

**PAH200H48-\***

**EVALUATION DATA**

**型式データ**

DWG.NO. C170-53-01A

**DENSEI-LAMBDA**

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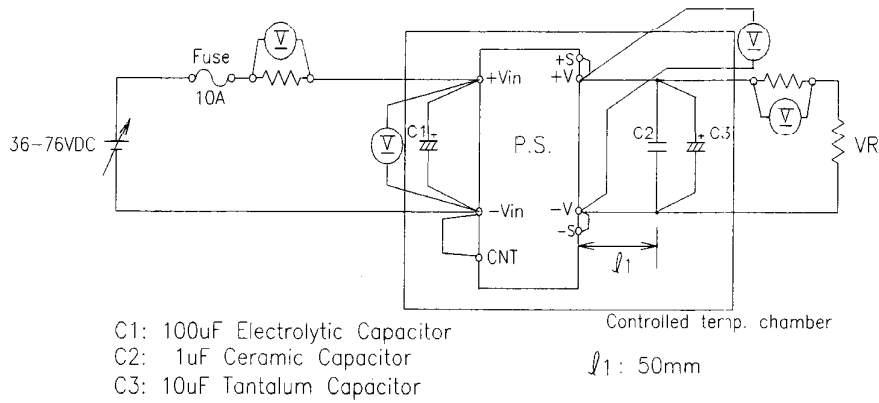
使用記号 Terminology used

	Definition	
Vin	..... 入力電圧	Input Voltage
Vout	..... 出力電圧	Output Voltage
Vcnt	..... CNT電圧	CNT 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

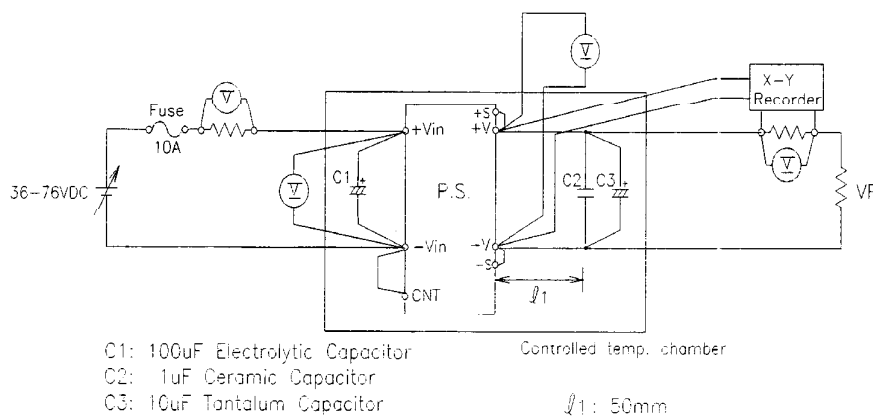


(2) 通電ドリフト特性 Warm up voltage drift characteristics

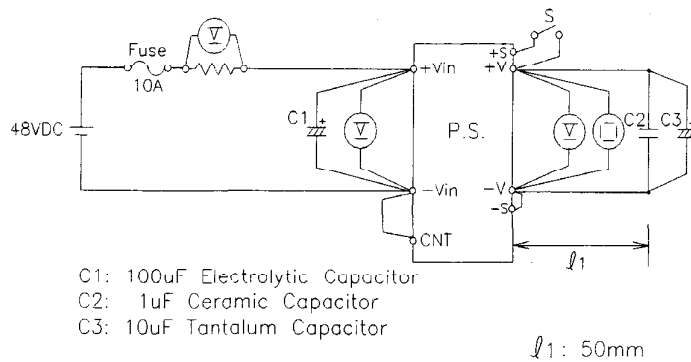
静特性と同じ

Same as Steady state data

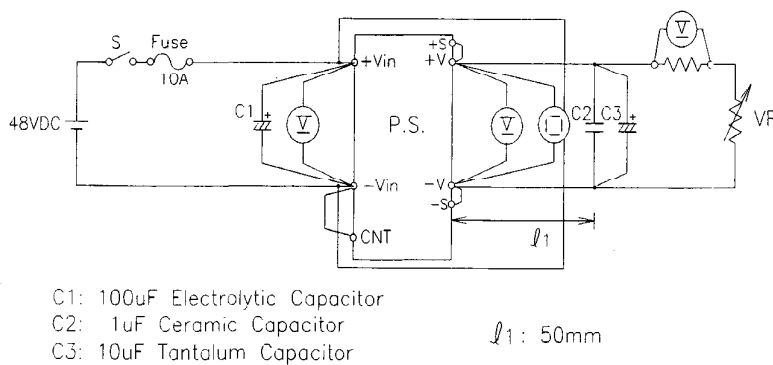
(3) 過電流保護特性 Over current protection (OCP) characteristics



(4) 過電圧保護特性 Over voltage protection (OVP) characteristics



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

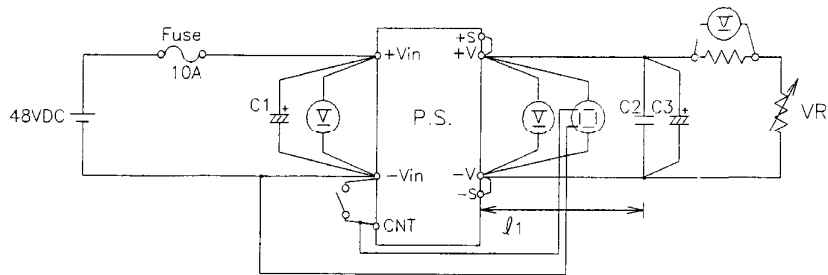


(6) 出力立ち下がり Output fall characteristics

出力立ち上がり特性と同じ  
 Same as output rise characteristics

(7) 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



C1: 100uF Electrolytic Capacitor  
 C2: 1uF Ceramic Capacitor  
 C3: 10uF Tantalum Capacitor

$l_1$ : 50mm

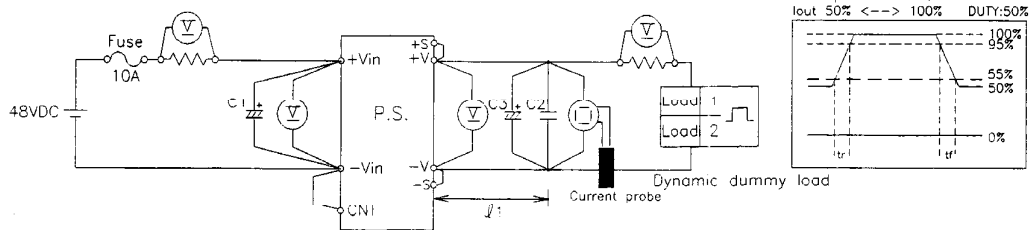
(8) 出力立ち下がり特性 (ON/OFFコントロール時)

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 CONTROL ON/OFF

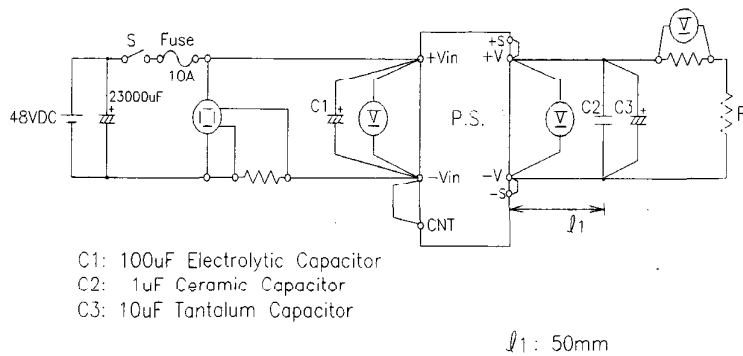
(9) 過渡応答(負荷急変)特性 Dynamic load response characteristics



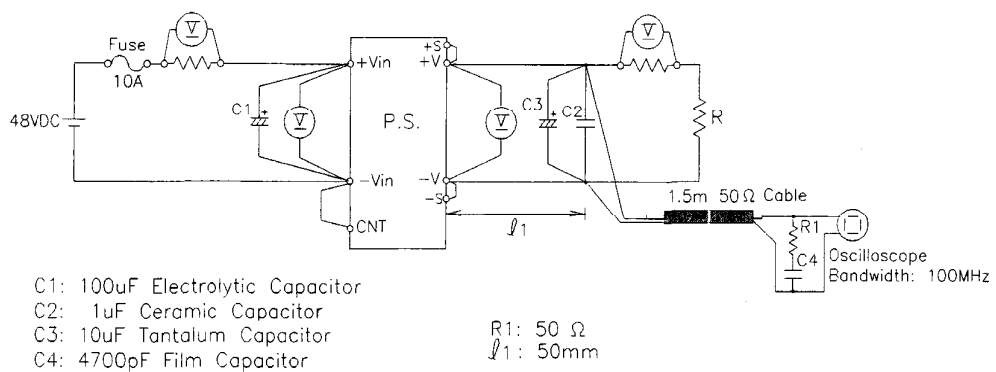
C1: 100uF Electrolytic Capacitor  
 C2: 1uF Ceramic Capacitor  
 C3: 10uF Tantalum Capacitor

$l_1$ : 50mm

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

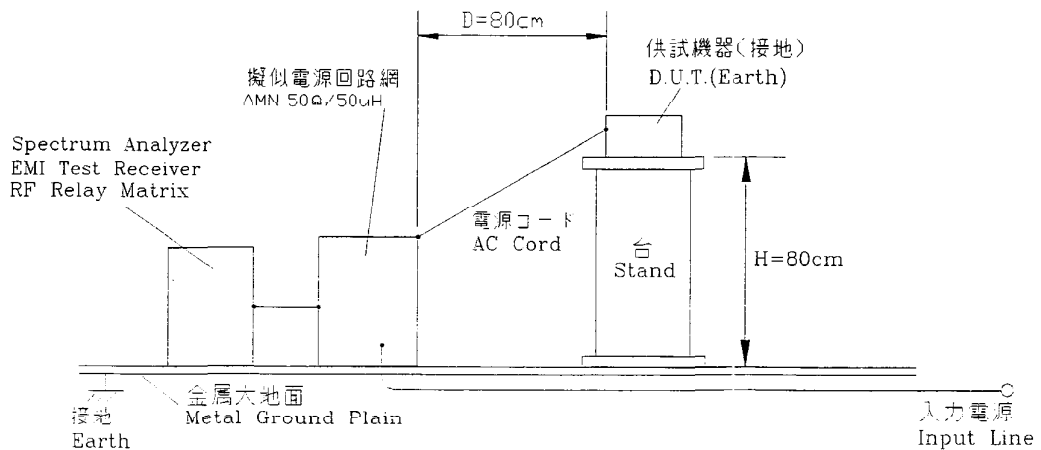


(11) 出力リップル、ノイズ波形 Output ripple and noise waveform

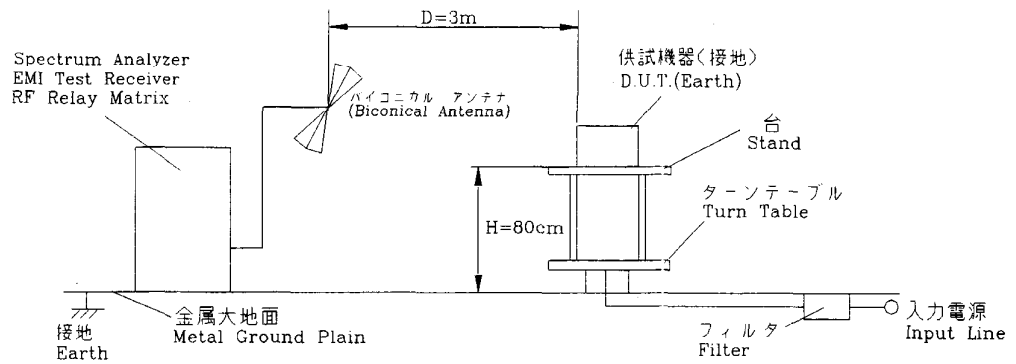


(12) EMI特性 Electro-Magnetic Interference characteristics

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

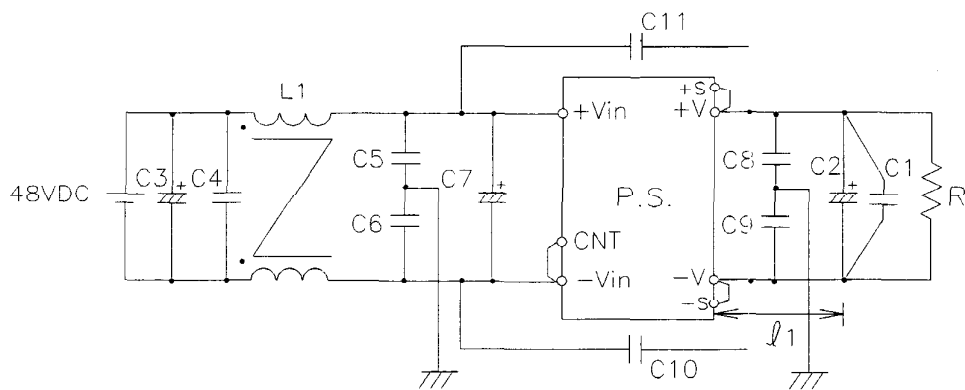


(b) 雑音電界強度 (輻射ノイズ) Radiated Emission Noise



(1) VCCI class A 対応アプリケーションシステム

VCCI class A application system



- L1 : 400uH
- C1 : 1uF Ceramic Capacitor
- C2 : 10uF Tantalum Capacitor
- C3 : 680uF Electrolytic Capacitorx2para
- C4 : 1uF Ceramic Capacitorx2para
- C5,C6 : 0.047uF Film Capacitor
- C7 : 100uF Electrolytic Capacitor
- C8,C9 : 0.15uF Film Capacitor
- C10,C11 : 2200pF Ceramic Capacitor
- $l_1$  : 50mm



## 1.2 使用測定機器 List of equipment used

	EQUIPMENT USED	MANUFACTURER	MODEL NO.
1	OSCILLOSCOPE	HITACHI DENSHI	V-1100A
2	DIGITAL STORAGE OSCILLOSCOPE	IWATSU	LT364L
3	DIGITAL MULTIMETER	ADVANTEST	R6441A
4	DIGITAL POWER METER	YOKOGAWA ELECT.	WT110
5	CURRENT PROBE/AMPLIFIER	TEKTRONIX	A6303/TM501
6	SHUNT RESISTER	YOKOGAWA ELECT.	2215
7	X-Y RECORDER	GRAPHTEC	WX3000
8	CONTROLLED TEMP. CHAMBER	TABAI ESPEC	SH-240
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
15	DYNAMIC DUMMY LOAD	TAKASAGO	FK-1000L
16	DUMMY LOAD	TOKYO SEIDEN	SC-10
17	DC POWER SUPPLY	TAKASAGO	AA2000XG

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

1.2V

1. Regulation - line and load conditions Ta : 25°C  
Air Velocity : 2m/s

Iout \ Vin	36VDC	48VDC	76VDC	line regulation	
0%	1.1988V	1.1987V	1.1985V	0.3mV	0.025%
50%	1.1984V	1.1983V	1.1981V	0.3mV	0.025%
100%	1.1973V	1.1973V	1.1972V	0.1mV	0.008%
load	1.5mV	1.4mV	1.3mV		
regulation	0.125%	0.117%	0.108%		

2. Temperature drift conditions Vin : 48VDC  
Iout : 100%  
Air Velocity : 2m/s

Ta	-40°C	25°C	55°C	temperature stability	
Vout	1.1989V	1.1973V	1.1956V	3.3mV	0.275%

1.5V

1. Regulation - line and load conditions Ta : 25°C  
Air Velocity : 2m/s

Iout \ Vin	36VDC	48VDC	76VDC	line regulation	
0%	1.5005V	1.5004V	1.5001V	0.4mV	0.027%
50%	1.5000V	1.5000V	1.4997V	0.3mV	0.020%
100%	1.4984V	1.4984V	1.4983V	0.1mV	0.007%
load	2.1mV	2.0mV	1.8mV		
regulation	0.140%	0.133%	0.120%		

2. Temperature drift conditions Vin : 48VDC  
Iout : 100%  
Air Velocity : 2m/s

Ta	-40°C	25°C	55°C	temperature stability	
Vout	1.5012V	1.4984V	1.4942V	7.0mV	0.467%

2.1 静特性 Steady state data

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

1.8V

1. Regulation line and load conditions Ta : 25°C  
Air Velocity : 2m/s

Iout \ Vin	36VDC	48VDC	76VDC	line regulation	
0%	1.7938V	1.7937V	1.7933V	0.5mV	0.028%
50%	1.7926V	1.7924V	1.7919V	0.7mV	0.039%
100%	1.7911V	1.7910V	1.7910V	0.1mV	0.006%
load regulation	2.7mV	2.7mV	2.3mV		
	0.150%	0.150%	0.128%		

