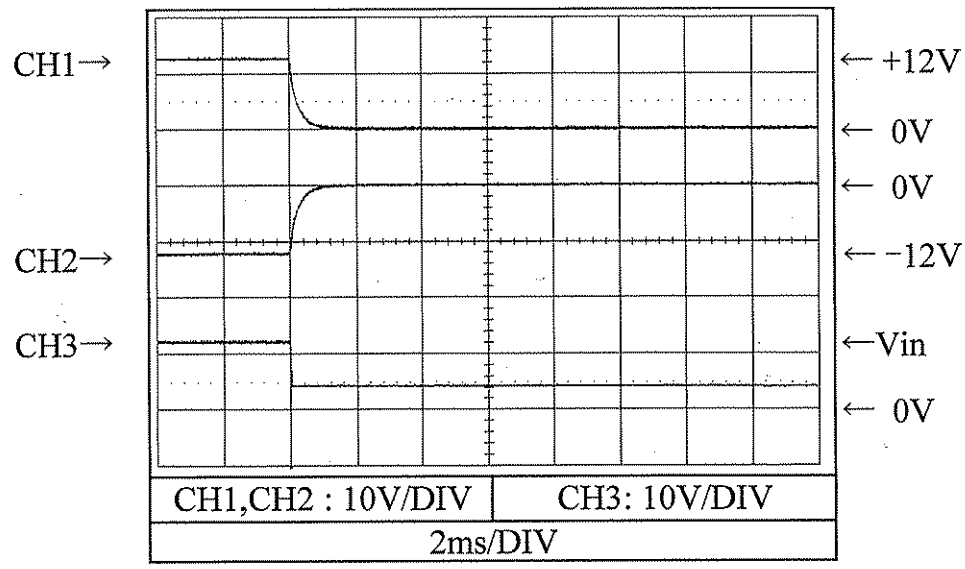
Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

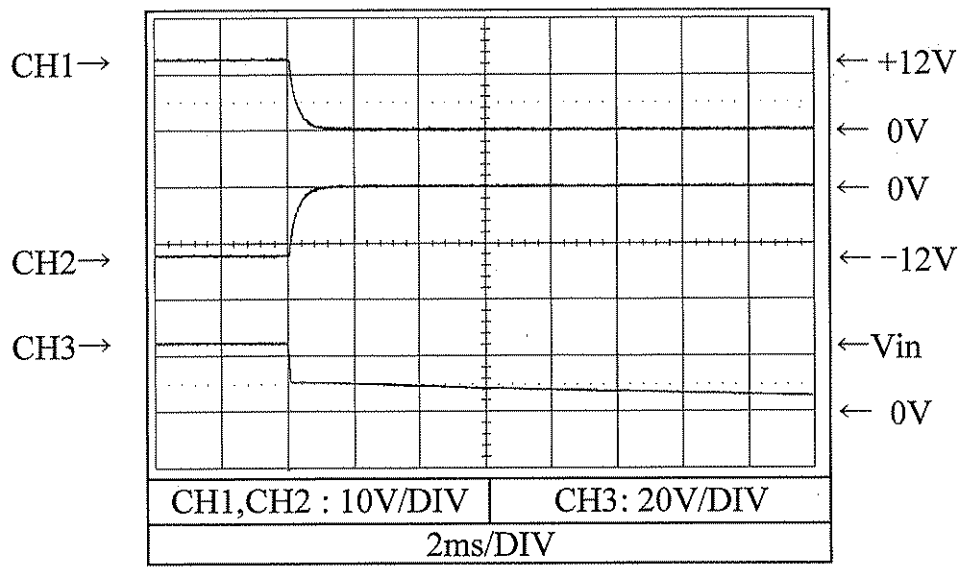
PSD10-12-1212



2.5 出力立ち下がり特性
Output fall characteristics

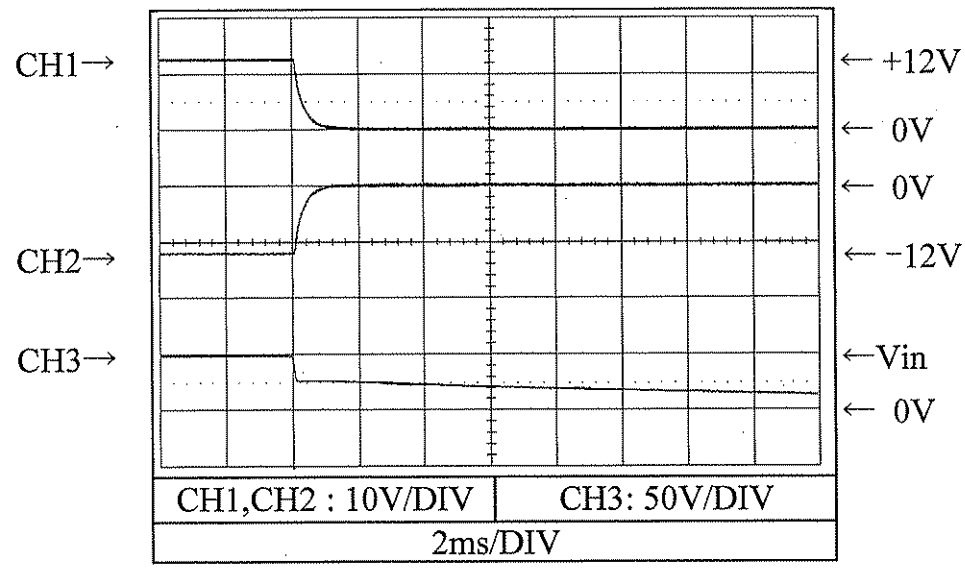
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

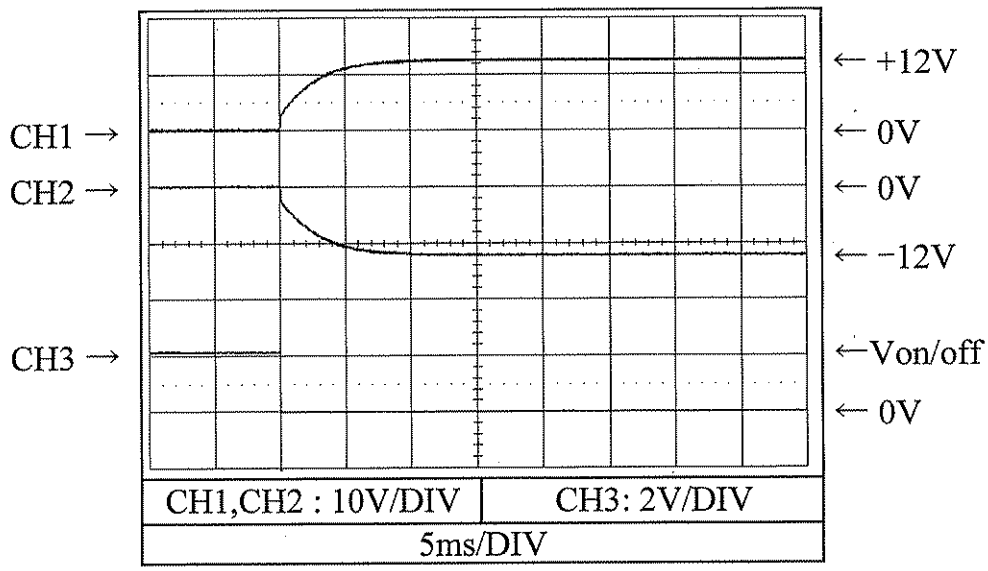
PSD10-48-1212



2.6 出力立ち上がり特性 （ＯＮ／ＯＦＦコントロール時）
Output rise characteristics with ON/OFF control

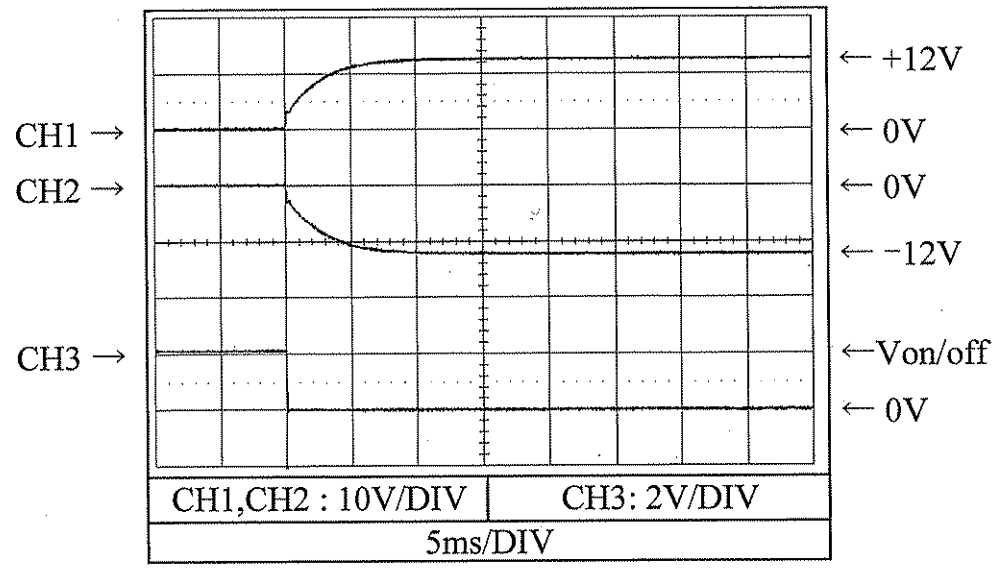
Conditions Vin : 5 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 0 %
Ta : 25 ℃