2. Temperature drift conditions Vin : 48VDC  
Iout : 100%  
Air Velocity : 2m/s

Ta	-40°C	25°C	55°C	temperature stability	
Vout	1.8013V	1.7910V	1.7890V	12.3mV	0.683%

2.5V

1. Regulation - line and load conditions Ta : 25°C  
Air Velocity : 2m/s

Iout \ Vin	36VDC	48VDC	76VDC	line regulation	
0%	2.5053V	2.5049V	2.5041V	1.2mV	0.048%
50%	2.5022V	2.5016V	2.5010V	1.2mV	0.048%
100%	2.4995V	2.4991V	2.4996V	0.5mV	0.020%
load regulation	5.8mV	5.8mV	4.5mV		
	0.232%	0.232%	0.180%		

2. Temperature drift conditions Vin : 48VDC  
Iout : 100%  
Air Velocity : 2m/s

Ta	-40°C	25°C	50°C	temperature stability	
Vout	2.5194V	2.4991V	2.4918V	27.6mV	1.104%

2.1 静特性      Steady state data

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

3.3V

1. Regulation - line and load

conditions Ta : 25°C

Air Velocity : 2m/s

Iout \ Vin	36VDC	48VDC	76VDC	line regulation	
0%	3.295V	3.295V	3.294V	1.0mV	0.030%
50%	3.293V	3.293V	3.292V	1.0mV	0.030%
100%	3.290V	3.290V	3.290V	0.0mV	0.000%
load regulation	5.0mV	5.0mV	4.0mV		
	0.152%	0.152%	0.121%		

2. Temperature drift

conditions Vin : 48VDC

Iout : 100%

Air Velocity : 2m/s

Ta	-40°C	25°C	45°C	temperature stability	
Vout	3.305V	3.290V	3.294V	15.0mV	0.455%

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

Conditions Iout : 100 %

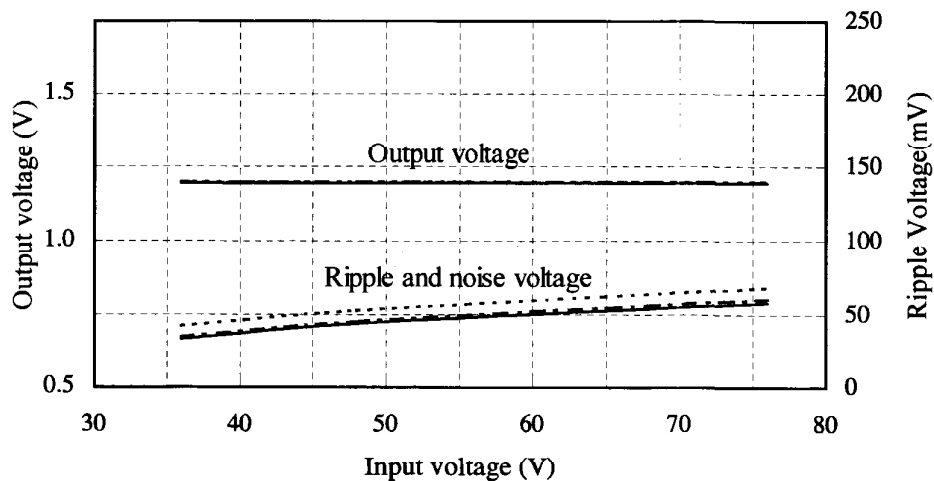
Ta : -40 °C -----

25 °C -.-.-.-

55 °C \_\_\_\_\_

Air Velocity : 2m/s

1.2V



Conditions Iout : 100 %

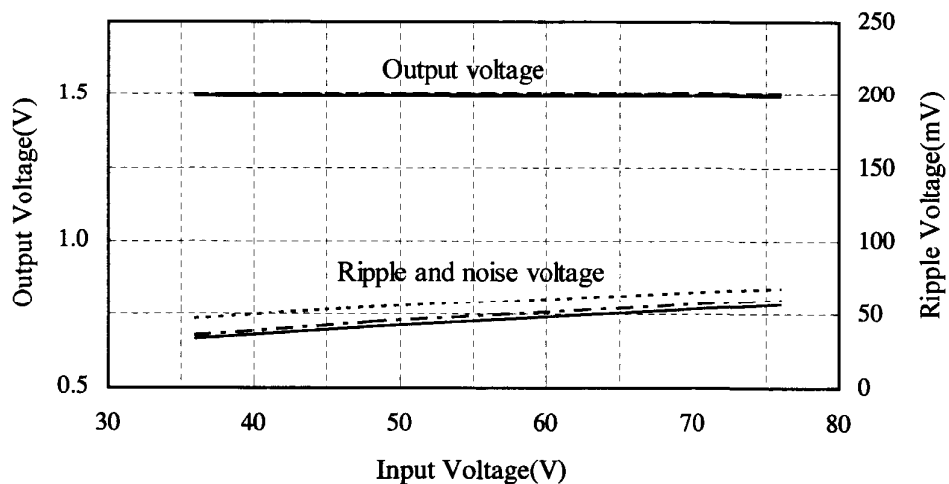
Ta : -40 °C -----

25 °C -.-.-.-

55 °C \_\_\_\_\_

Air Velocity : 2m/s

1.5V



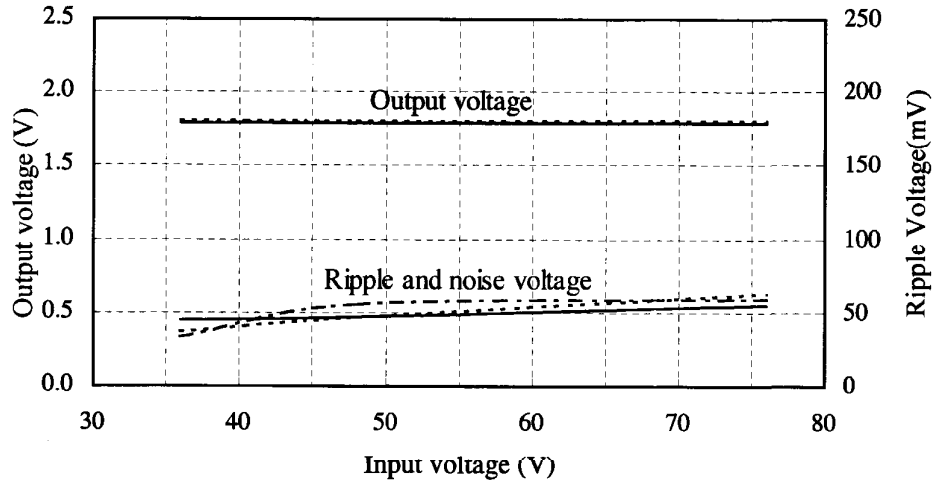
2.1 (2) 出力電圧、リップル電圧対入力電圧  
Output voltage and ripple voltage v.s. input voltage

Conditions Iout : 100 %

Ta : -40 °C -----  
 25 °C -.-.-.-  
 55 °C \_\_\_\_\_

Air Velocity : 2m/s

1.8V

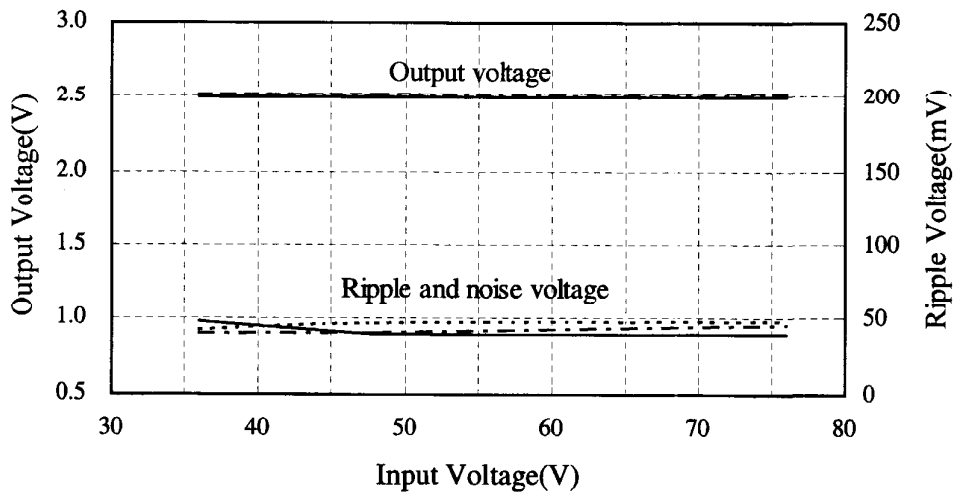


Conditions Iout : 100 %

Ta : -40 °C -----  
 25 °C -.-.-.-  
 50 °C \_\_\_\_\_

Air Velocity : 2m/s

2.5V



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

Conditions Iout : 100 %

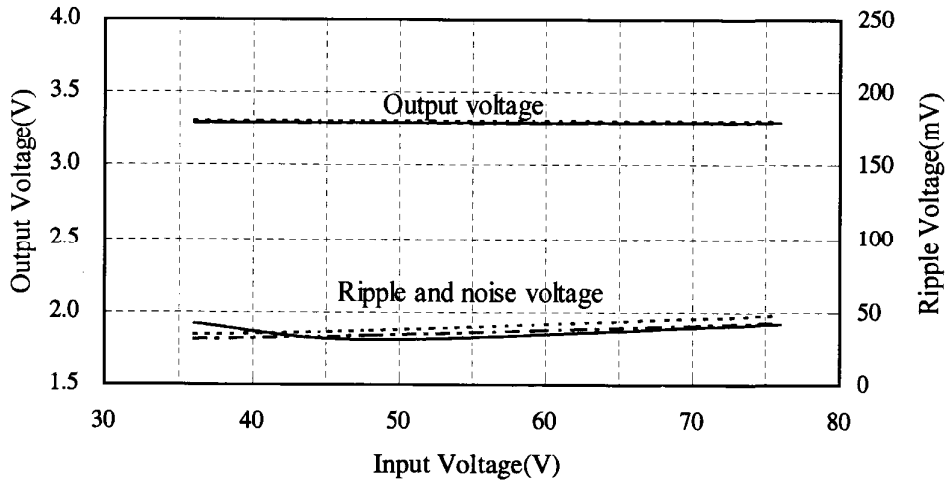
Ta : -40 °C -----

25 °C -.-.-.-.-

45 °C \_\_\_\_\_

Air Velocity : 2m/s

3.3V



2.1 (3) 効率、入力電流対出力電流

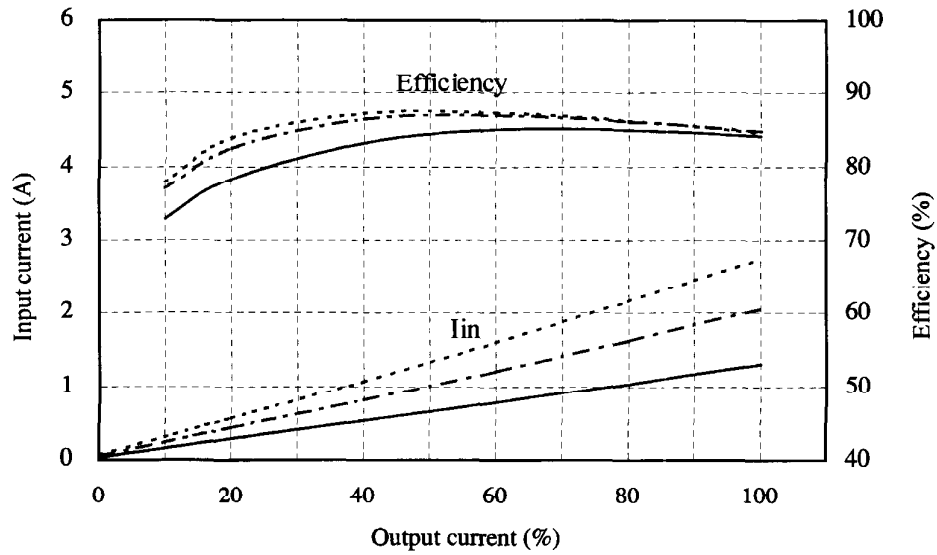
Efficiency and input current v.s. output current

Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC ————

Ta : 25 °C

Air Velocity : 2m/s

1.2V

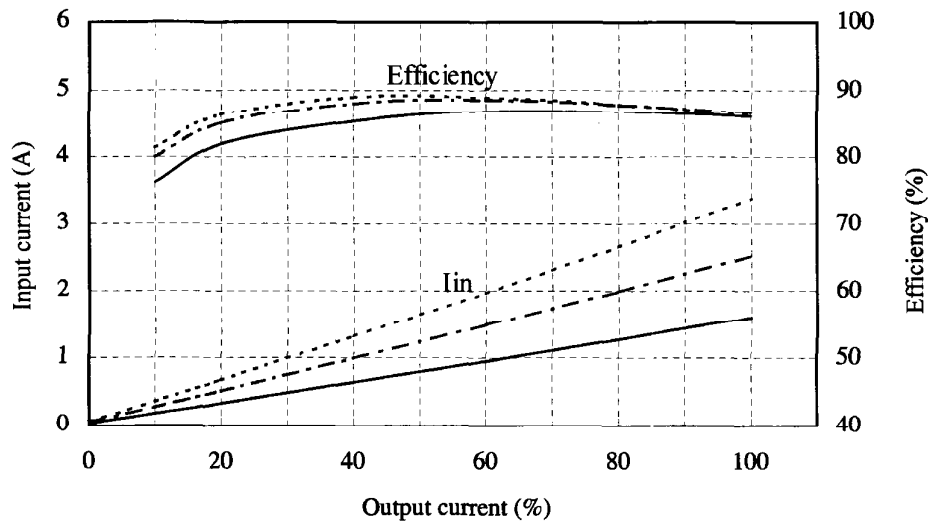


Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC ————

Ta : 25 °C

Air Velocity : 2m/s

1.5V





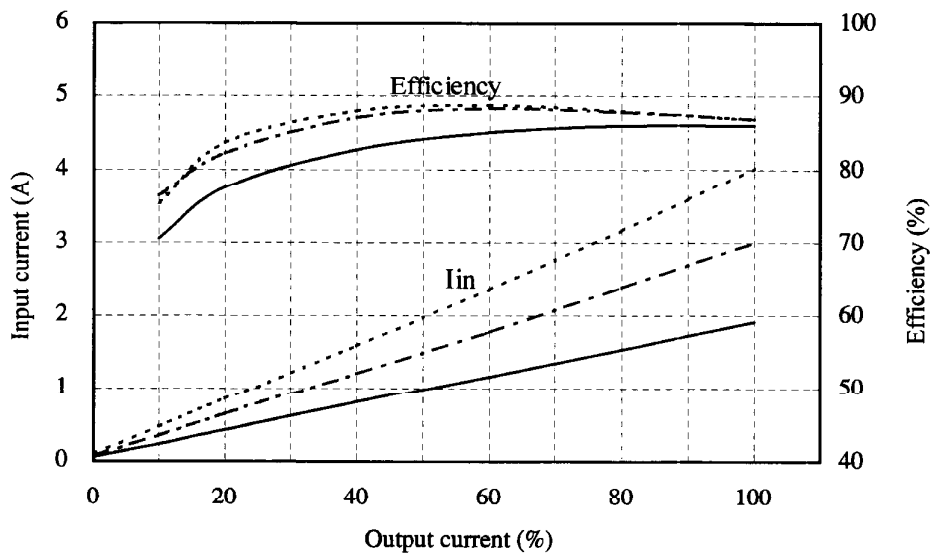
2.1 (3) 効率、入力電流対出力電流

Efficiency and input current v.s. output current

Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC ————  
 Ta : 25 °C

1.8V

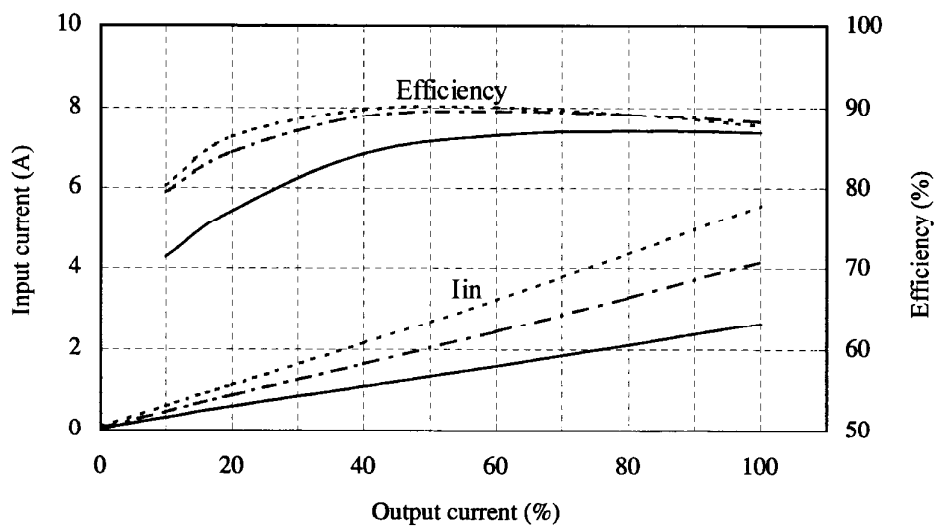
Air Velocity : 2m/s



Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC ————  
 Ta : 25 °C

2.5V

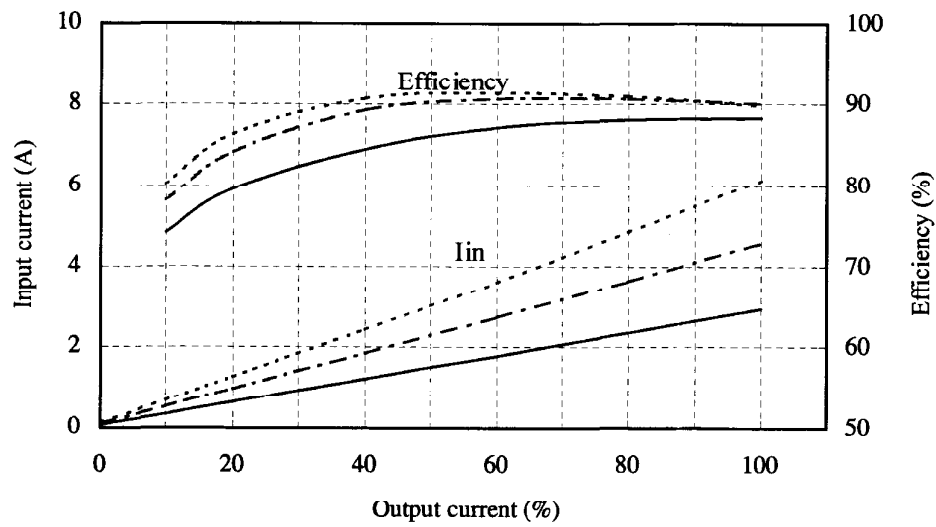
Air Velocity : 2m/s



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

Conditions  $V_{in}$  : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC ————  
 $T_a$  : 25 °C  
 Air Velocity : 2m/s

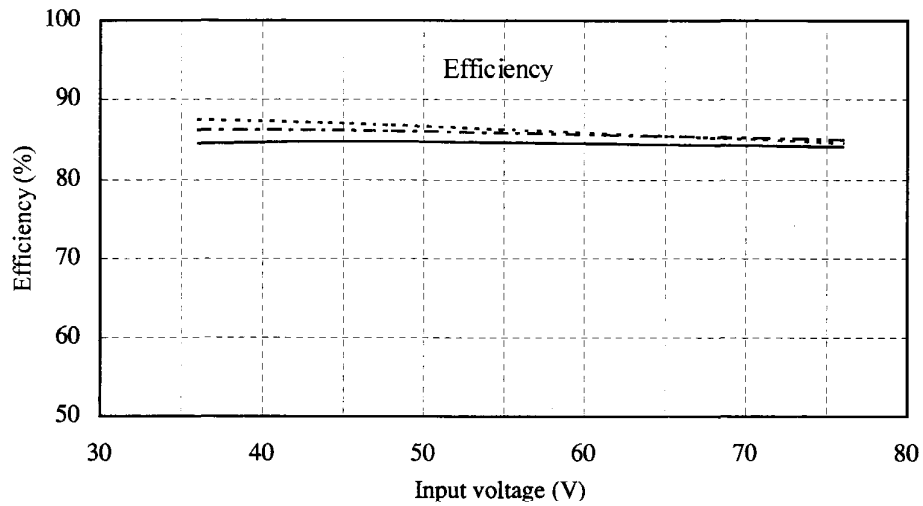
3.3V



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

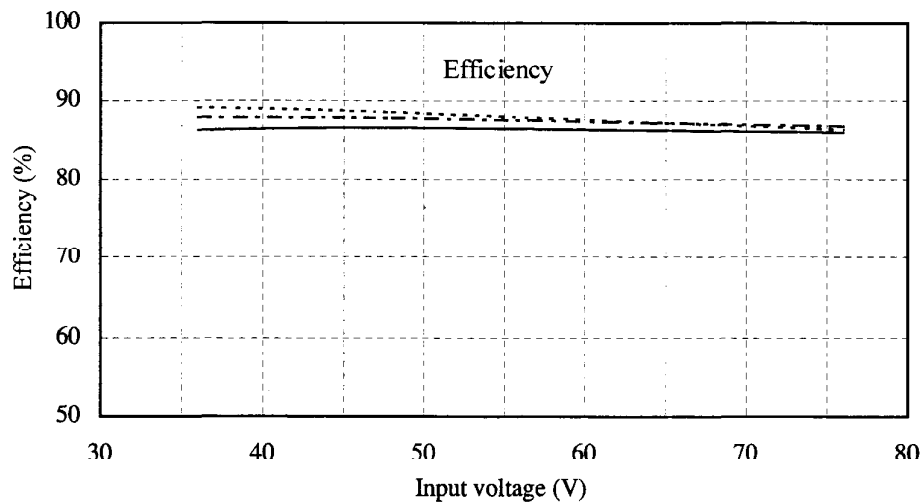
Conditions Ta : 25 °C  
 Iout : 50 % -----  
           80 % -.-.-.-.-  
           100 % \_\_\_\_\_  
 Air Velocity : 2m/s

1.2V



Conditions Ta : 25 °C  
 Iout : 50 % -----  
           80 % -.-.-.-.-  
           100 % \_\_\_\_\_  
 Air Velocity : 2m/s

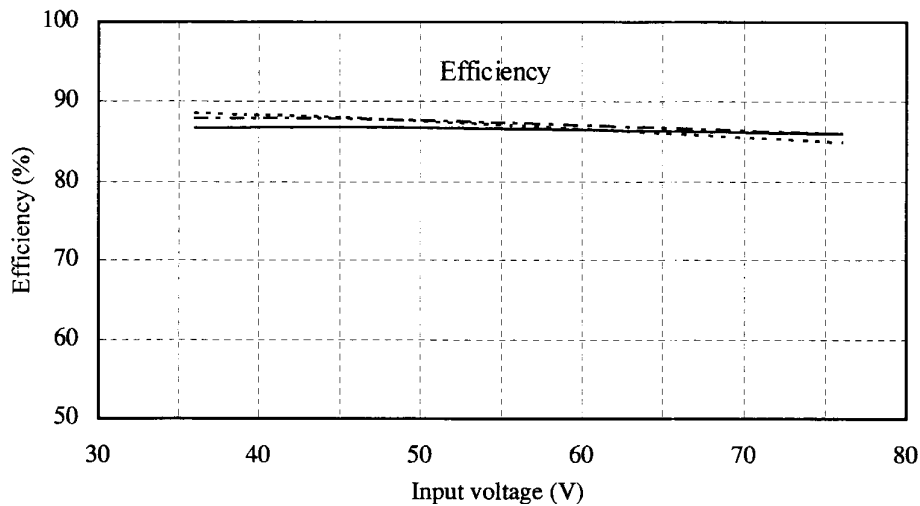
1.5V



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

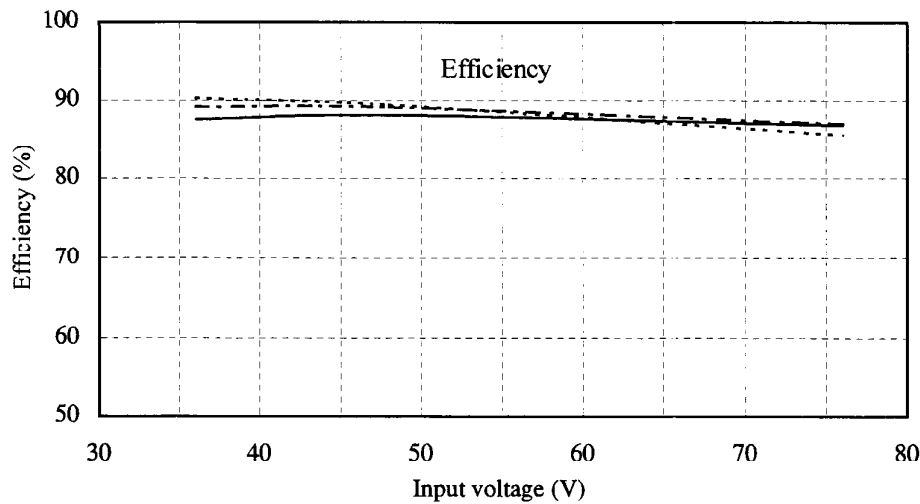
Conditions Ta : 25 °C  
 Iout : 50 % -----  
           80 % -.-.-.-  
           100 % \_\_\_\_\_  
 Air Velocity : 2m/s

1.8V



Conditions Ta : 25 °C  
 Iout : 50 % -----  
           80 % -.-.-.-  
           100 % \_\_\_\_\_  
 Air Velocity : 2m/s

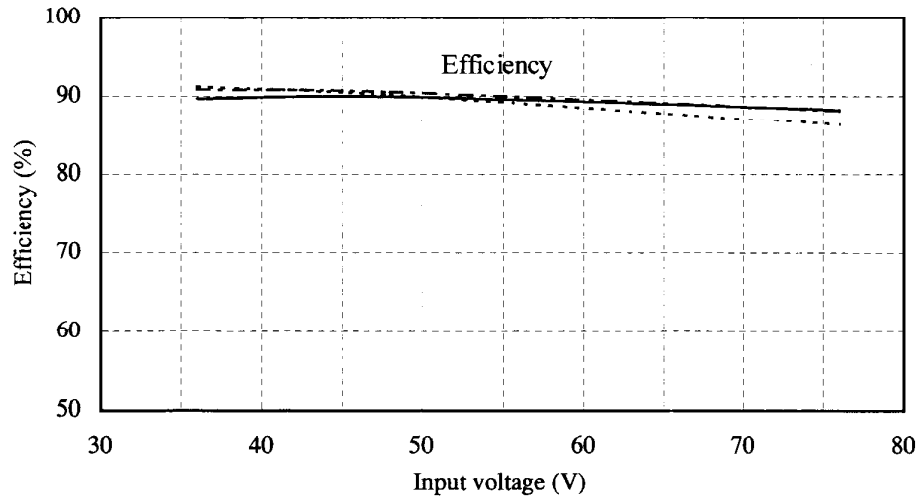
2.5V



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

Conditions Ta : 25 °C  
Iout : 50 % -----  
80 % -.-.-.-  
100 % \_\_\_\_\_  
Air Velocity : 2m/s

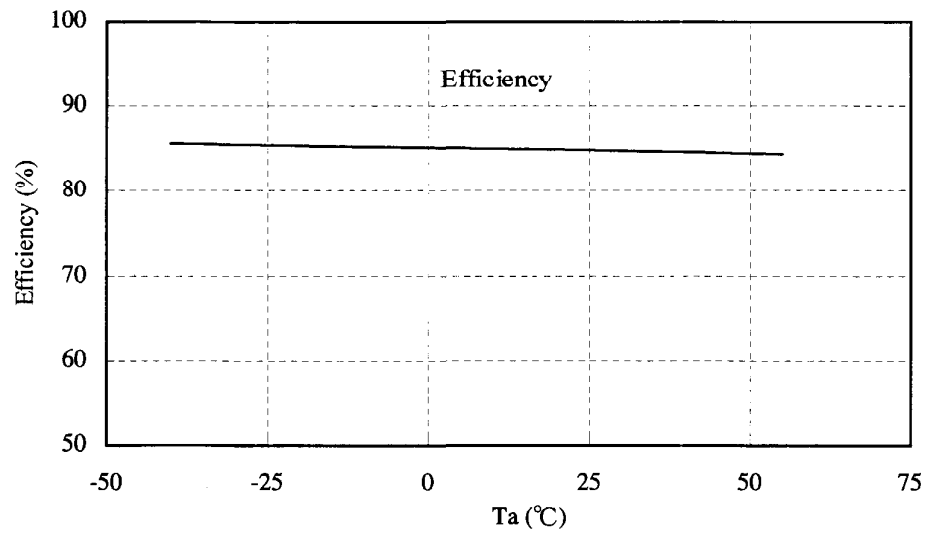
3.3V



2.1 (5) 効率対周囲温度  
Efficiency v.s. ambient temperature

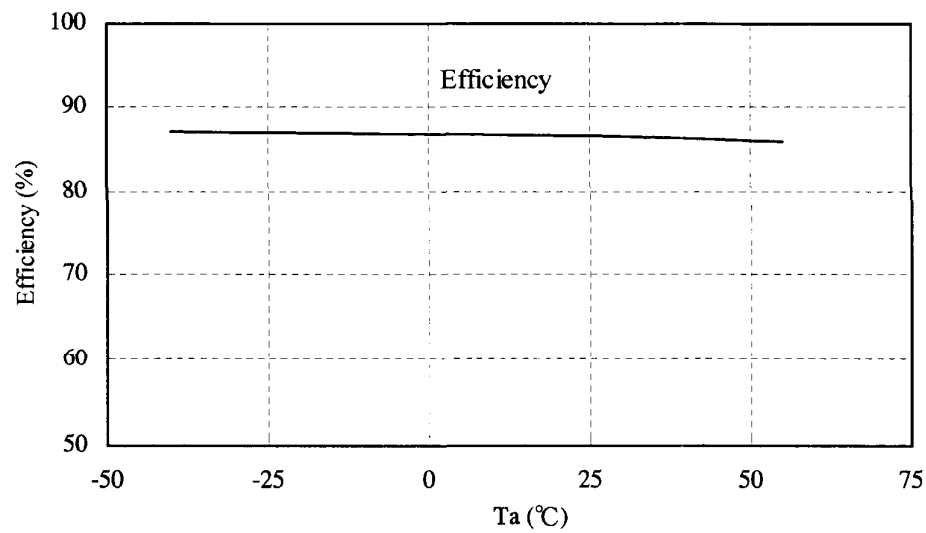
Conditions Vin : 48 VDC  
Iout : 100 %  
Air Velocity : 2m/s

1.2V



Conditions Vin : 48 VDC  
Iout : 100 %  
Air Velocity : 2m/s

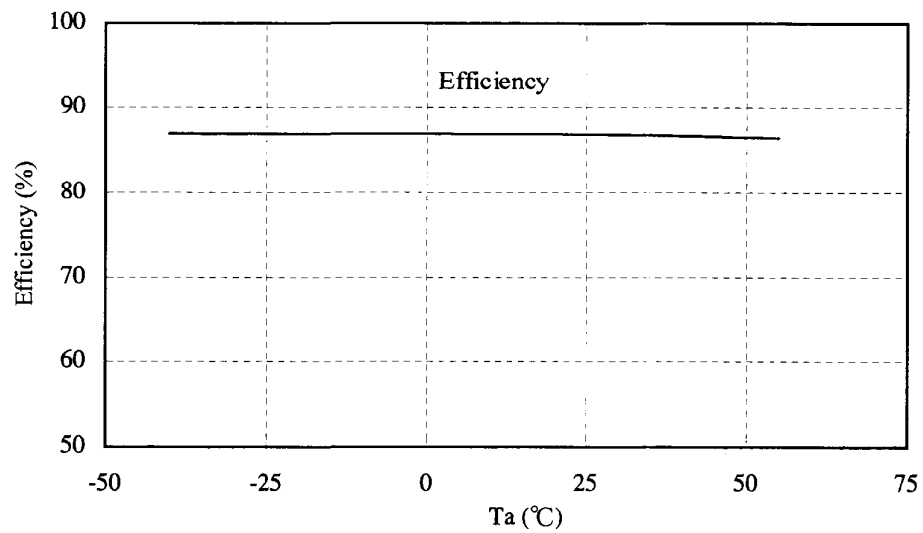
1.5V



2.1 (5) 効率対周囲温度  
Efficiency v.s. ambient temperature

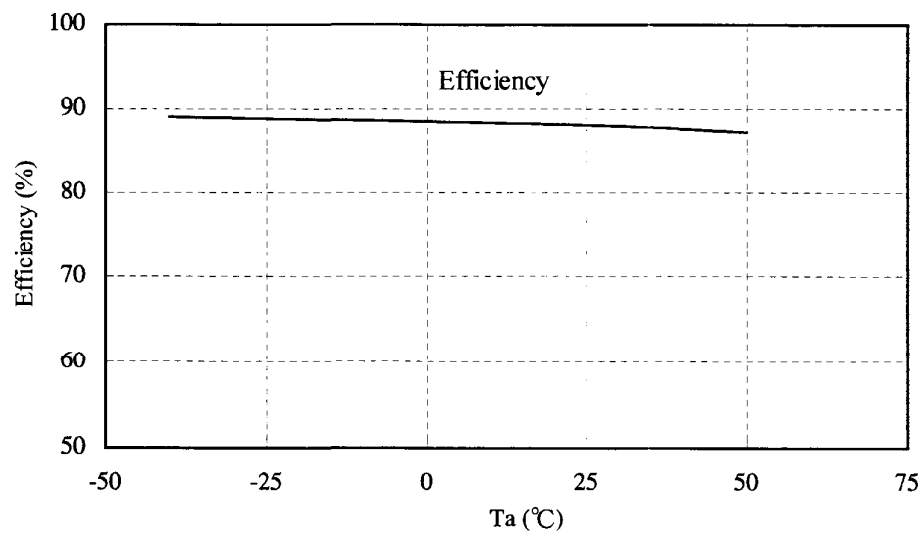
Conditions Vin : 48 VDC  
Iout : 100 %  
Air Velocity : 2m/s