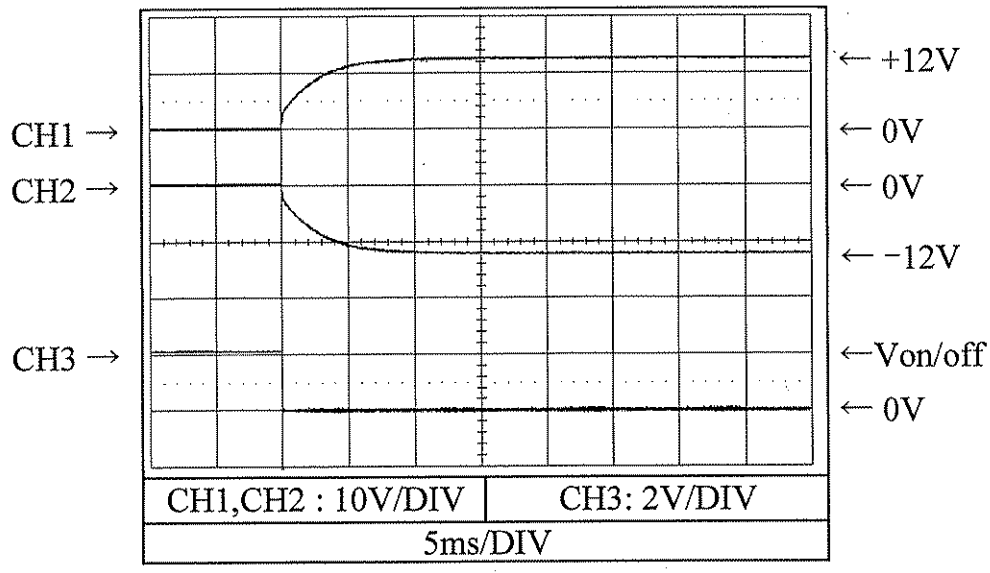
PSD10-12-1212



2.6 出力立ち上がり特性 （ＯＮ／ＯＦＦコントロール時）
Output rise characteristics with ON/OFF control

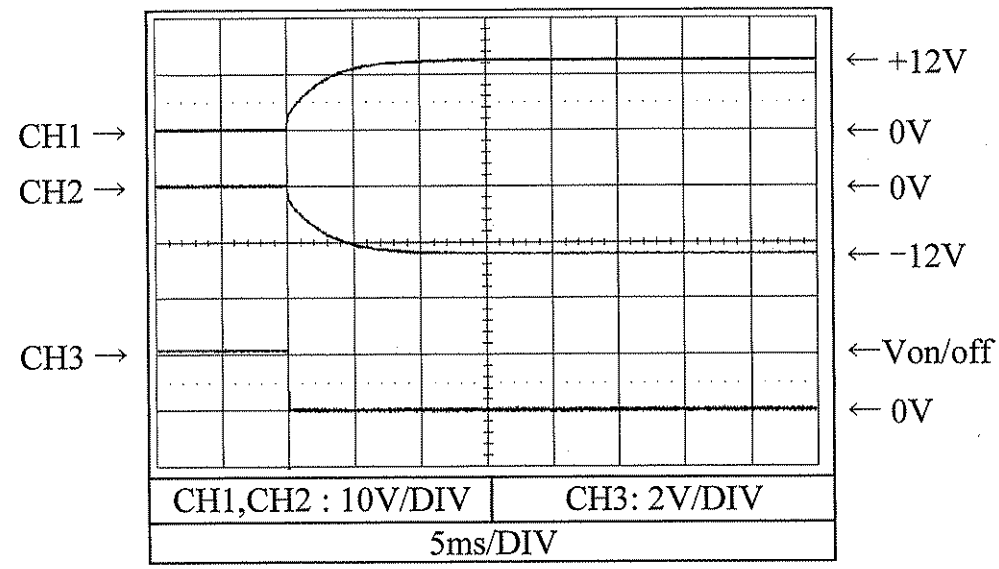
Conditions Vin : 24 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 0 %
Ta : 25 ℃

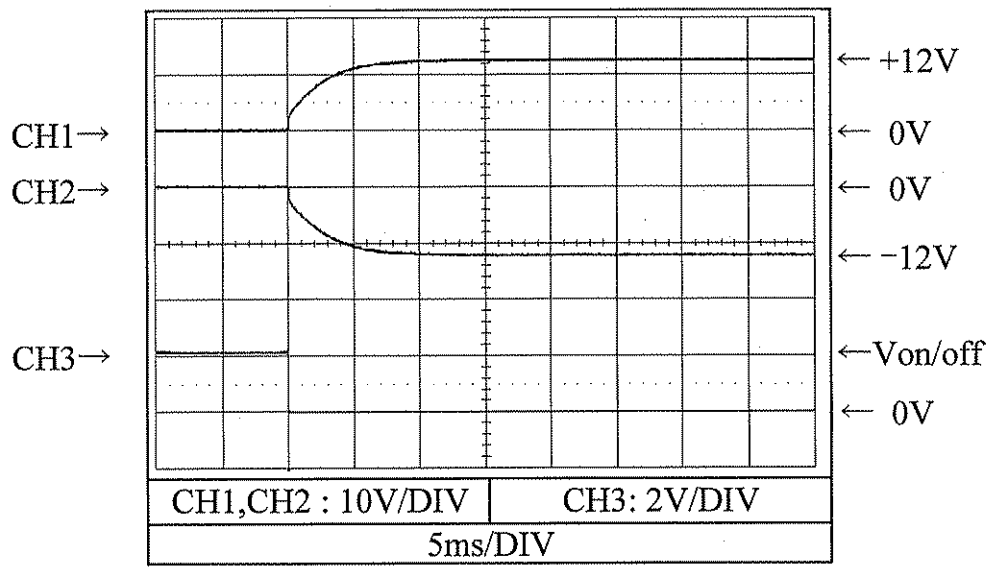
PSD10-48-1212



2.6 出力立ち上がり特性　（ＯＮ／ＯＦＦコントロール時）
Output rise characteristics with ON/OFF control

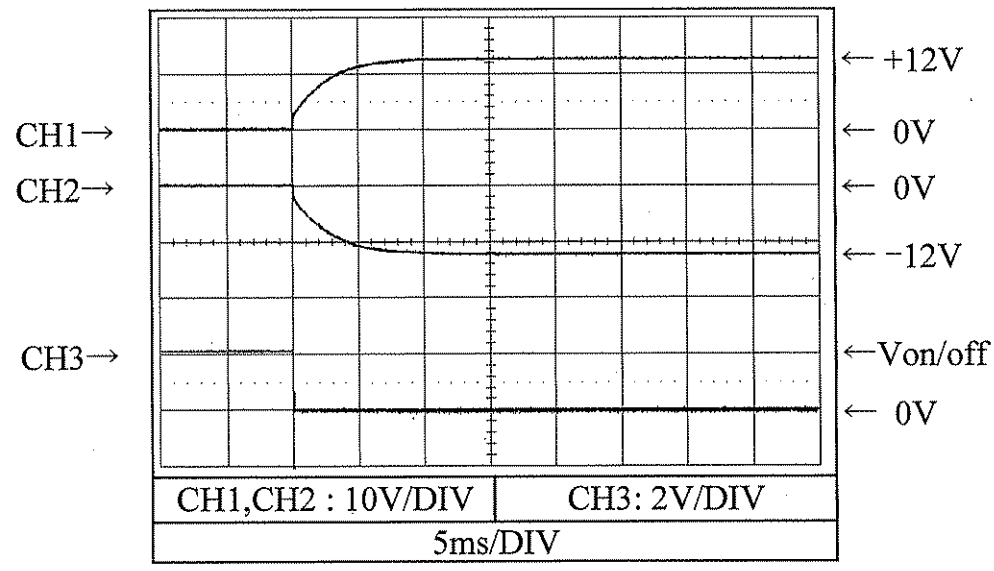
Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

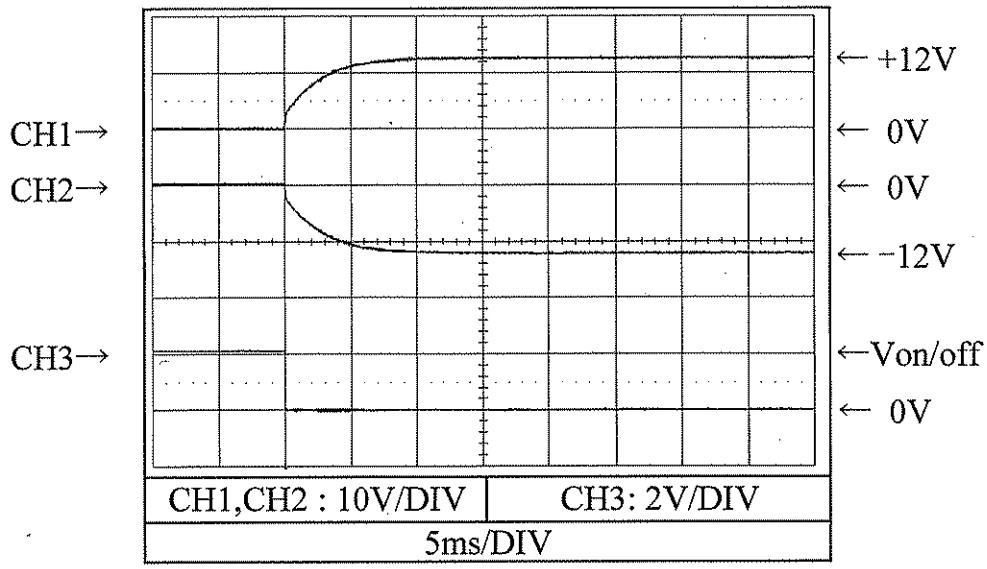
PSD10-12-1212



2.6 出力立ち上がり特性 （ＯＮ／ＯＦＦコントロール時）
Output rise characteristics with ON/OFF control

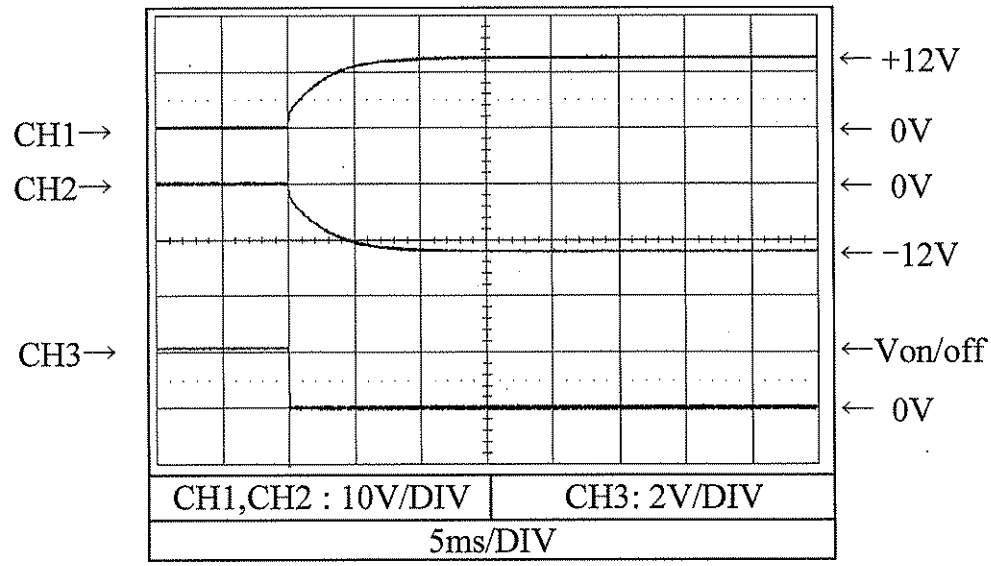
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