1.8V



Conditions Vin : 48 VDC  
Iout : 100 %  
Air Velocity : 2m/s

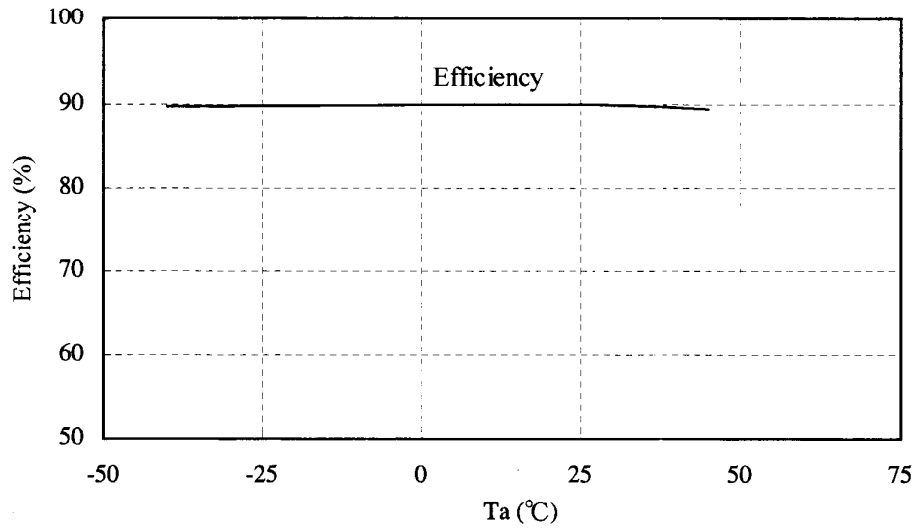
2.5V



2.1 (5) 効率对周围温度  
Efficiency v.s. ambient temperature

Conditions Vin : 48 VDC  
Iout : 100 %  
Air Velocity : 2m/s

3.3V

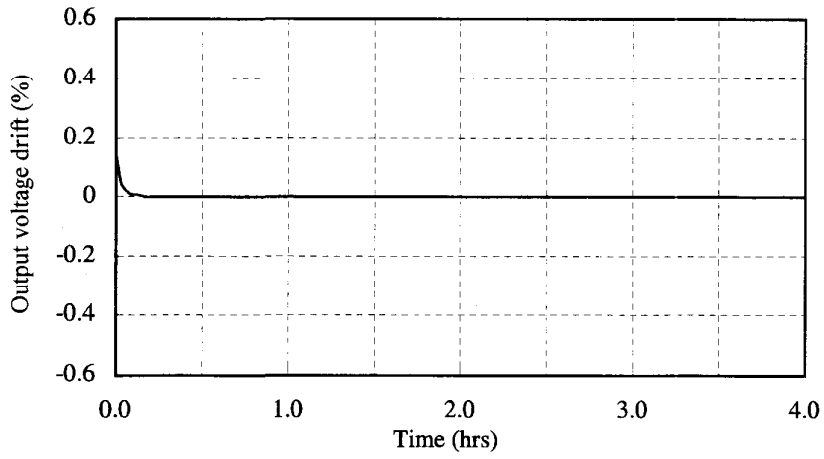




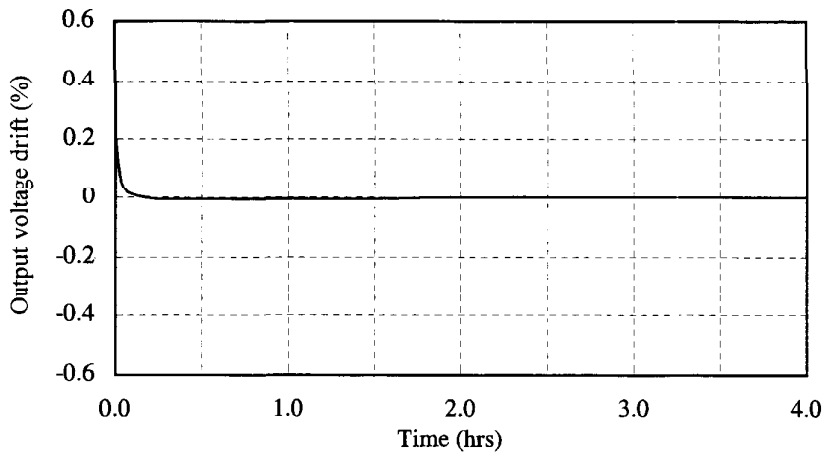
2.2 通電ドリフト特性  
Warm up voltage drift characteristics

Conditions Vin : 48 VDC  
Iout : 100 %  
Ta : 25 °C  
Air Velocity : 2 m/s

1.2V

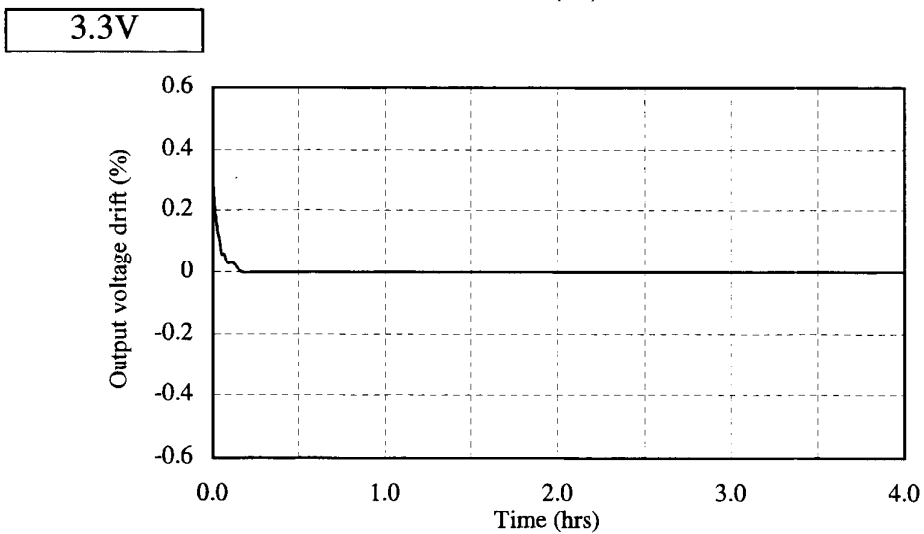
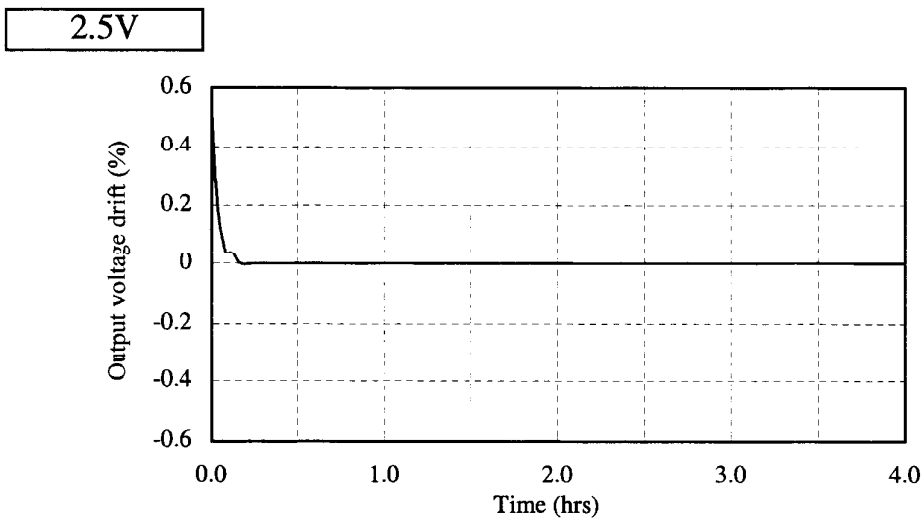
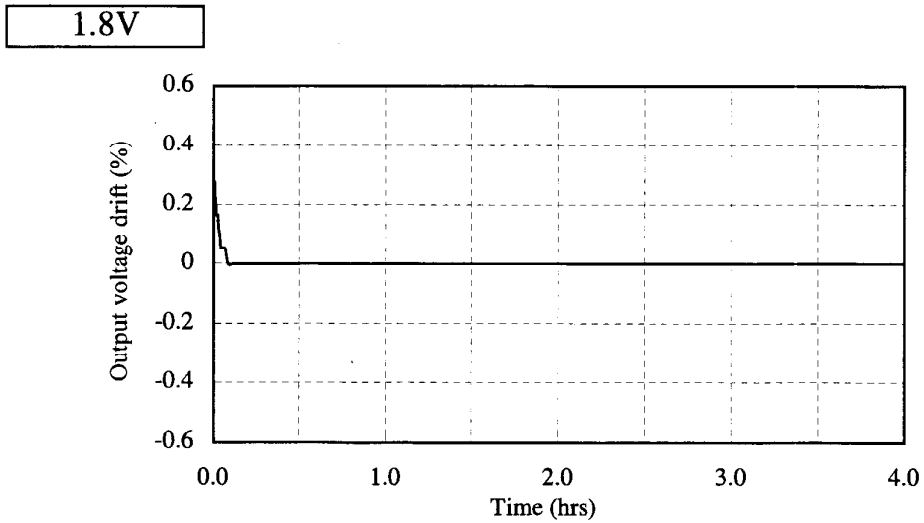


1.5V



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

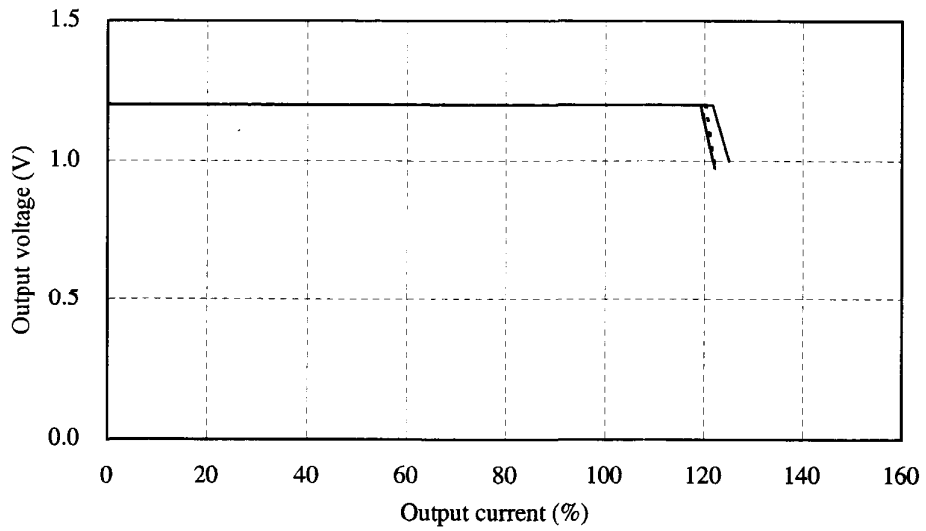
Conditions Vin : 48 VDC  
Iout : 100 %  
Ta : 25 °C  
Air Velocity : 2 m/s



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

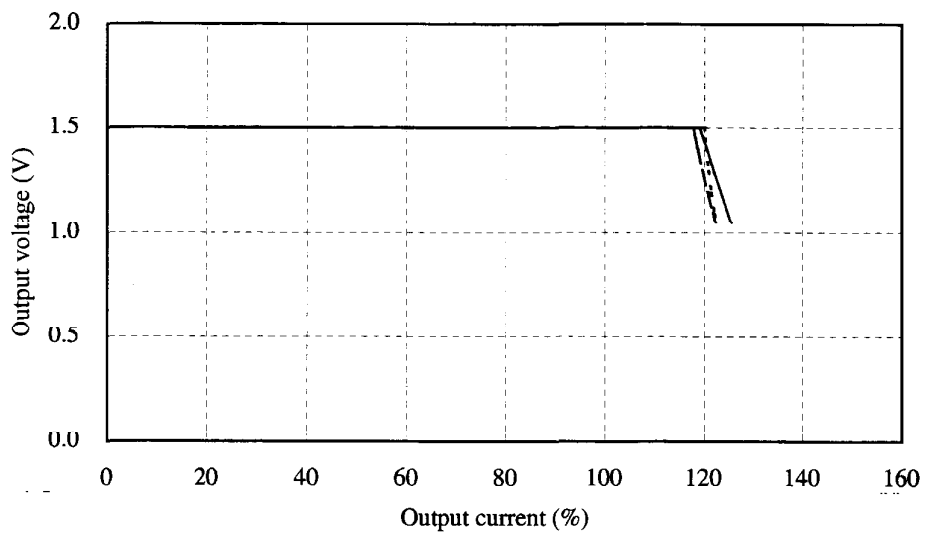
Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC \_\_\_\_\_  
 Ta : 25 °C  
 Air Velocity : 2 m/s

1.2V



Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC \_\_\_\_\_  
 Ta : 25 °C  
 Air Velocity : 2 m/s

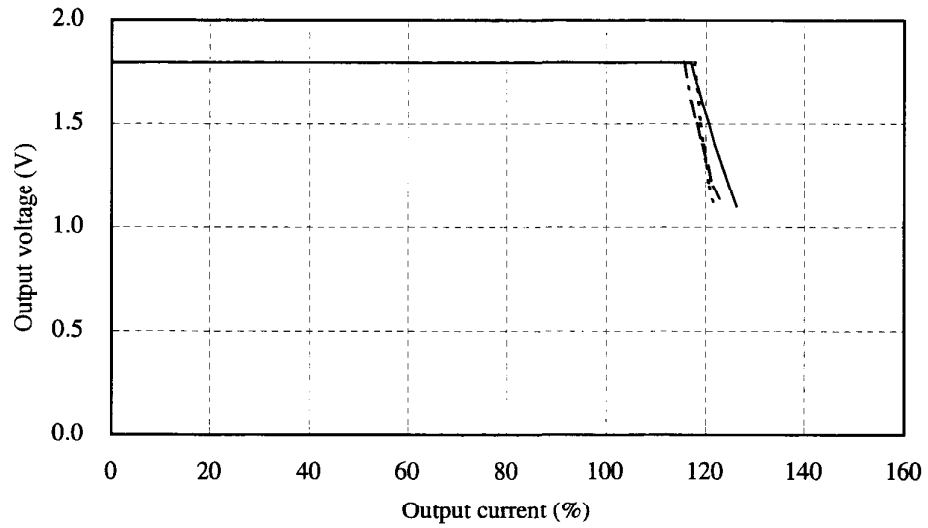
1.5V



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

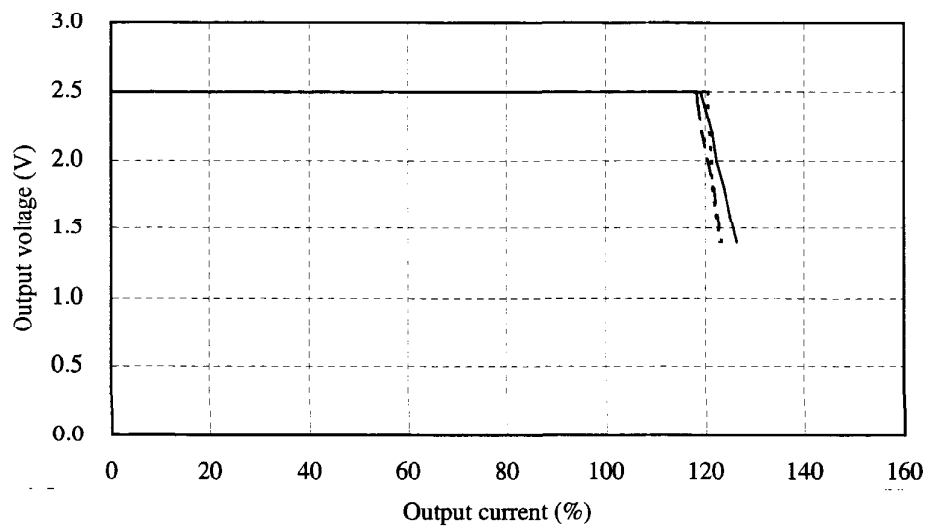
Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC \_\_\_\_\_  
 Ta : 25 °C  
 Air Velocity : 2 m/s