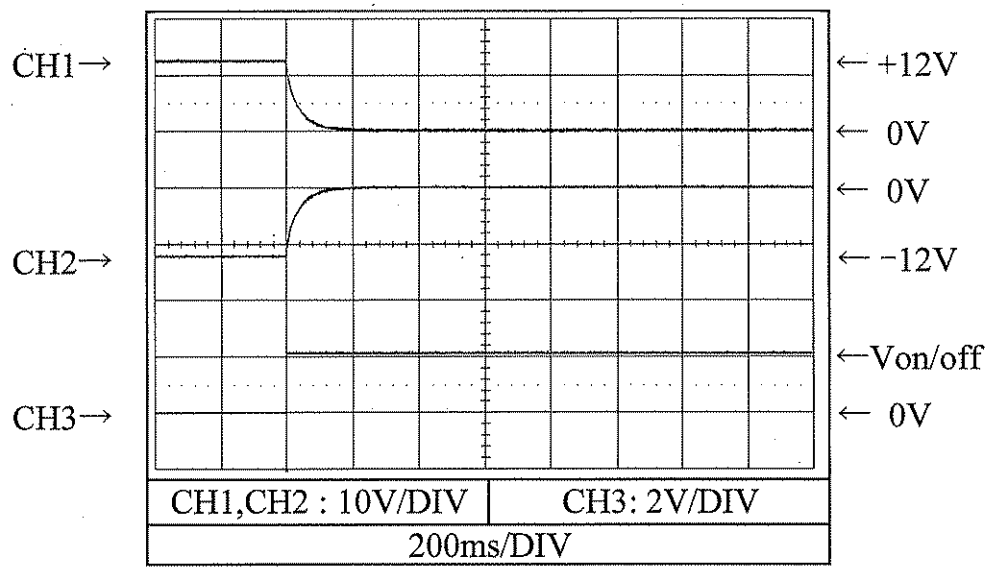
PSD10-48-1212



2.7 出力立ち下がり特性 （ＯＮ／ＯＦＦコントロール時）
Output fall characteristics with ON/OFF control

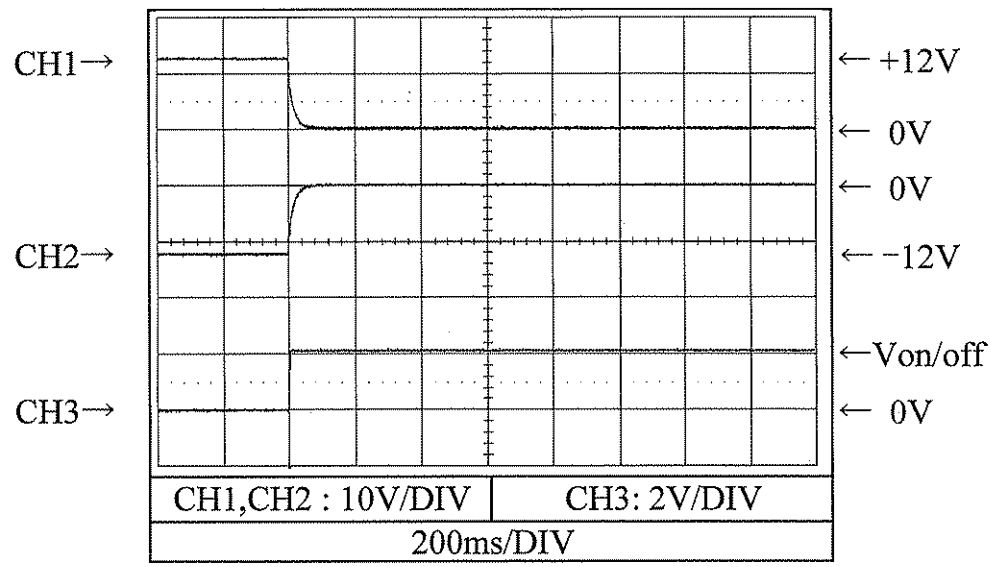
Conditions Vin : 5 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 0 %
Ta : 25 ℃

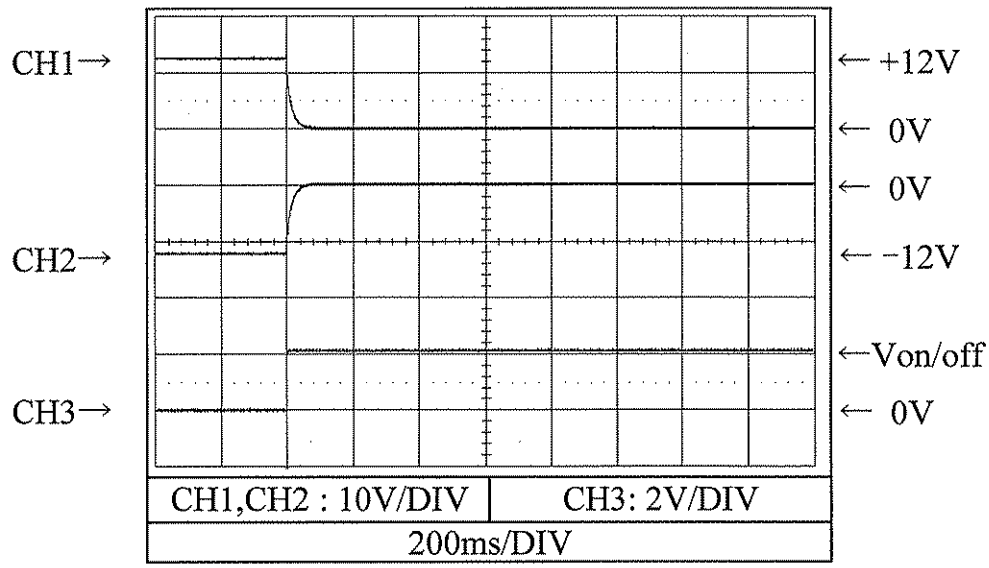
PSD10-12-1212



2.7 出力立ち下がり特性 （ＯＮ／ＯＦＦコントロール時）
Output fall characteristics with ON/OFF control

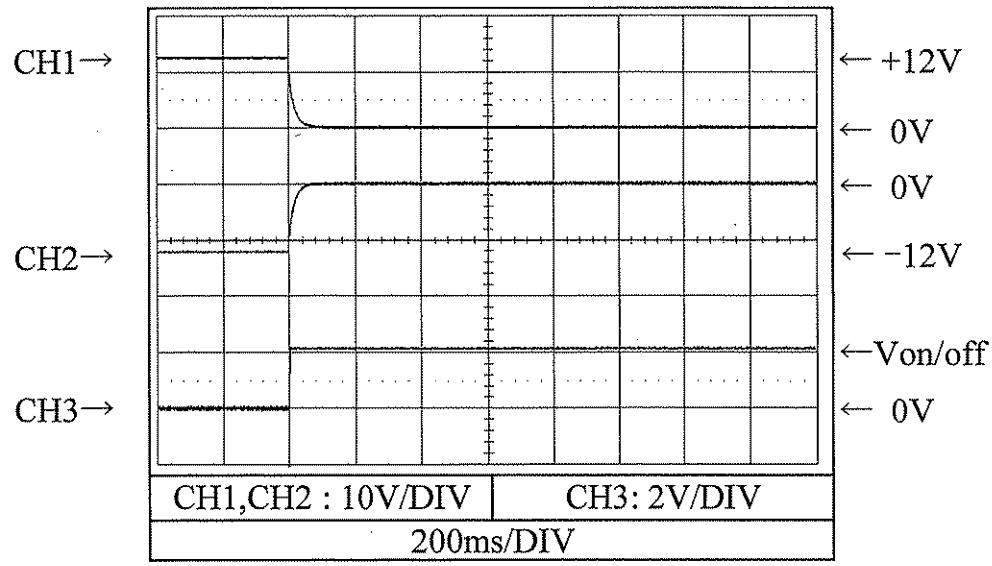
Conditions Vin : 24 VDC
Iout : 0 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 0 %
Ta : 25 ℃

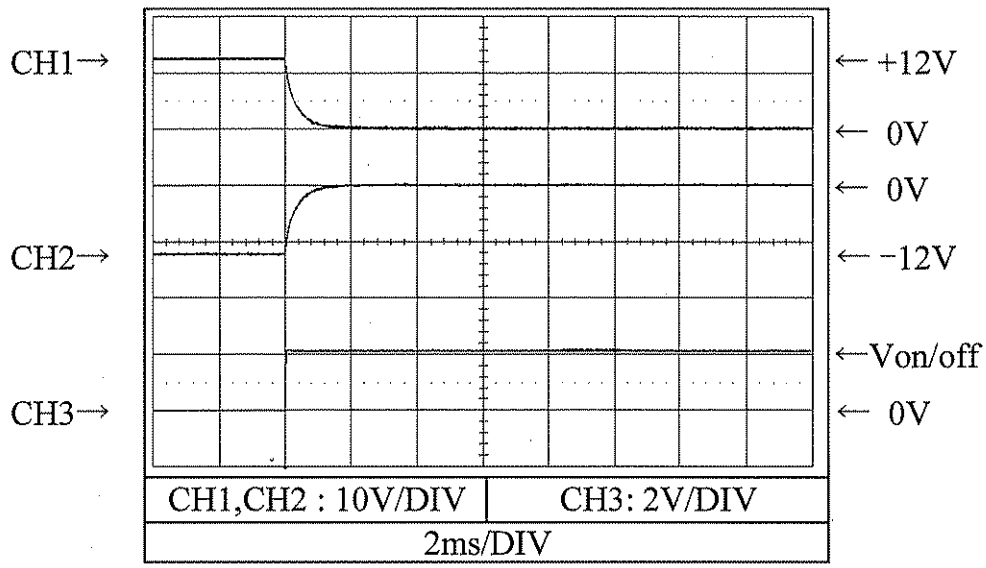
PSD10-48-1212



2.7 出力立ち下がり特性 （ＯＮ／ＯＦＦコントロール時）
Output fall characteristics with ON/OFF control

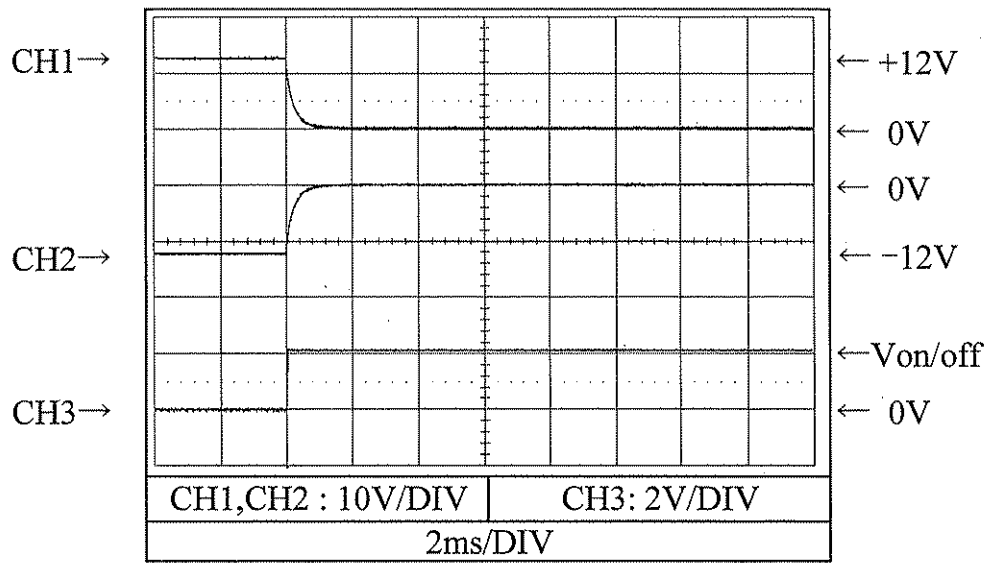
Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