1.8V



Conditions Vin : 36 VDC -----  
 : 48 VDC - - - - -  
 : 76 VDC \_\_\_\_\_  
 Ta : 25 °C  
 Air Velocity : 2 m/s

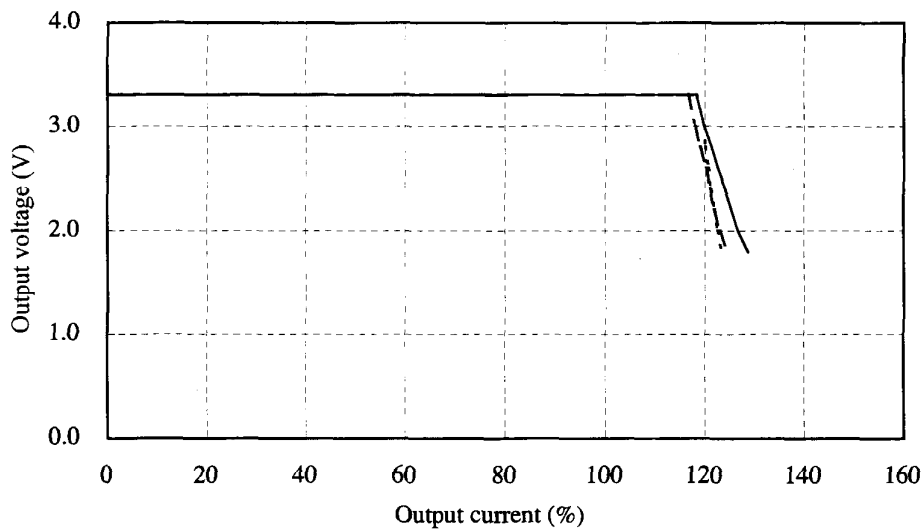
2.5V



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

Conditions Vin : 36 VDC -----  
 : 48 VDC -.-.-.-.-  
 : 76 VDC \_\_\_\_\_  
 Ta : 25 °C  
 Air Velocity : 2 m/s

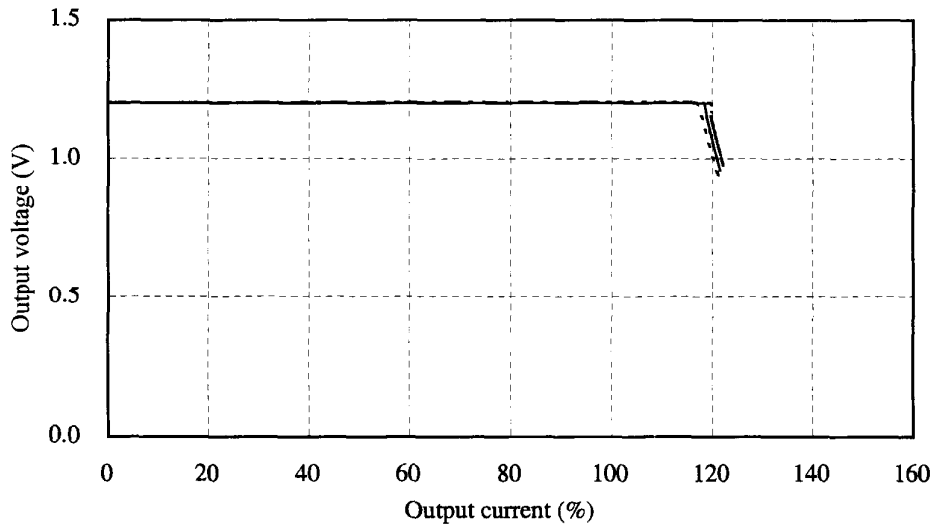
3.3V



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

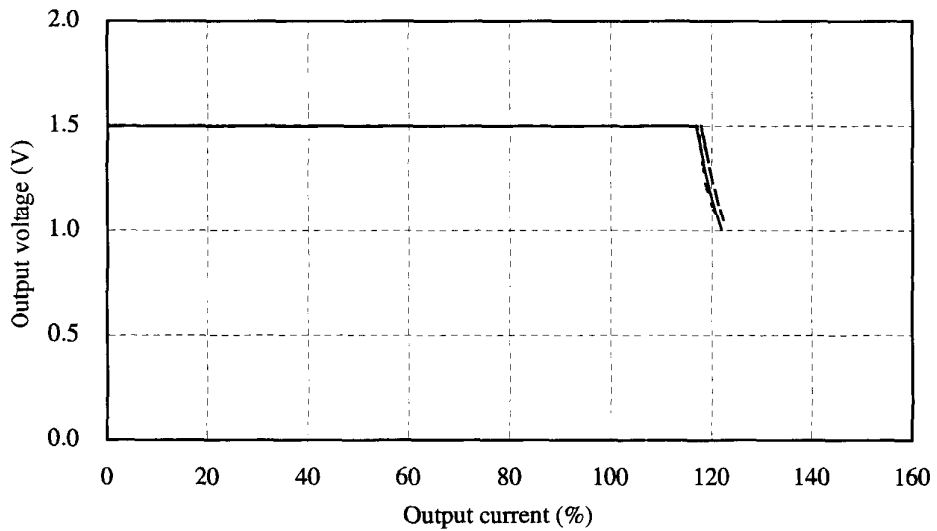
Conditions -Ta : -40 °C -----  
 : 25 °C -.-.-.-  
 : 55 °C \_\_\_\_\_  
 Vin : 48 VDC  
 Air Velocity : 2 m/s

1.2V



Conditions Ta : -40 °C -----  
 : 25 °C -.-.-.-  
 : 55 °C \_\_\_\_\_  
 Vin : 48 VDC  
 Air Velocity : 2 m/s

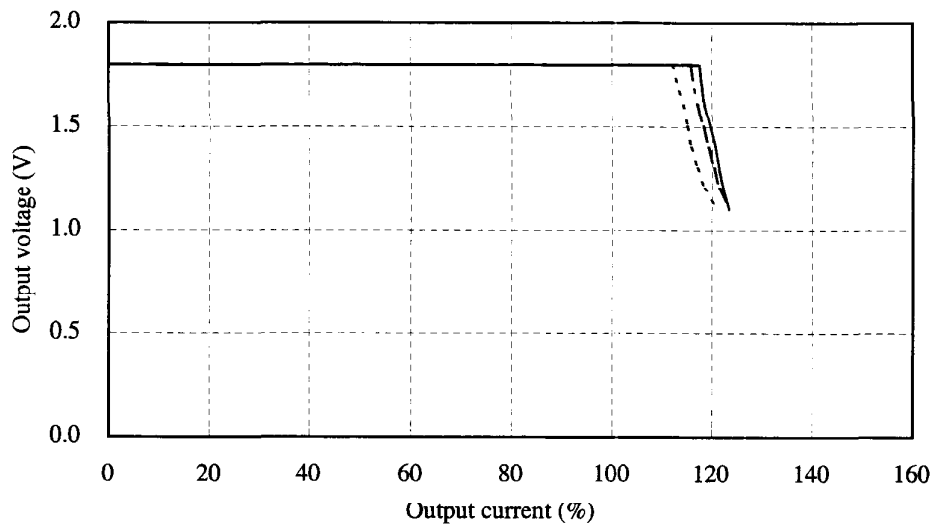
1.5V



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

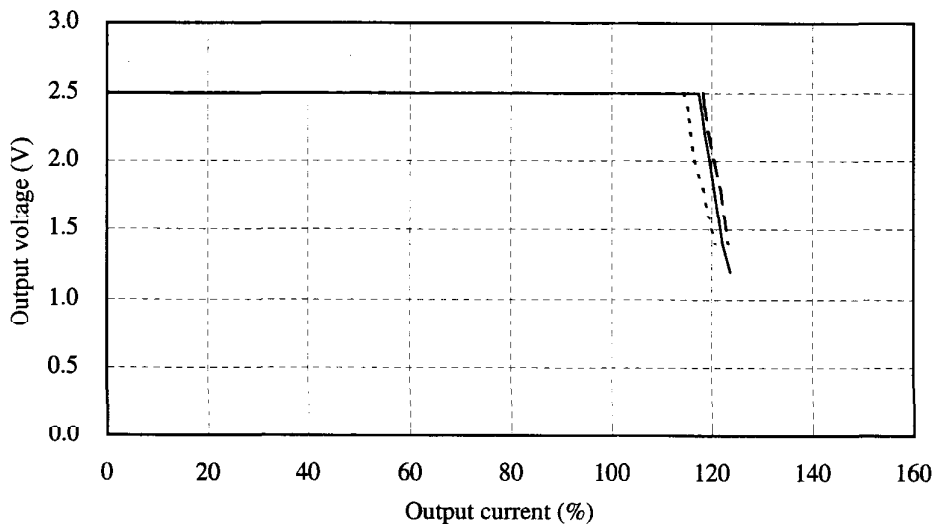
Conditions Ta : -40 °C -----  
 : 25 °C -----  
 : 55 °C -----  
 Vin : 48 VDC  
 Air Velocity : 2 m/s

1.8V



Conditions Ta : -40 °C -----  
 : 25 °C -----  
 : 50 °C -----  
 Vin : 48 VDC  
 Air Velocity : 2 m/s

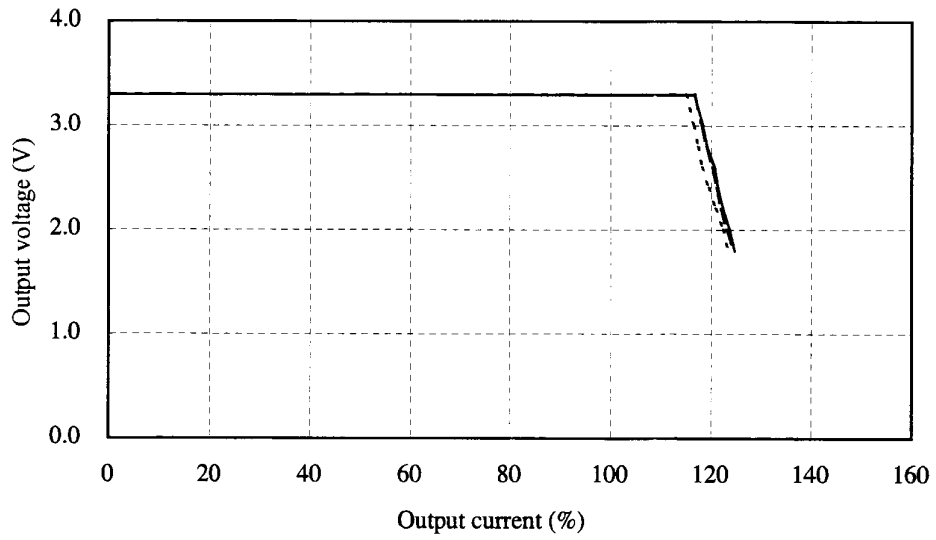
2.5V



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

Conditions Ta : -40 °C -----  
                  : 25 °C       - - - - -  
                  : 45 °C       —————  
Vin : 48 VDC  
Air Velocity : 2 m/s

3.3V

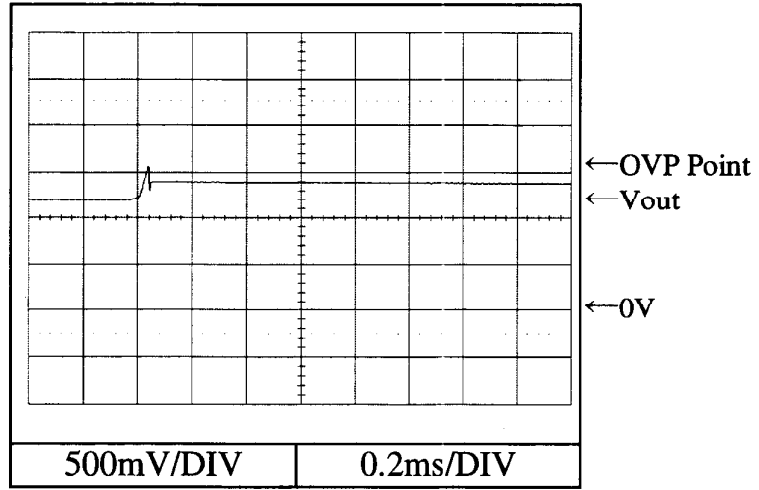




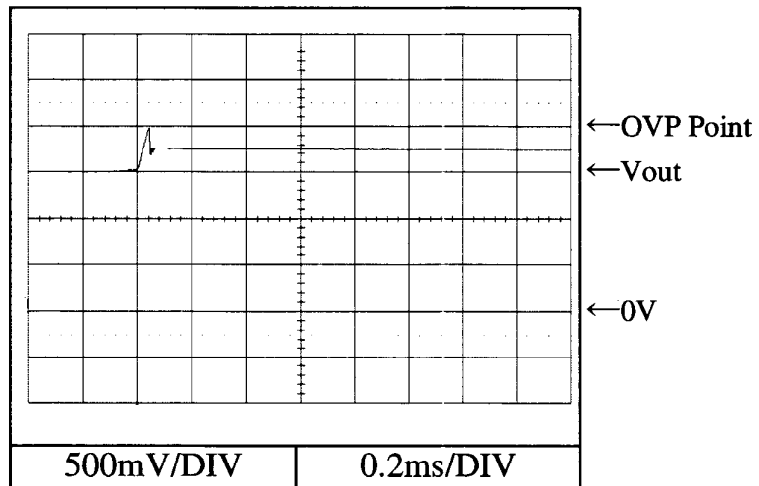
2.4 過電圧保護特性  
Over voltage protection (OVP) characteristics

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C

1.2V



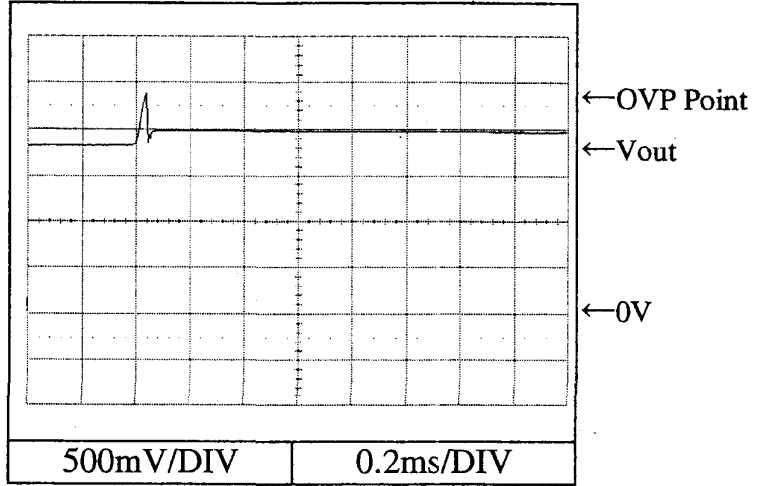
1.5V



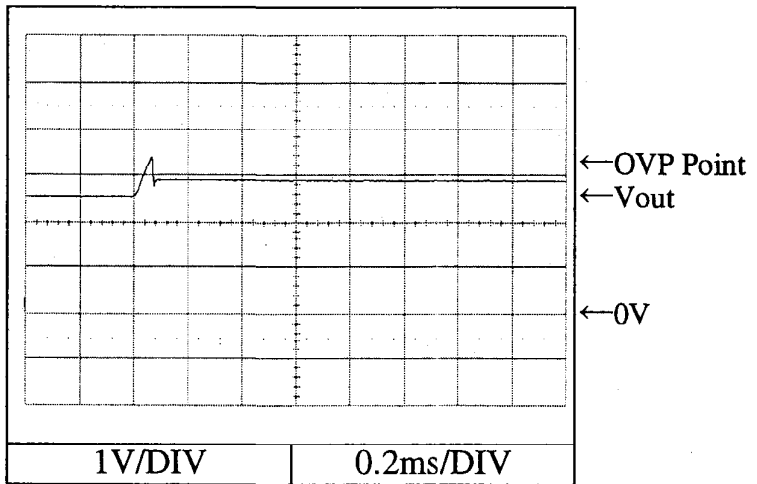
2.4 過電圧保護特性  
Over voltage protection (OVP) characteristics

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C

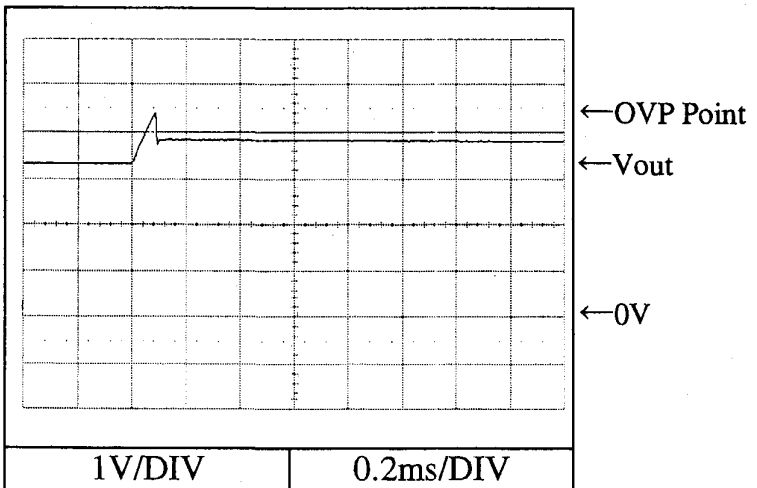
1.8V



2.5V



3.3V

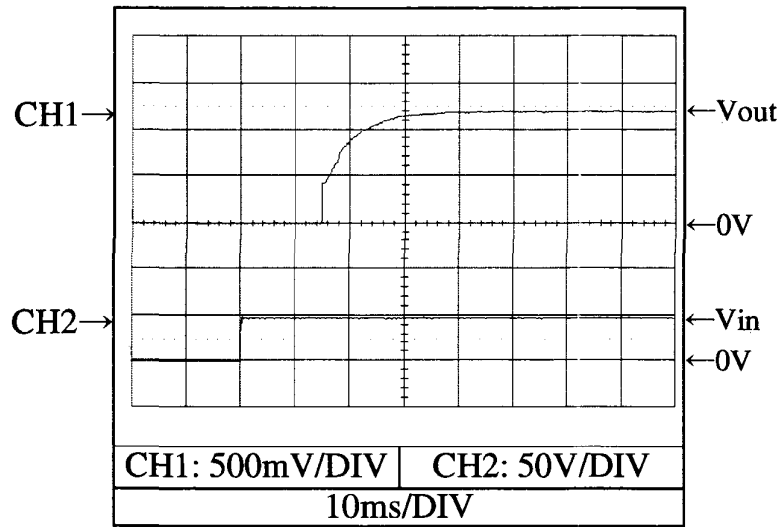


2.5 出力立ち上がり特性  
Output rise characteristics

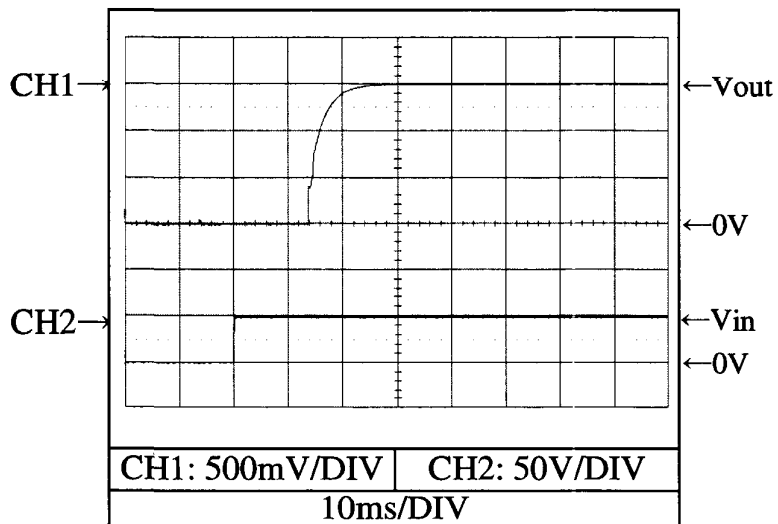
**PAH200H48-\***

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C  
Air Velocity : 2 m/s

1.2V



1.5V

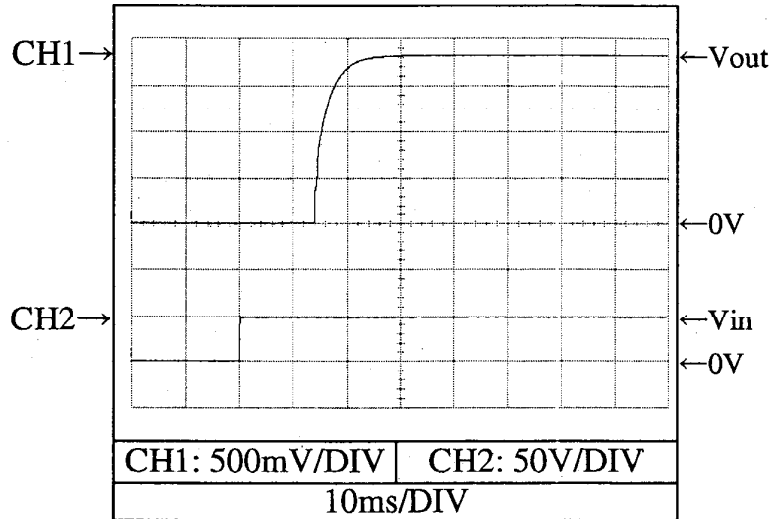


# PAH200H48-\*

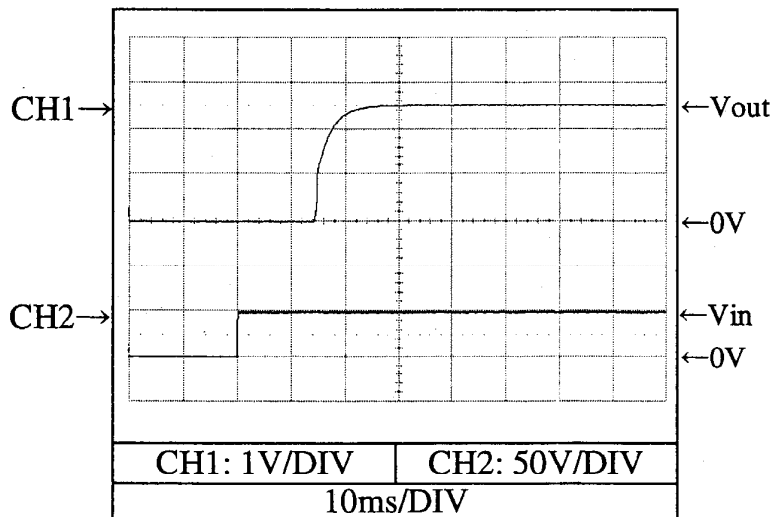
## 2.5 出力立ち上がり特性 Output rise characteristics

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C  
Air Velocity : 2 m/s

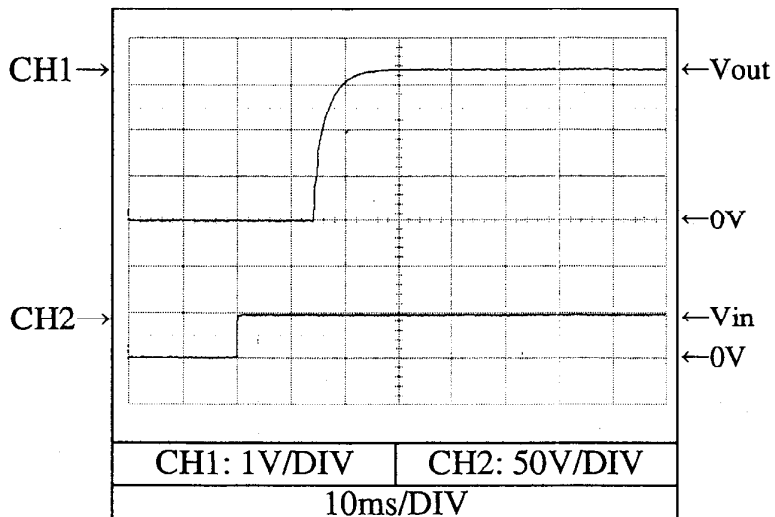
1.8V



2.5V



3.3V

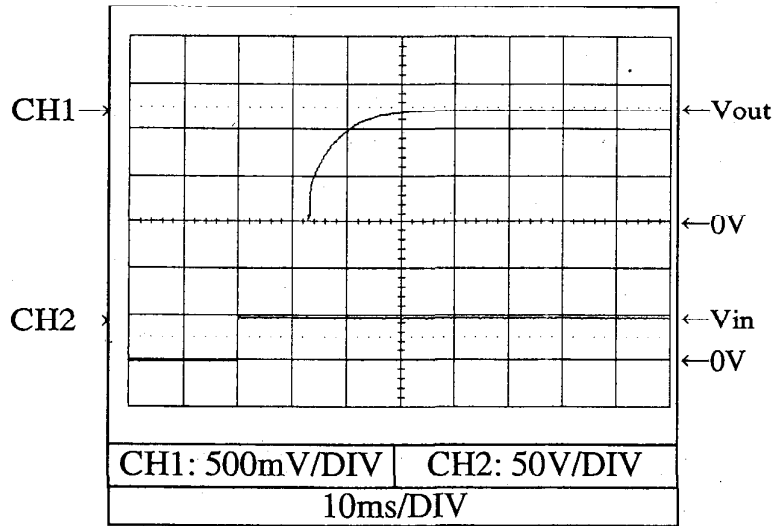


# PAH200H48-\*

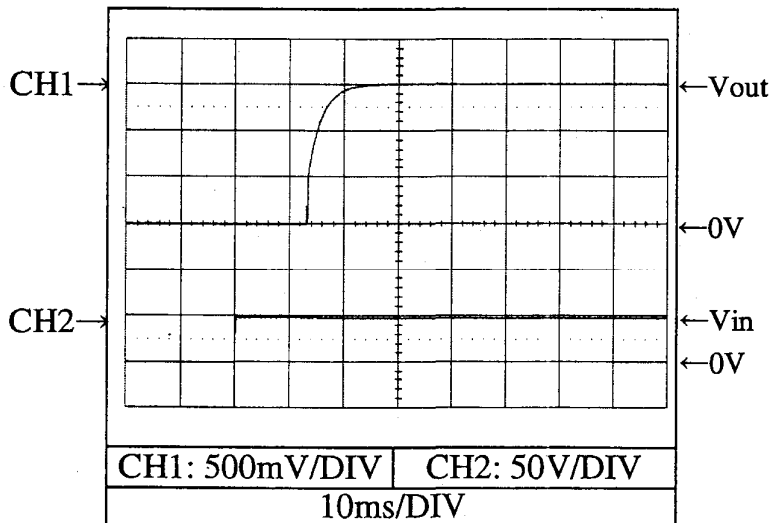
## 2.5 出力立ち上がり特性 Output rise characteristics

Conditions  $V_{in}$  : 48 VDC  
 $I_{out}$  : 100 %  
 $T_a$  : 25 °C  
Air Velocity : 2 m/s

1.2V



1.5V

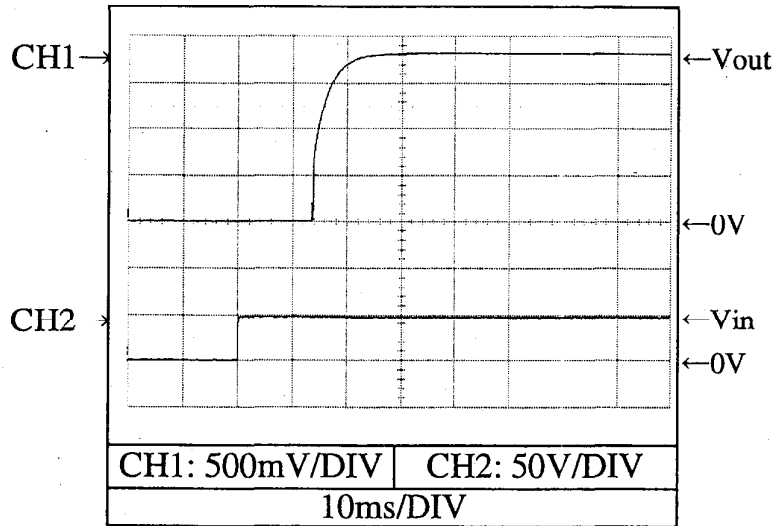


# PAH200H48-\*

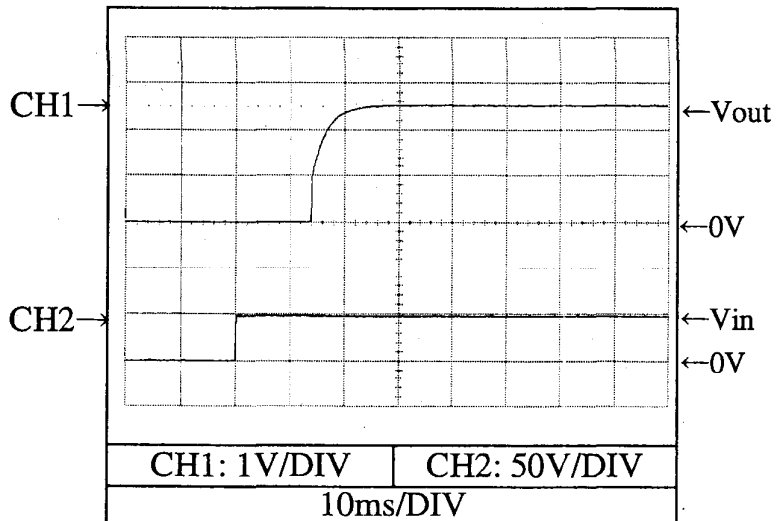
## 2.5 出力立ち上がり特性 Output rise characteristics