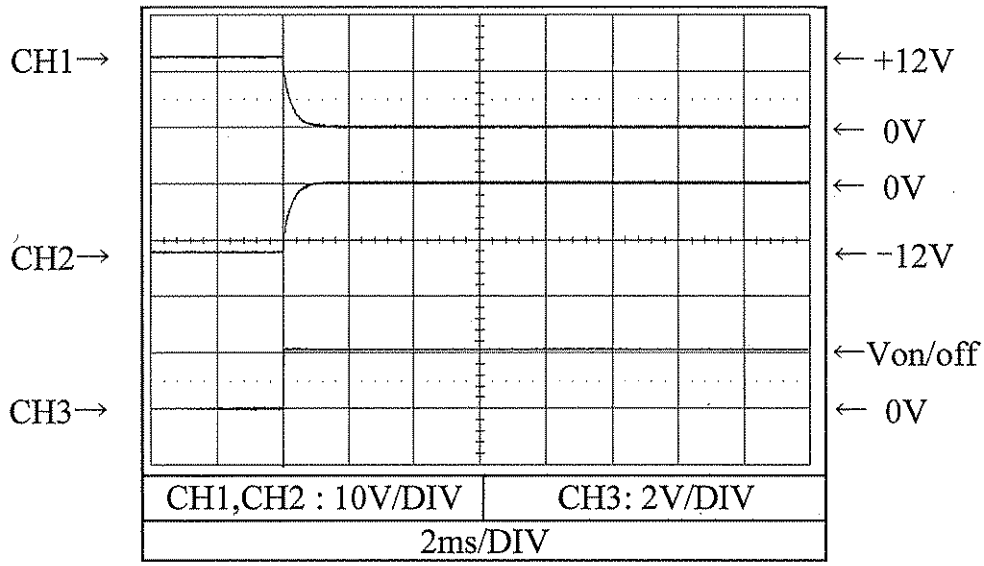
PSD10-12-1212



2.7 出力立ち下がり特性　（ＯＮ／ＯＦＦコントロール時）
Output fall characteristics with ON/OFF control

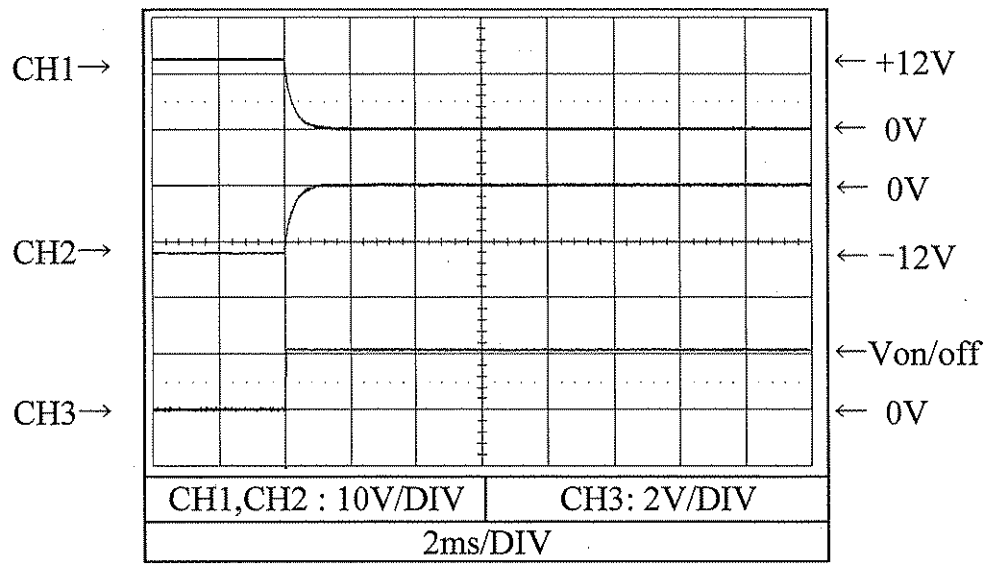
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212



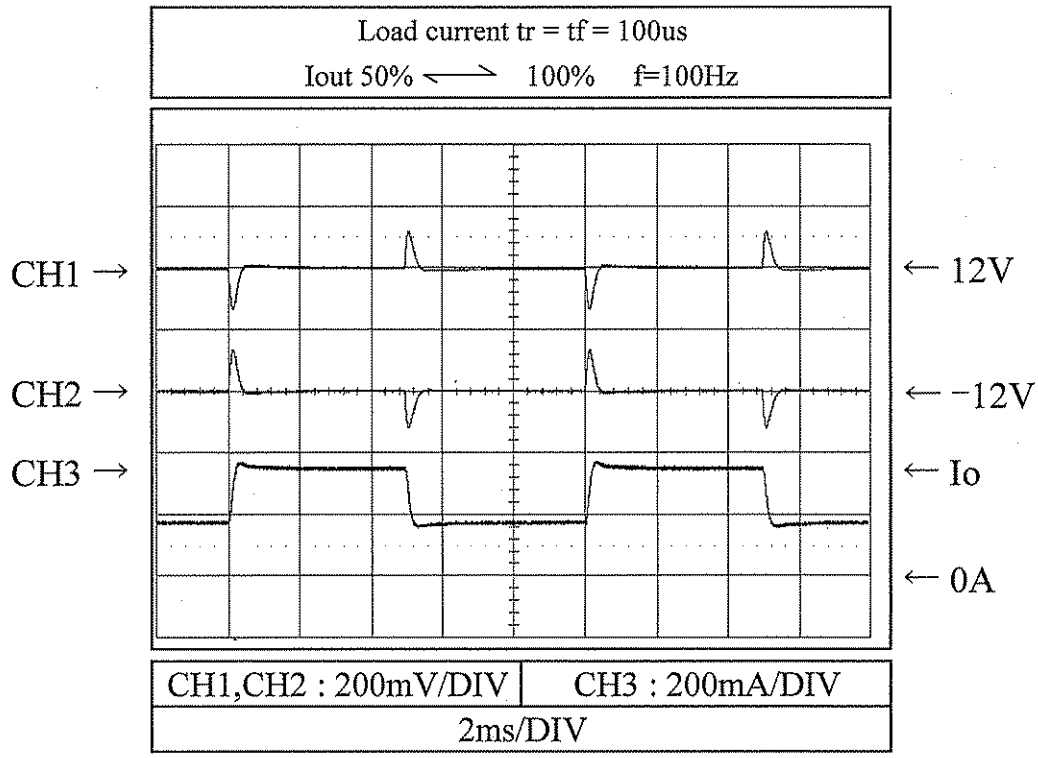
Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-48-1212