Conditions Vin : 48 VDC  
Iout : 100 %  
Ta : 25 °C  
Air Velocity : 2 m/s

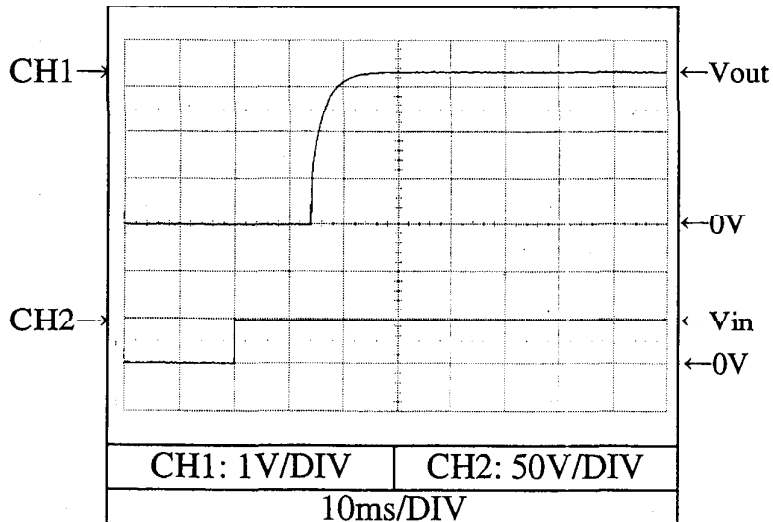
1.8V



2.5V



3.3V

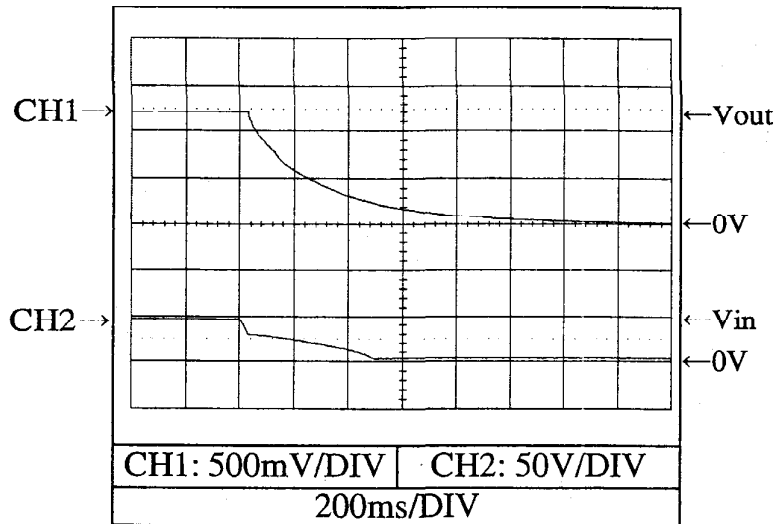


2.6 出力立ち下がり特性  
Output fall characteristics

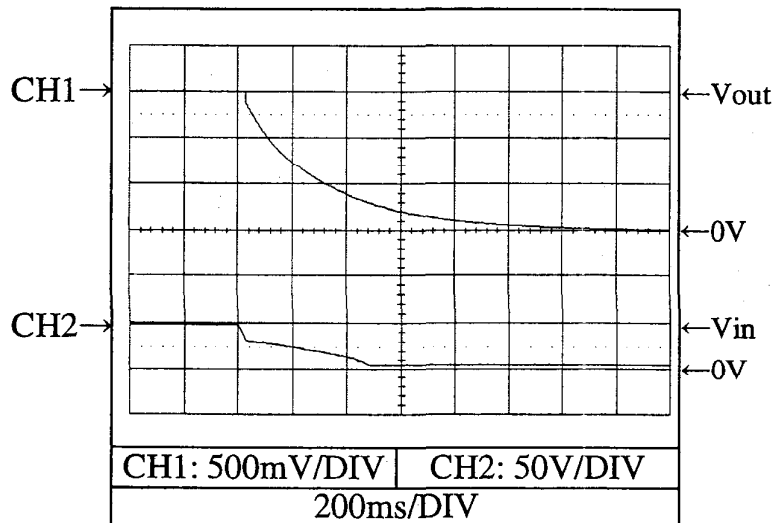
PAH200H48-\*

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C  
Air Velocity : 2 m/s

1.2V



1.5V

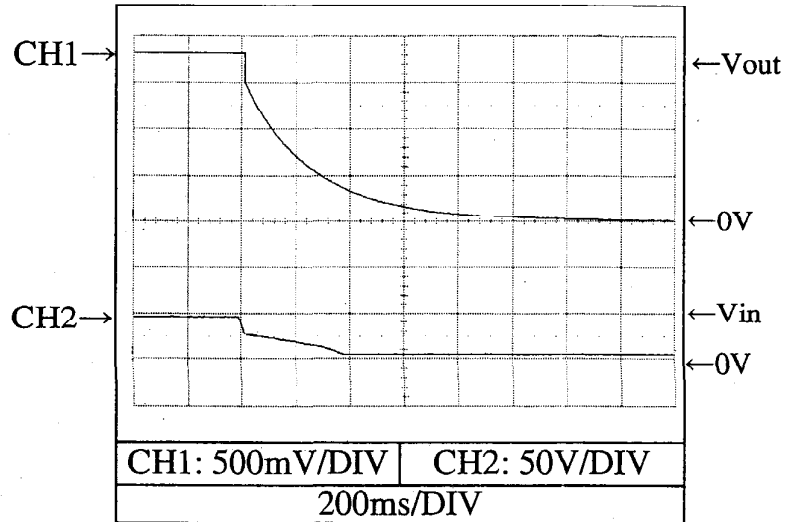


2.6 出力立ち下がり特性  
Output fall characteristics

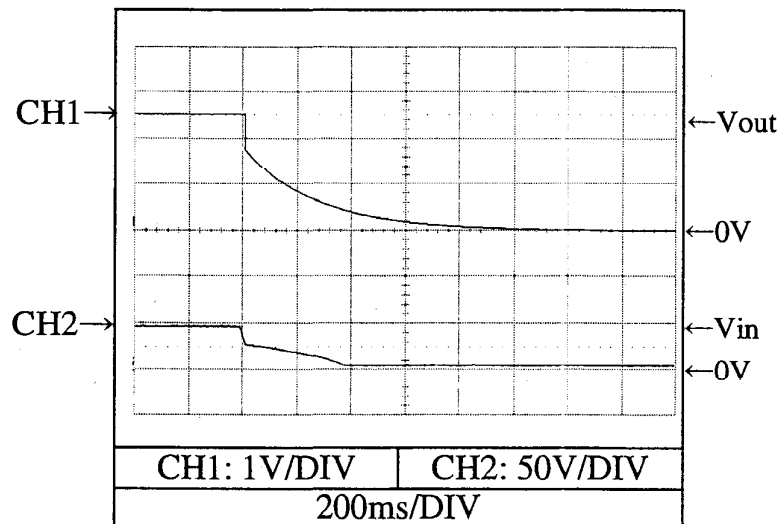
PAH200H48-\*

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C  
Air Velocity : 2 m/s

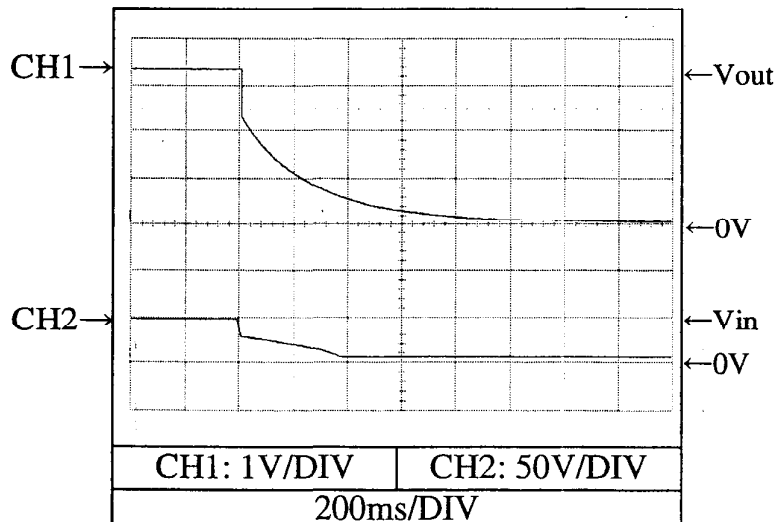
1.8V



2.5V



3.3V



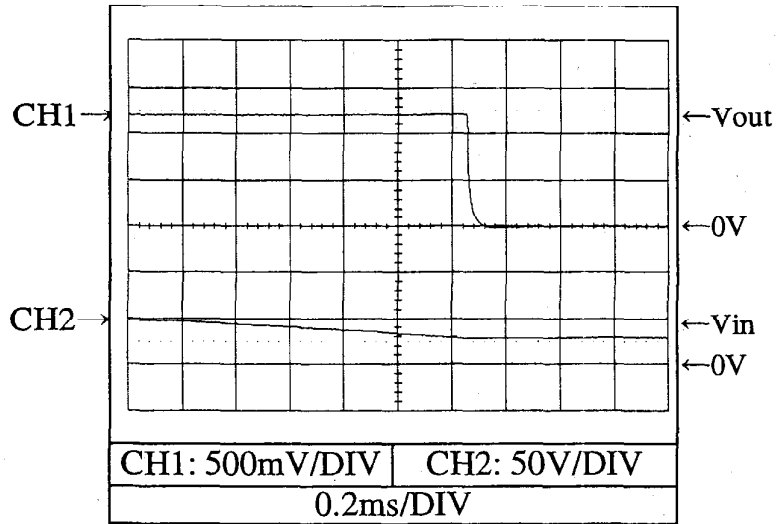


2.6 出力立ち下がり特性  
Output rise characteristics

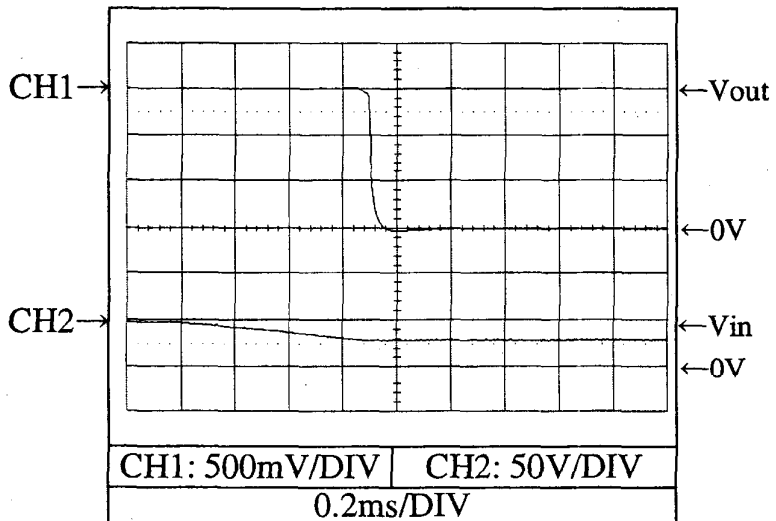
PAH200H48-\*

Conditions Vin : 48 VDC  
Iout : 100 %  
Ta : 25 °C  
Air Velocity : 2 m/s

1.2V



1.5V

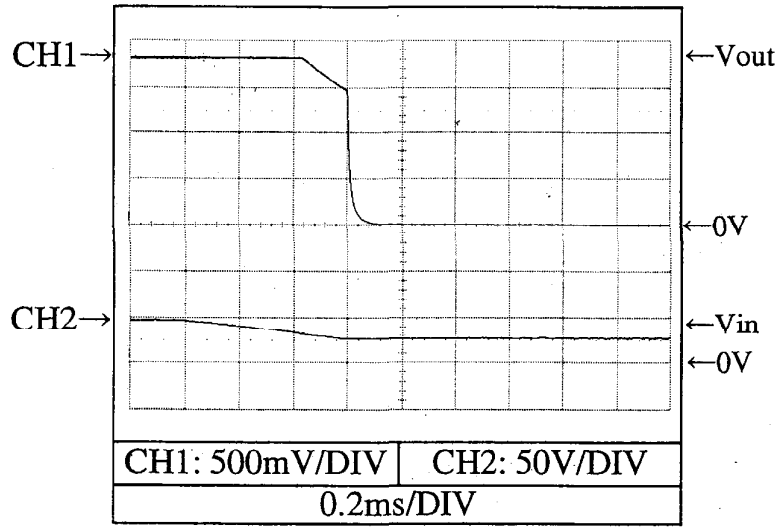


2.6 出力立ち下がり特性  
Output rise characteristics

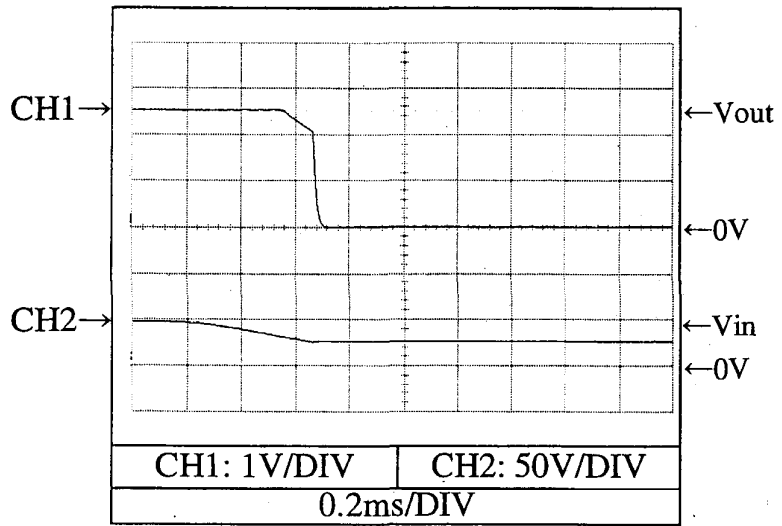
**PAH200H48-\***

Conditions Vin : 48 VDC  
Iout : 100 %  
Ta : 25 °C  
Air Velocity : 2 m/s

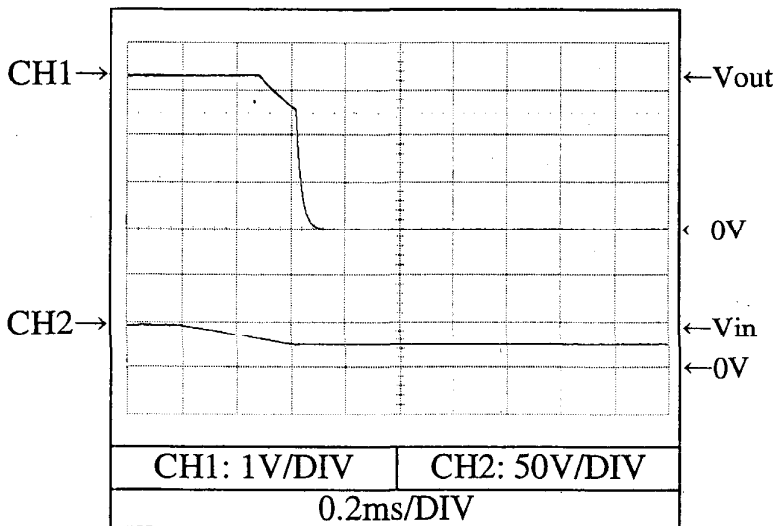
1.8V



2.5V



3.3V

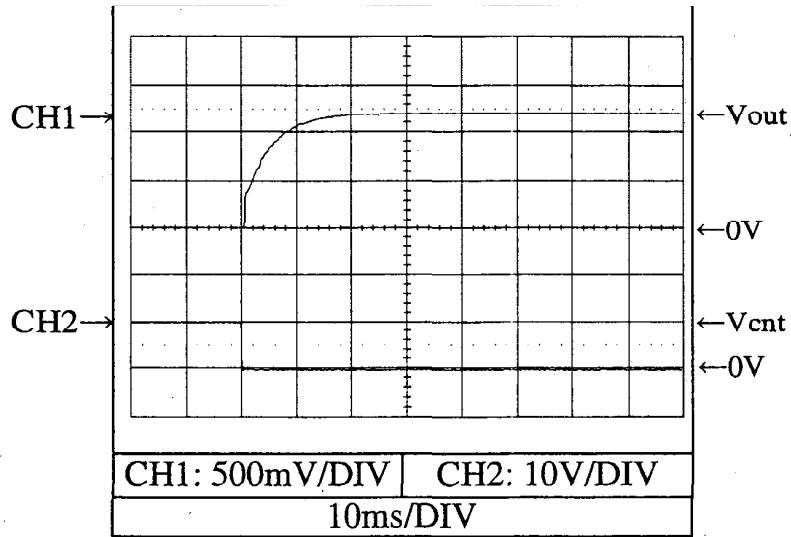


2.7 出力立ち上がり特性 (ON/OFFコントロール時)  
Output rise characteristics with ON/OFF CONTROL

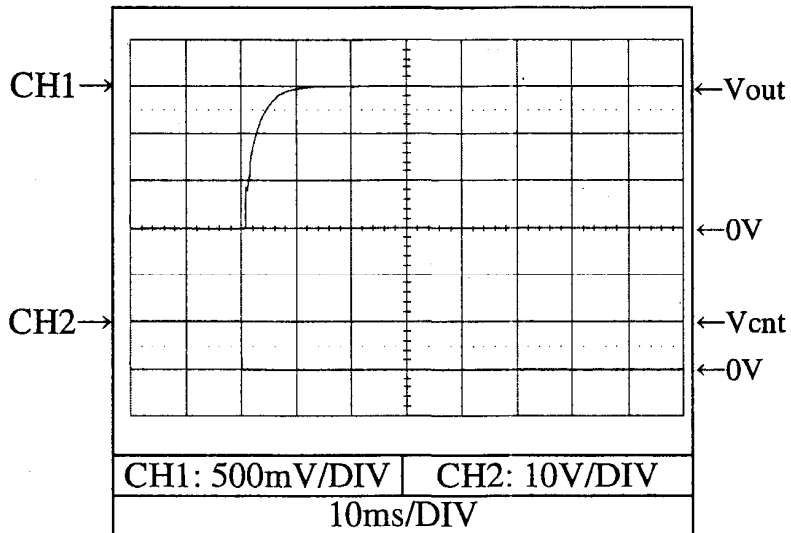
PAH200H48-\*

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C  
Air Velocity : 2 m/s

1.2V



1.5V

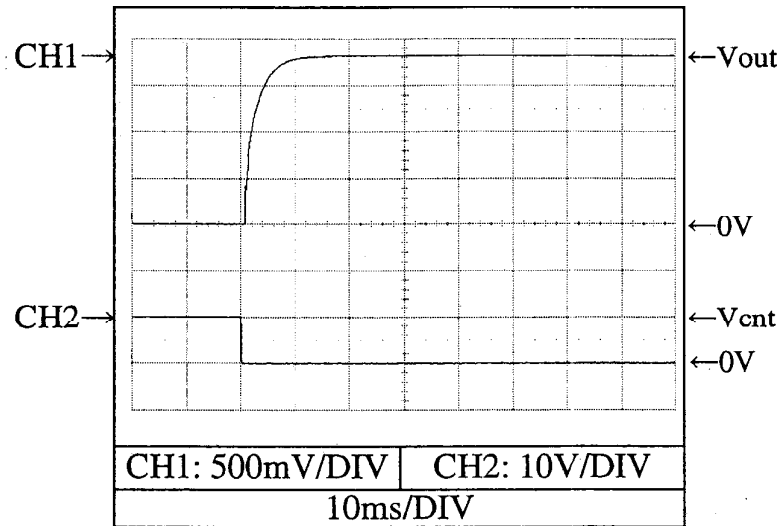


# PAH200H48-\*

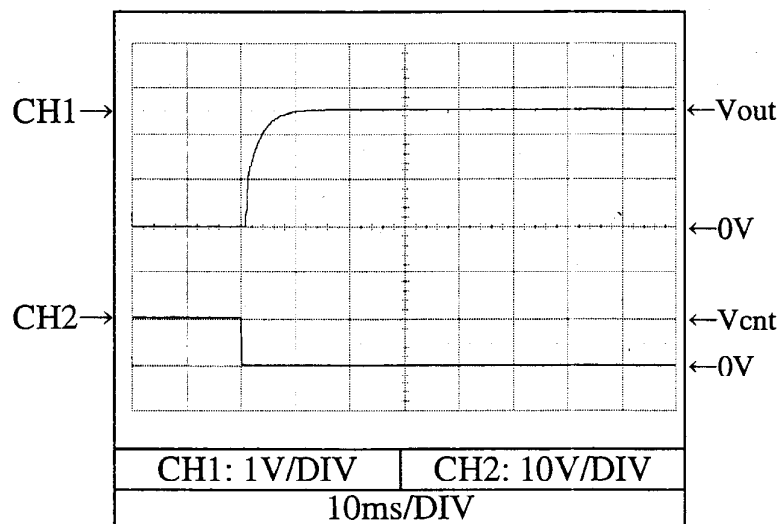
## 2.7 出力立ち上がり特性 (ON/OFFコントロール時) Output rise characteristics with ON/OFF CONTROL