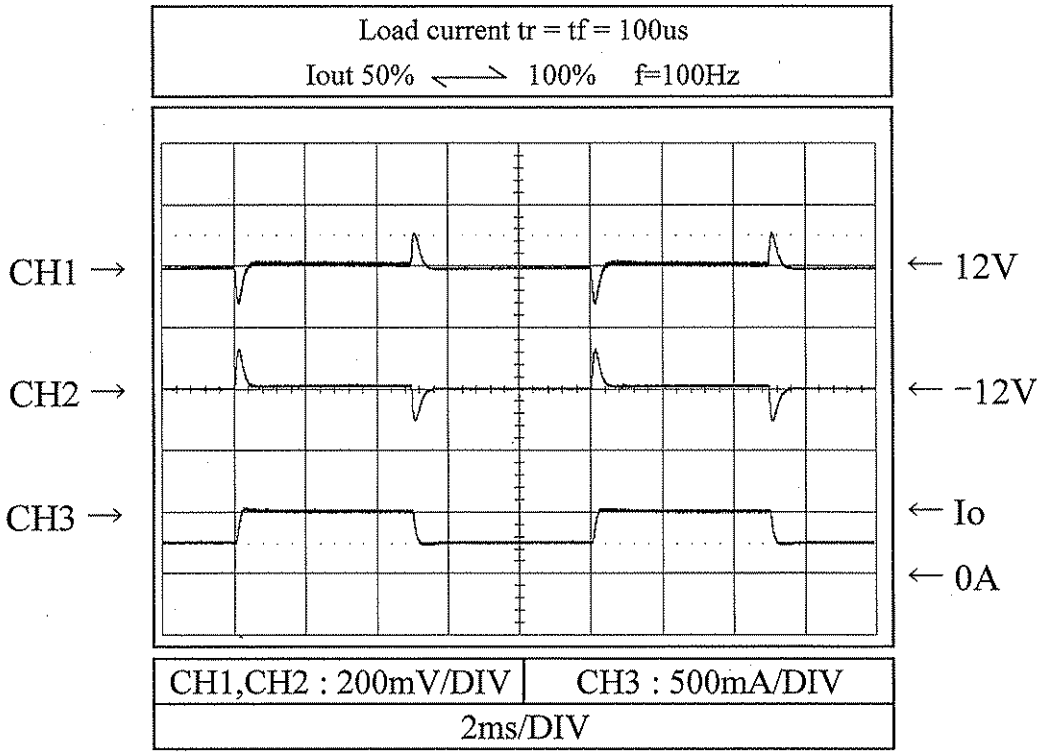
Conditions Vin : 5 VDC
Ta : 25 ℃

PSD10-5-1212



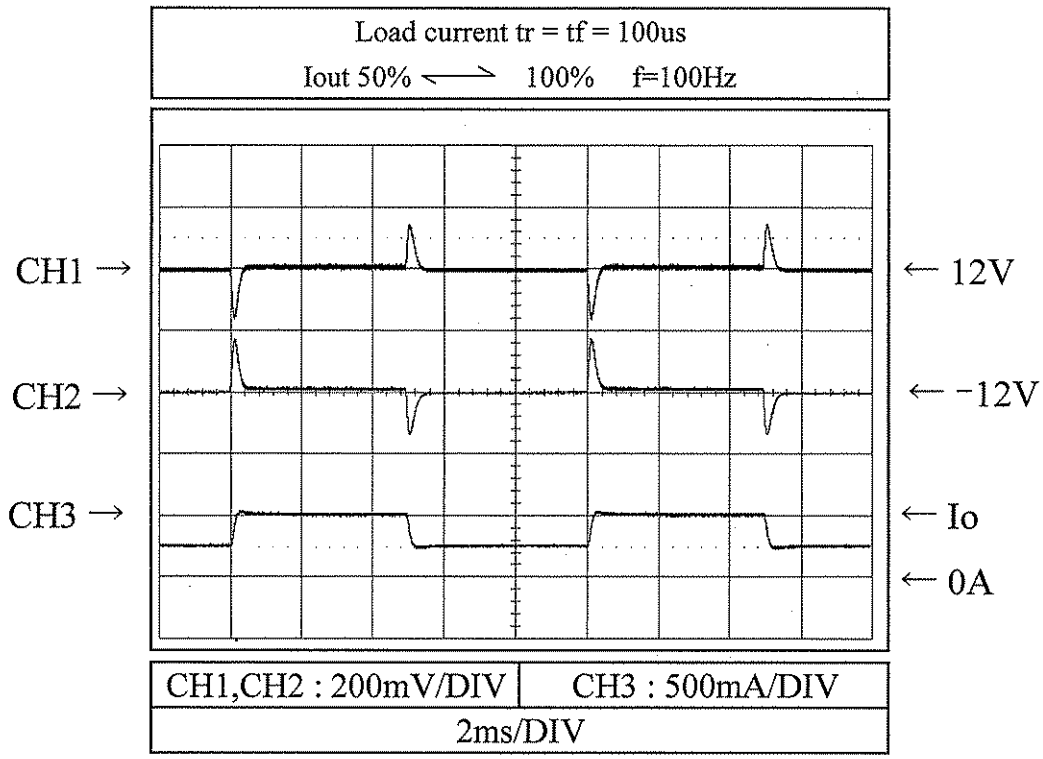
Conditions Vin : 12 VDC
Ta : 25 ℃

PSD10-12-1212



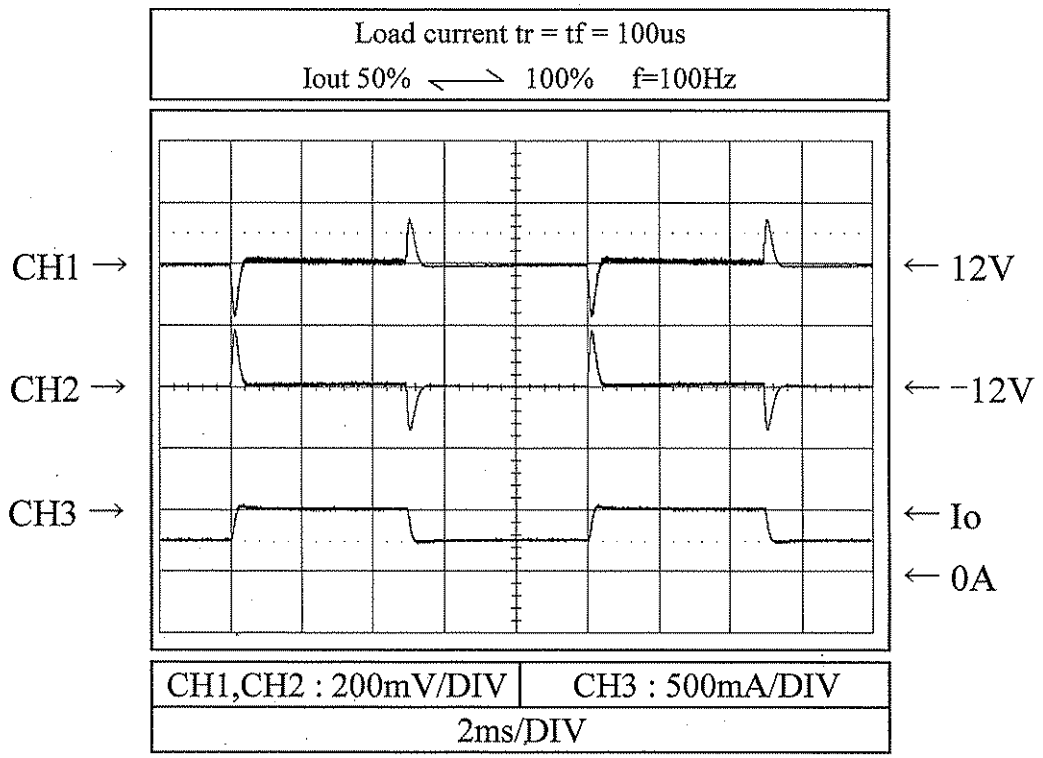
Conditions Vin : 24 VDC
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Ta : 25 ℃

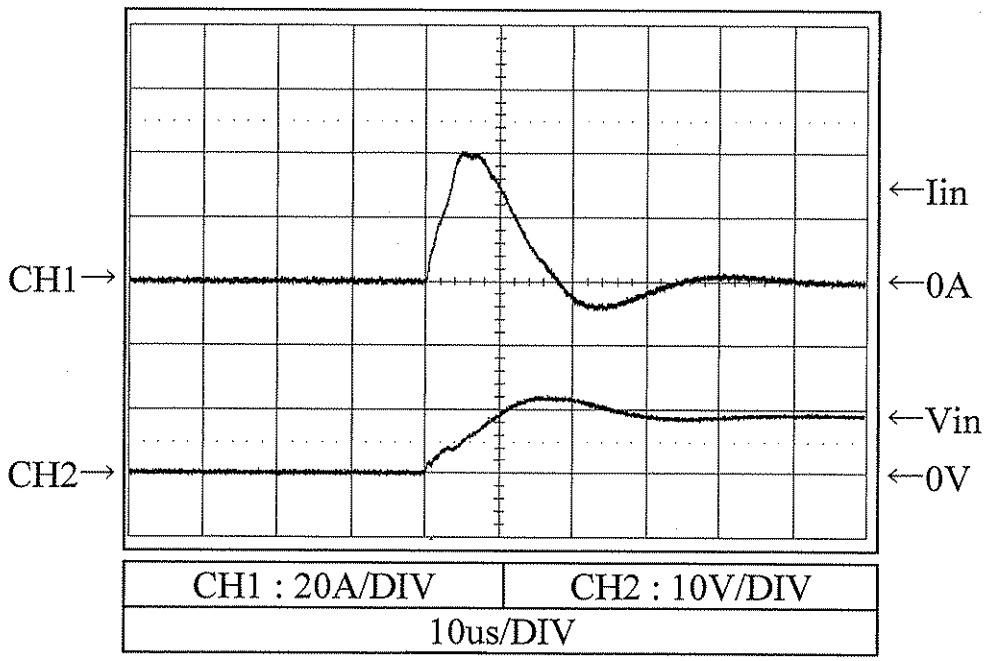
PSD10-48-1212



2.7 入力サージ電流（突入電流）特性
Inrush current waveform

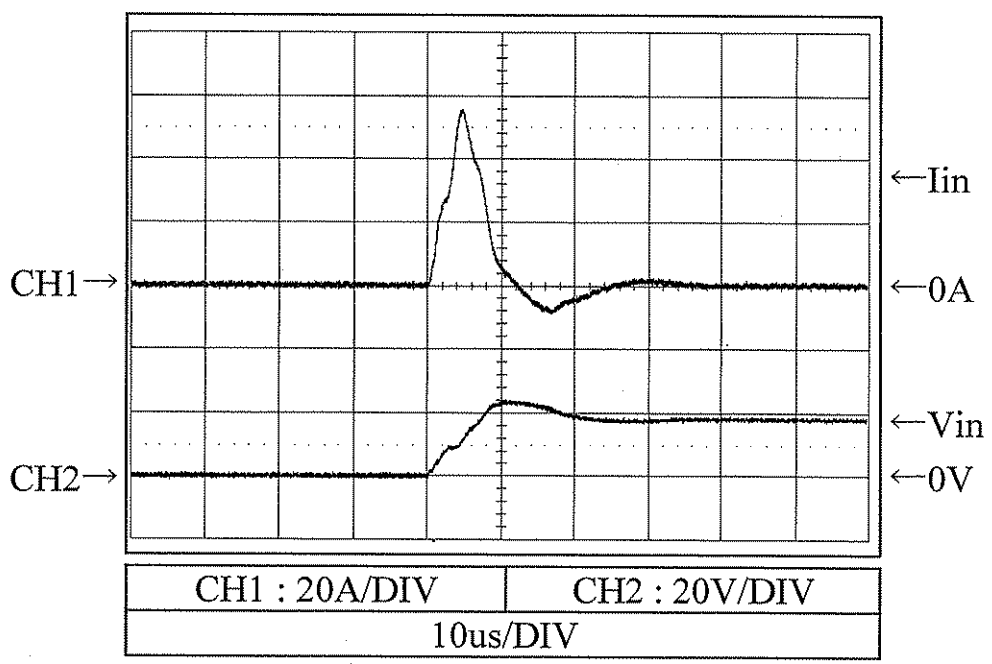
Conditions Vin : 9 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 18 VDC
Iout : 100 %
Ta : 25 ℃

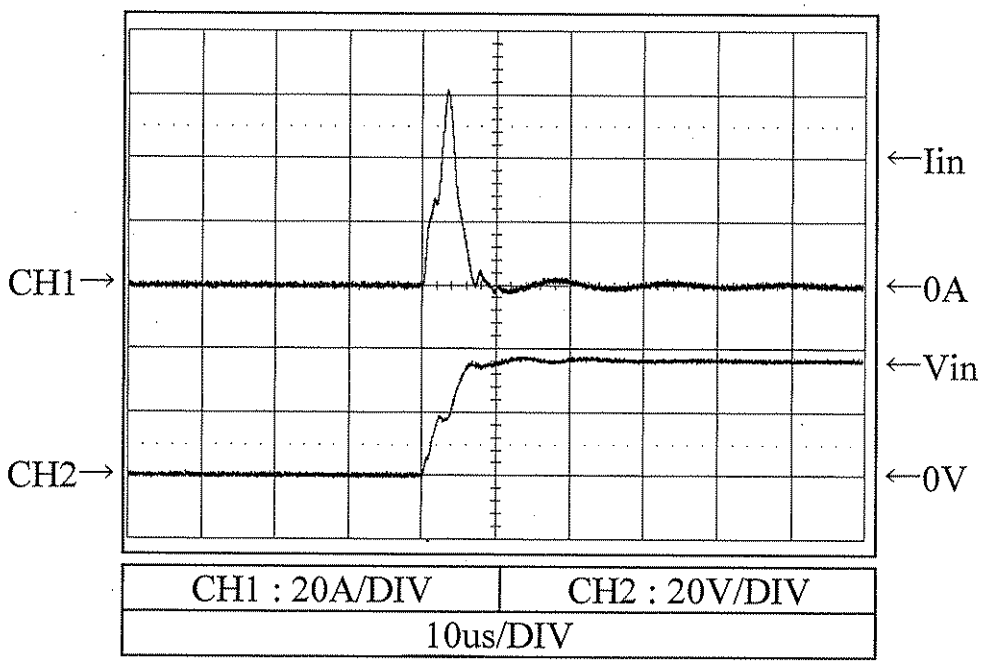
PSD10-12-1212



2.7 入力サージ電流（突入電流）特性
Inrush current waveform

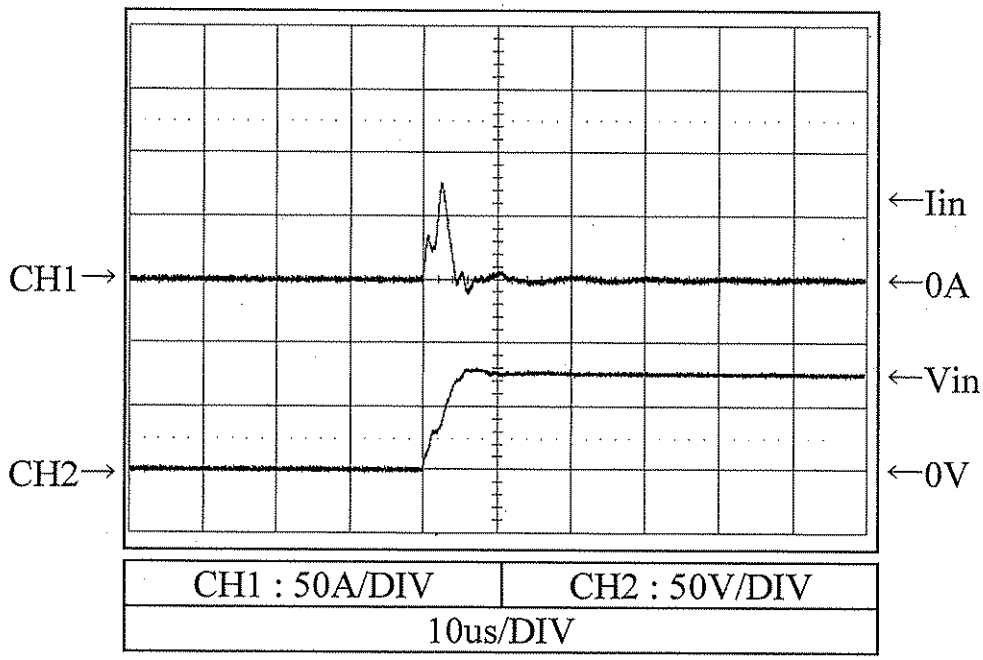
Conditions Vin : 36 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 76 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-48-1212

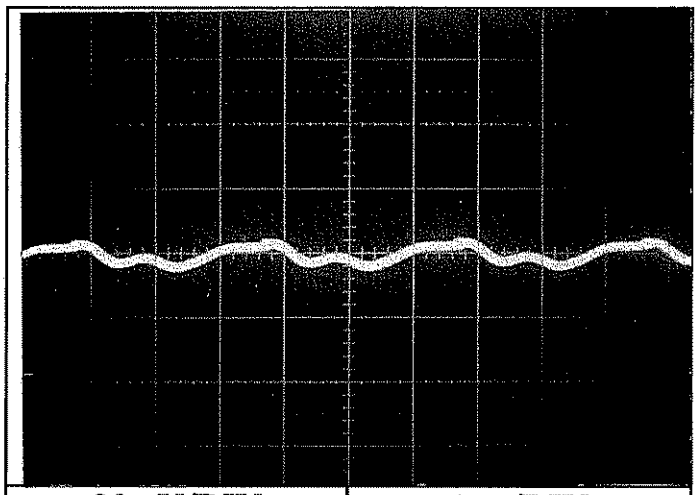


2.8 出力リップル、ノイズ波形
Output ripple and noise waveform

PSD10-5-1212

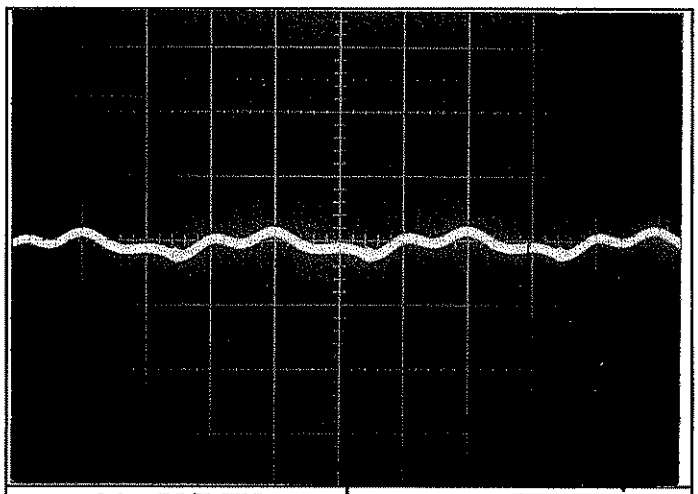
Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

12V（CH1）



20mV/DIV	1μs/DIV
20mVp-p	

−12V（CH2）



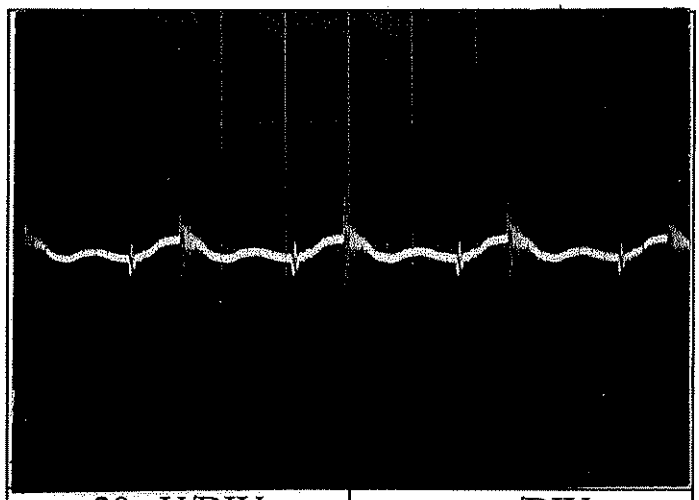
20mV/DIV	1μs/DIV
18mVp-p	

2.8 出力リップル、ノイズ波形
Output ripple and noise waveform

PSD10-12-1212

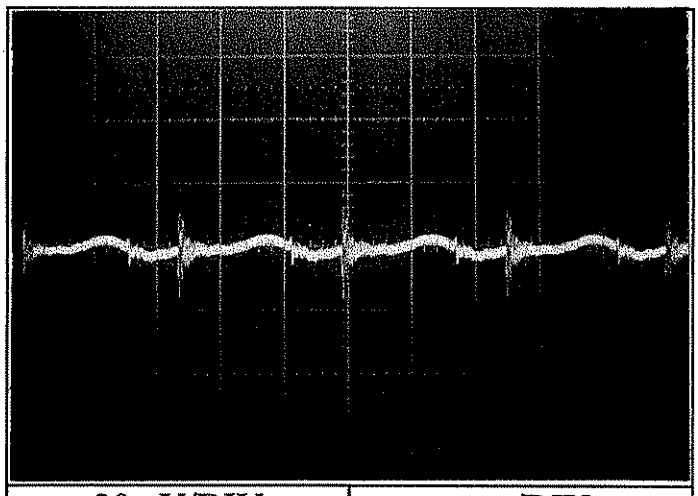
Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

12V（CH1）



20mV/DIV	1μs/DIV
43mVp-p	

−12V（CH2）



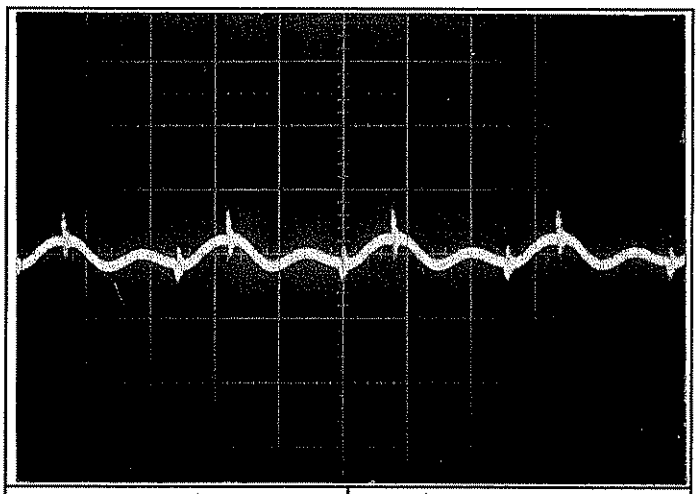
20mV/DIV	1μs/DIV
39mVp-p	

2.8 出力リップル、ノイズ波形
Output ripple and noise waveform

PSD10-24-1212

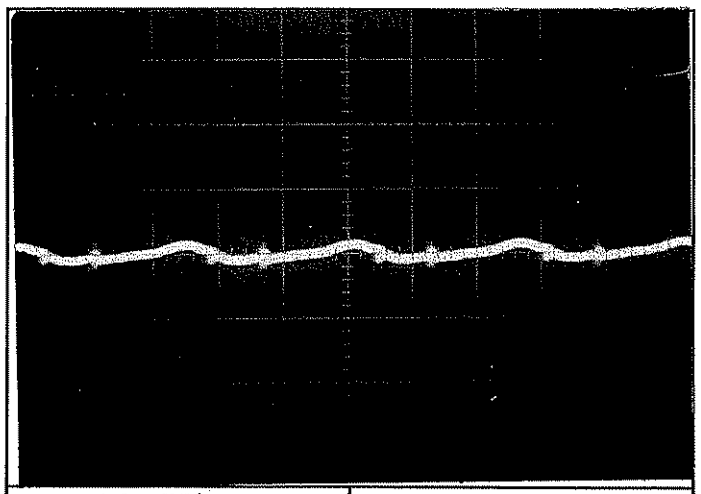
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

12V（CH1）



20mV/DIV	1μs/DIV
24mVp-p	

−12V（CH2）



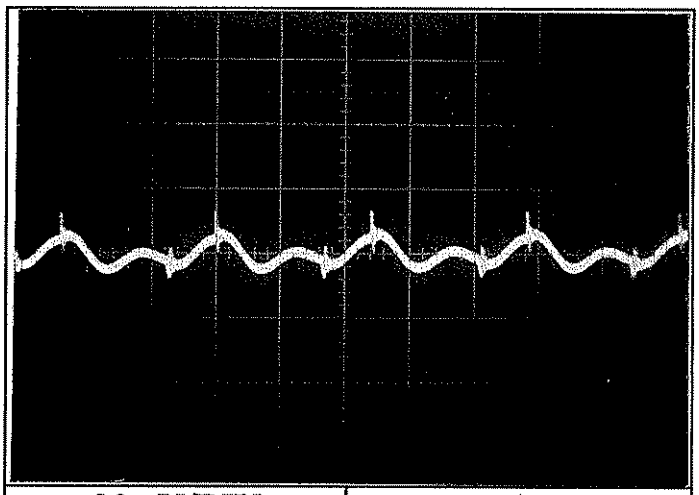
20mV/DIV	1μs/DIV
12mVp-p	

2.8 出力リップル、ノイズ波形
Output ripple and noise waveform

PSD10-48-1212

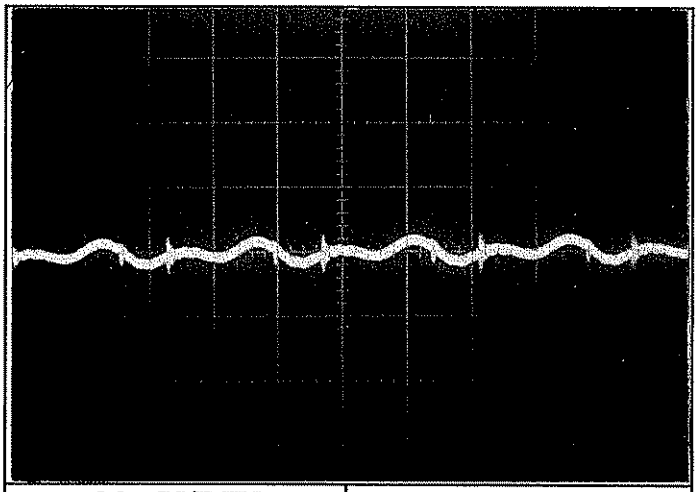
Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

12V（CH1）



20mV/DIV	1μs/DIV
26mVp-p	

−12V（CH2）

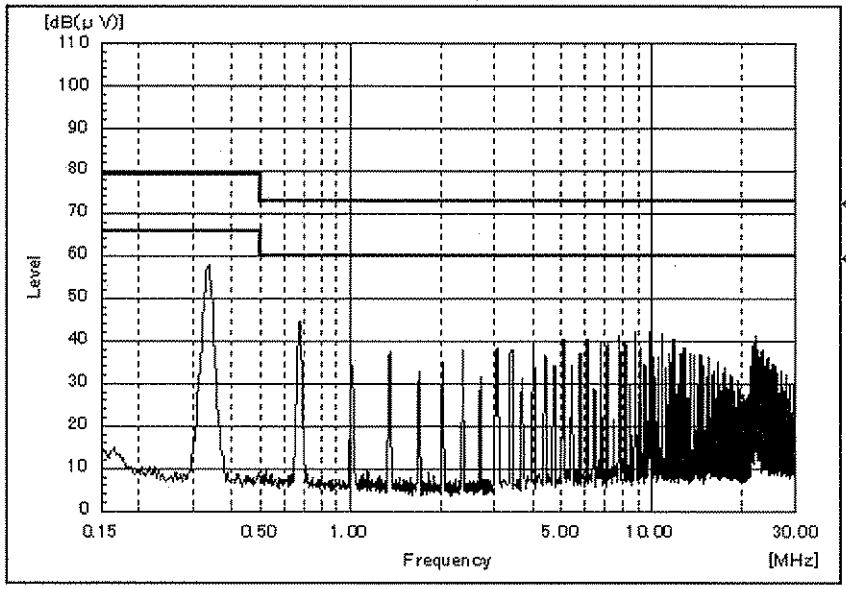


20mV/DIV	1μs/DIV
14mVp-p	

2.10 EMI特性
Electro-Magnetic Interference characteristics
(a) 雑音端子電圧（帰還ノイズ）
Conducted Emission
VCCI class A 対応アプリケーションシステム
VCCI class A application system

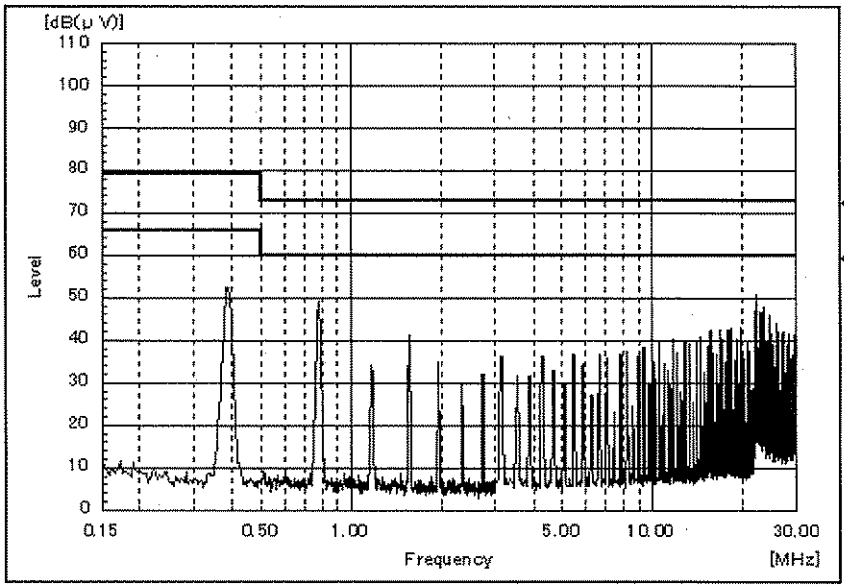
Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-5-1212



Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-12-1212



2.10 EMI特性
Electro-Magnetic Interference characteristics
(a) 雑音端子電圧（帰還ノイズ）
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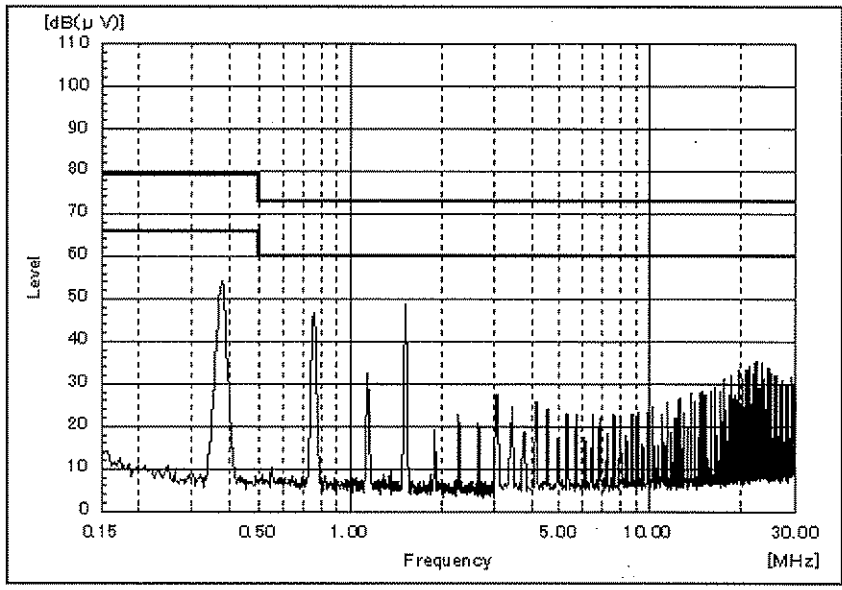
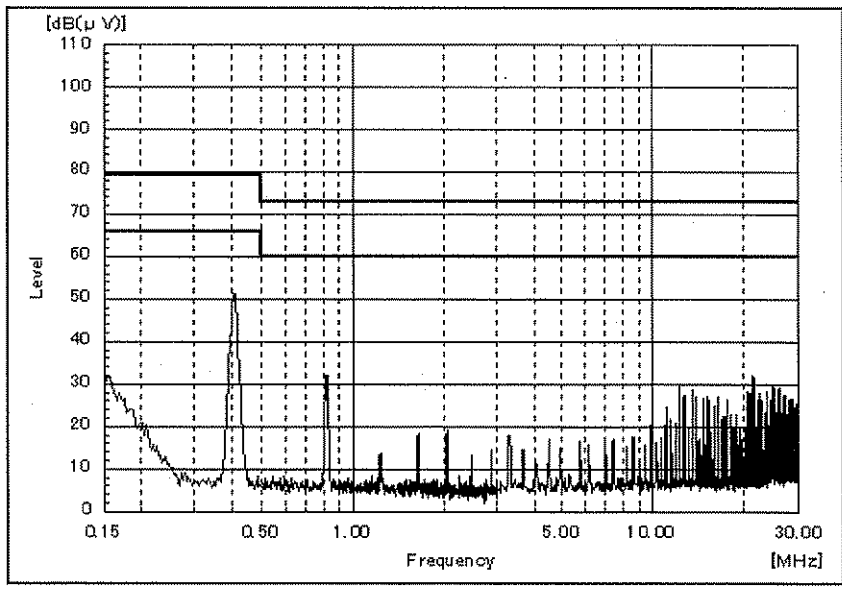
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212



Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-48-1212

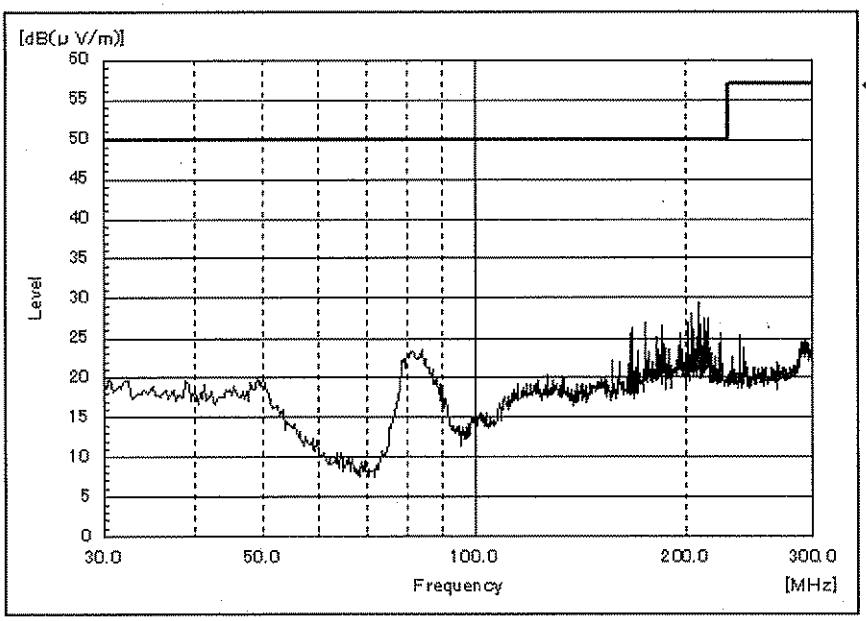


2.10 EMI特性
Electro-Magnetic Interference characteristics
(b) 雑音電界強度（輻射ノイズ）
Radiated Emission
VCCI class A 対応アプリケーションシステム
VCCI class A application system

Conditions Vin : 5 VDC
Iout : 100 %
Ta : 25 ℃

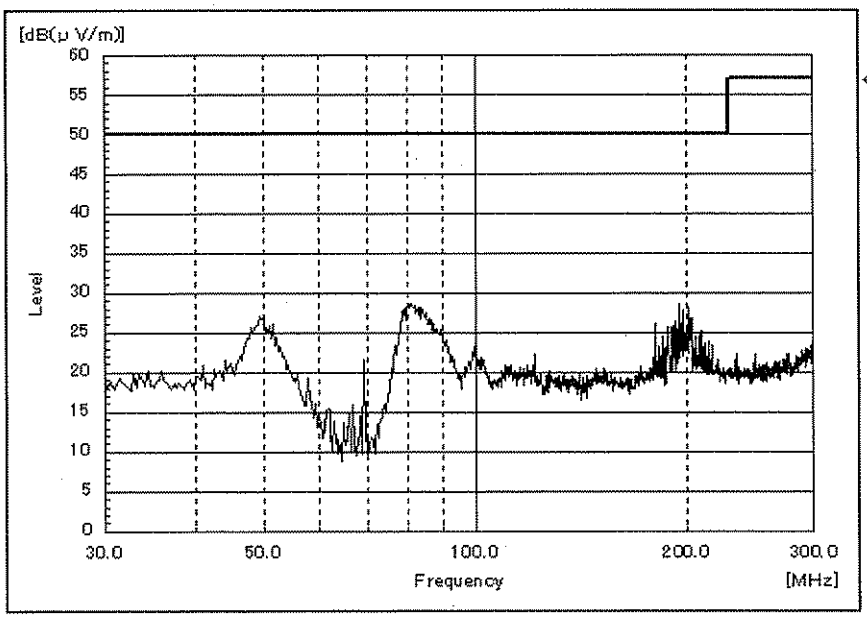
PSD10-5-1212

HORIZONTAL:



←QP Limit

VERTICAL:



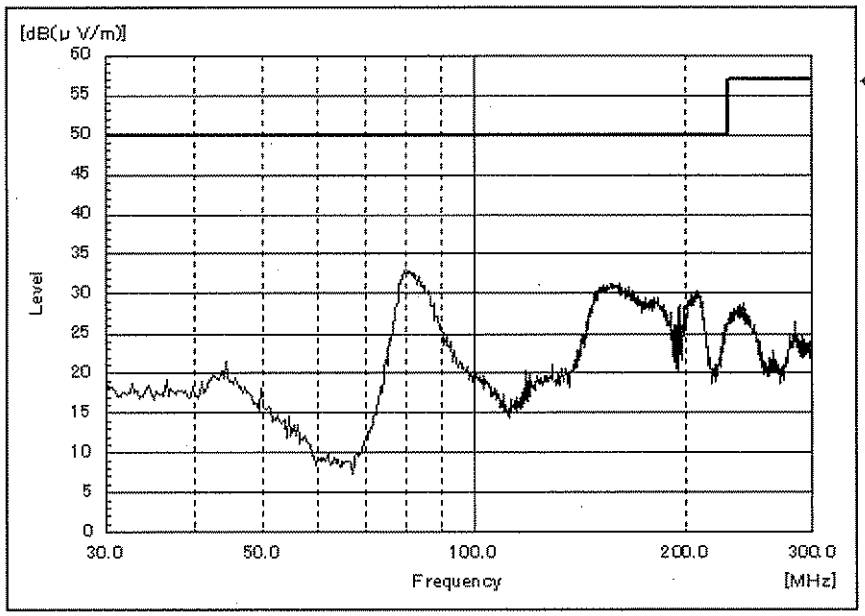
←QP Limit

2. 10 EMI特性
Electro-Magnetic Interference characteristics
(b) 雑音電界強度（輻射ノイズ）
Radiated Emission
VCCI class A 対応アプリケーションシステム
VCCI class A application system

Conditions Vin : 12 VDC
Iout : 100 %
Ta : 25 ℃

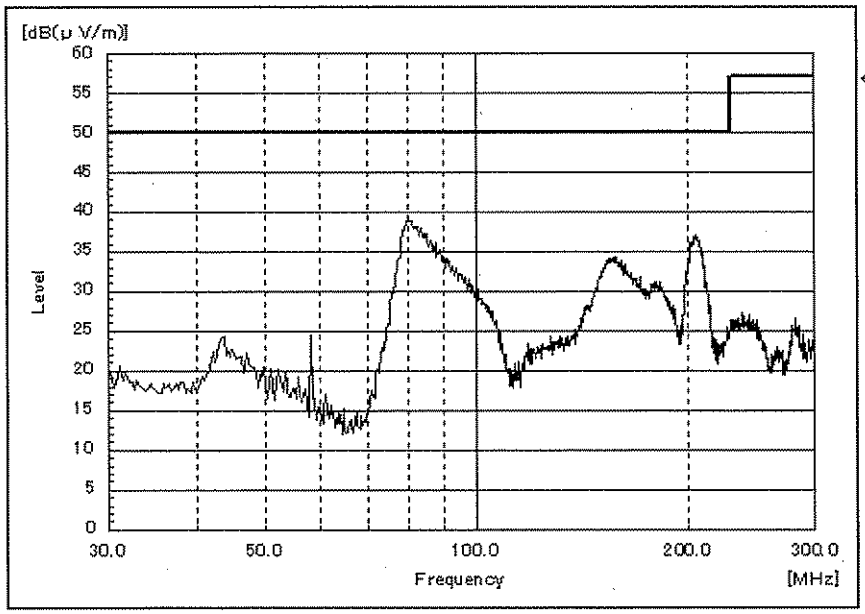
PSD10-12-1212

HORIZONTAL:



←QP Limit

VERTICAL:



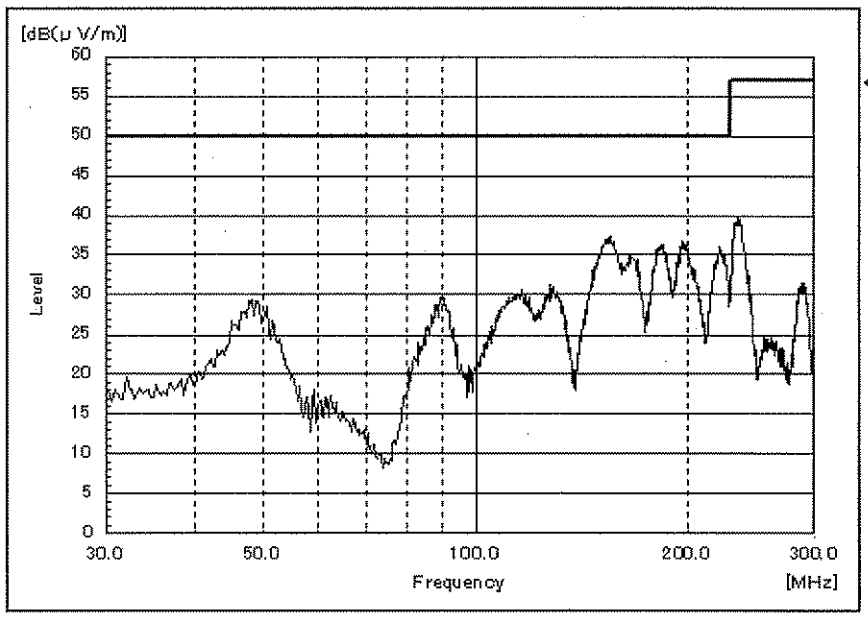
←QP Limit

2.10 EMI特性
Electro-Magnetic Interference characteristics
(b) 雑音電界強度（輻射ノイズ）
Radiated Emission
VCCI class A 対応アプリケーションシステム
VCCI class A application system

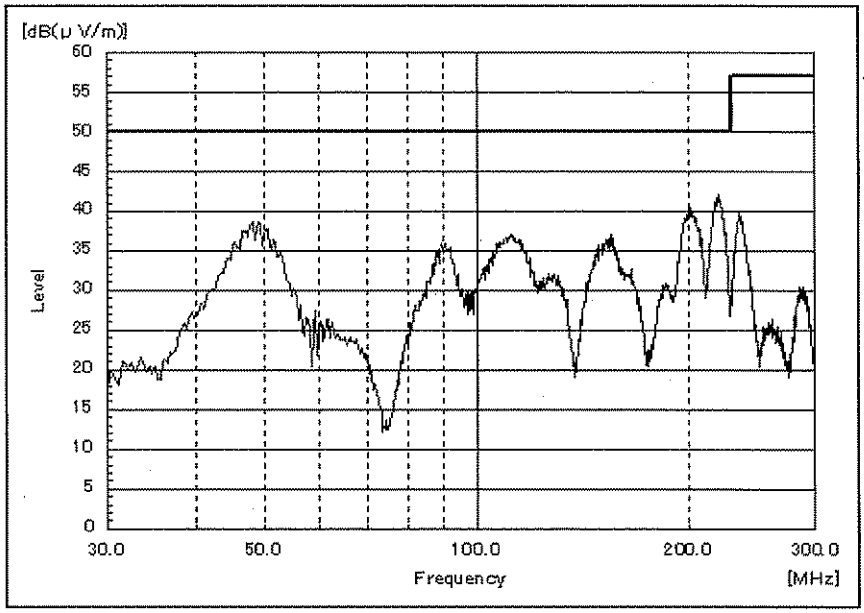
Conditions Vin : 24 VDC
Iout : 100 %
Ta : 25 ℃

PSD10-24-1212

HORIZONTAL:



VERTICAL:

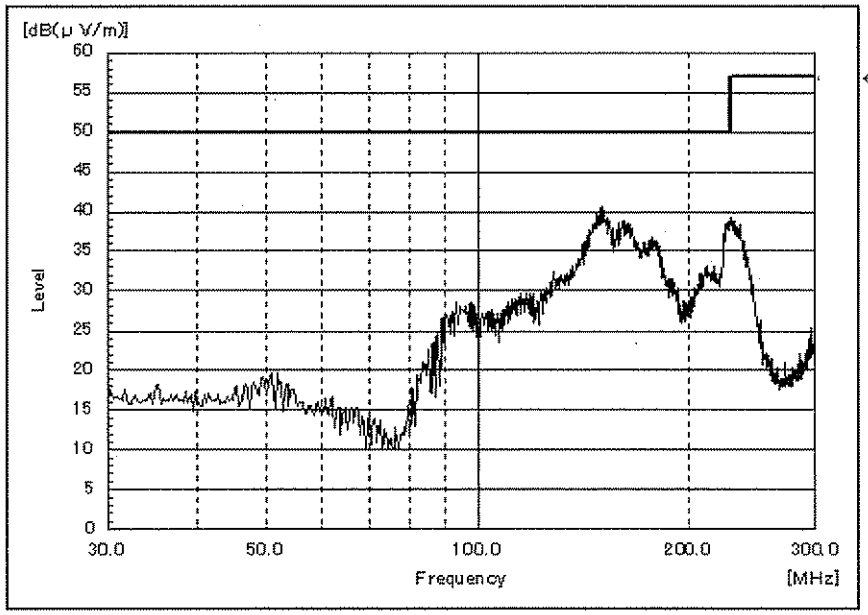


2.10 EMI特性
Electro-Magnetic Interference characteristics
(b) 雑音電界強度（輻射ノイズ）
Radiated Emission
VCCI class A 対応アプリケーションシステム
VCCI class A application system

Conditions Vin : 48 VDC
Iout : 100 %
Ta : 25 ℃

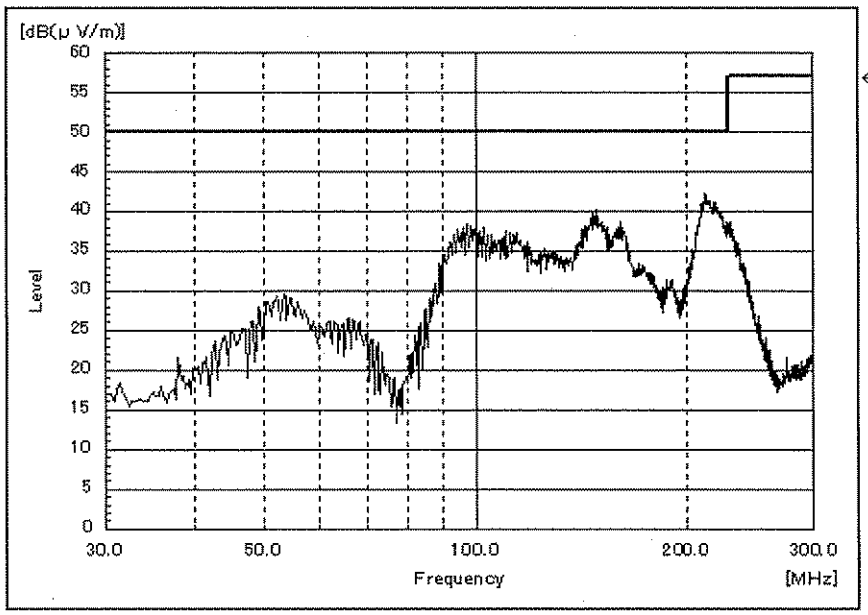
PSD10-48-1212

HORIZONTAL:



←QP Limit

VERTICAL:



←QP Limit