Conditions Vin : 48 VDC  
Iout : 0 %  
Ta : 25 °C  
Air Velocity : 2 m/s

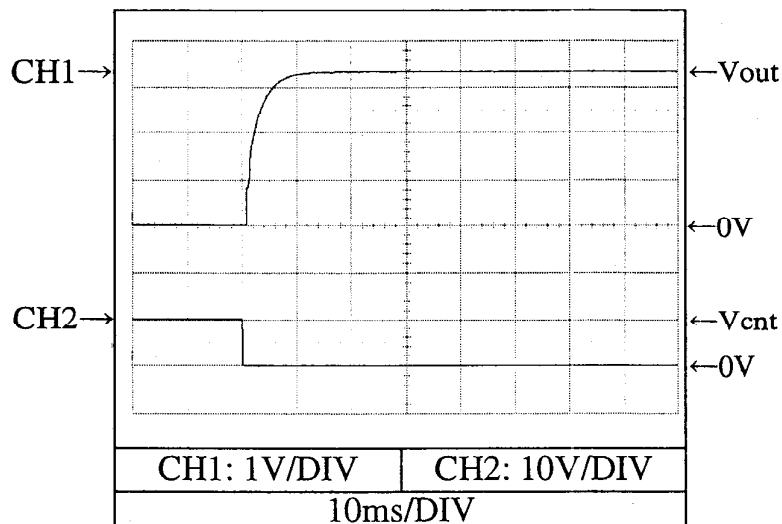
1.8V



2.5V



3.3V



2.7 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

PAH200H48-\*

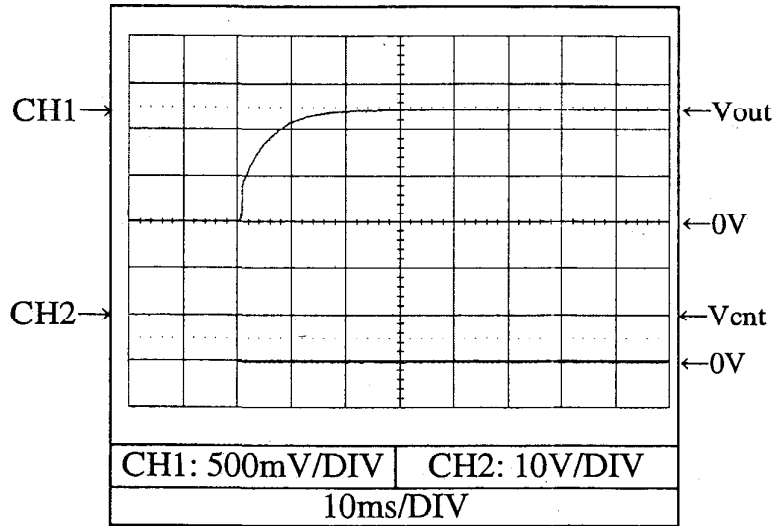
Conditions  $V_{in}$  : 48 VDC

$I_{out}$  : 100 %

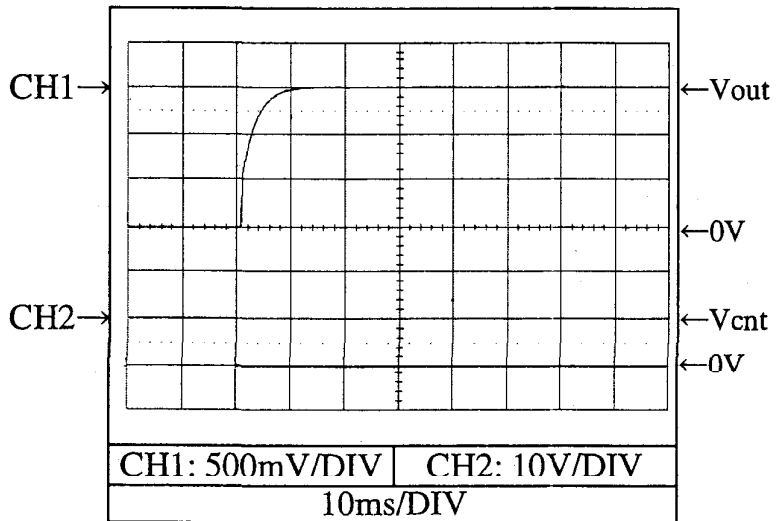
$T_a$  : 25 °C

Air Velocity : 2 m/s

1.2V



1.5V

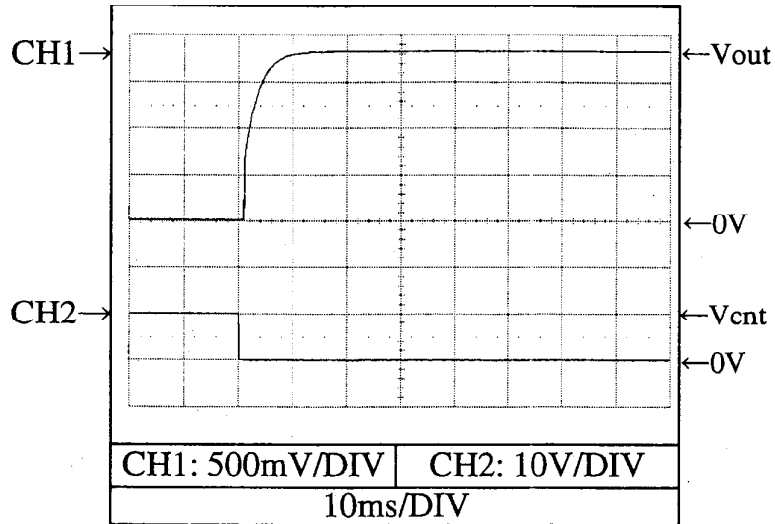


2.7 出力立ち上がり特性 (ON/OFFコントロール時)  
 Output rise characteristics with ON/OFF CONTROL

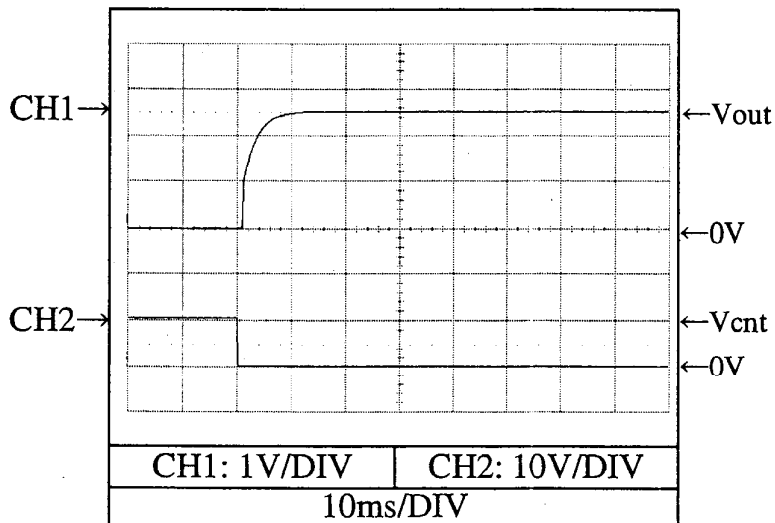
PAH200H48-\*

Conditions Vin : 48 VDC  
 Iout : 100 %  
 Ta : 25 °C  
 Air Velocity : 2 m/s

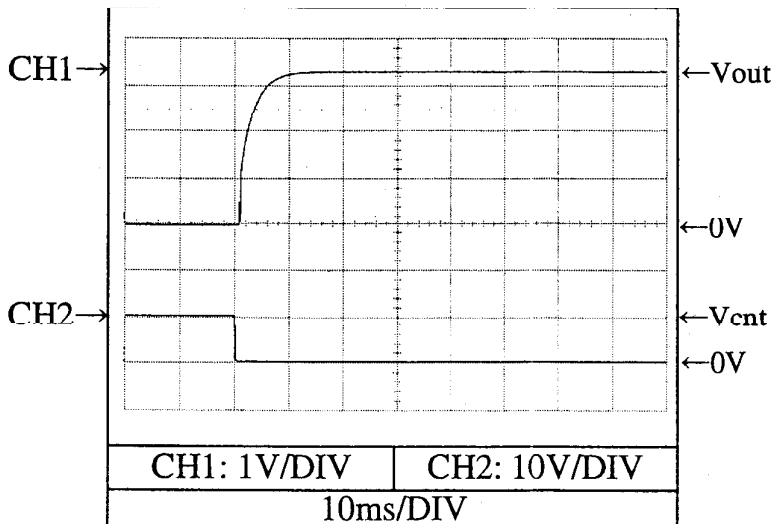
1.8V



2.5V



3.3V

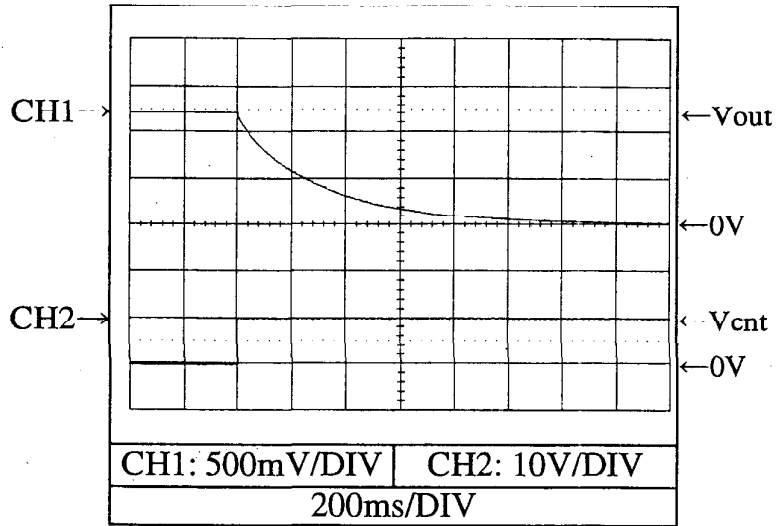


2.8 出力立ち下がり特性 (ON/OFFコントロール時)  
 Output fall characteristics with ON/OFF CONTROL

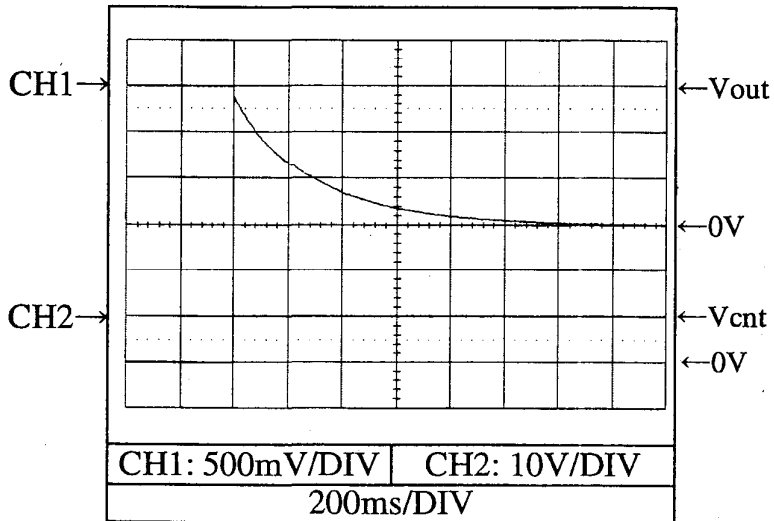
PAH200H48-\*

Conditions Vin : 48 VDC  
 Iout : 0 %  
 Ta : 25 °C  
 Air Velocity : 2 m/s

1.2V



1.5V

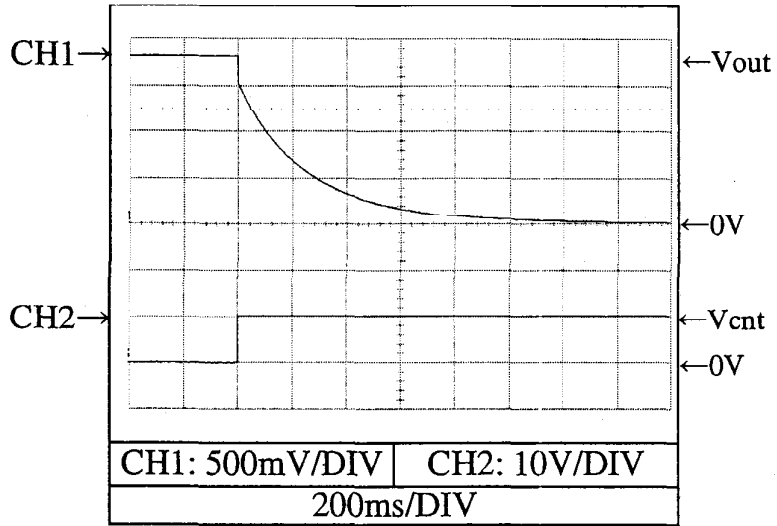


2.8 出力立ち下がり特性 (ON/OFFコントロール時)  
 Output fall characteristics with ON/OFF CONTROL

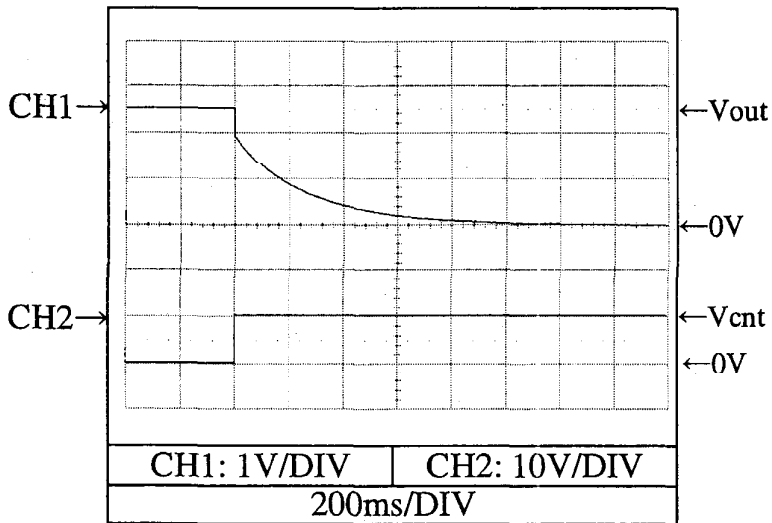
PAH200H48-\*

Conditions Vin : 48 VDC  
 Iout : 0 %  
 Ta : 25 °C  
 Air Velocity : 2 m/s

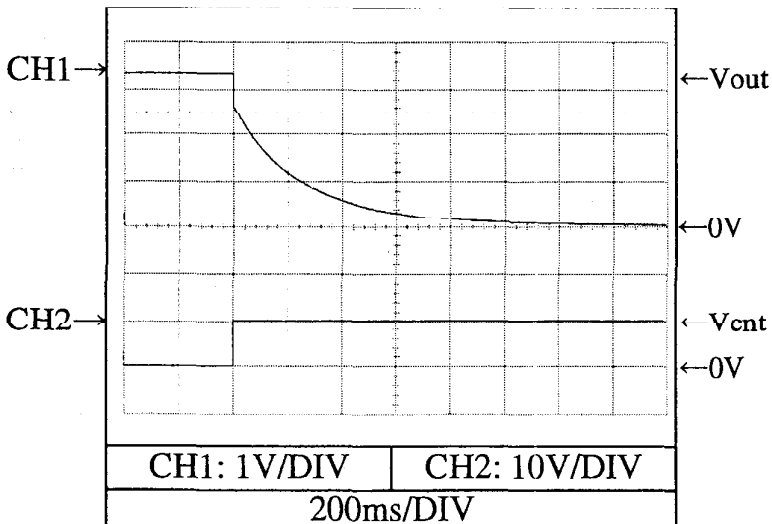
1.8V



2.5V



3.3V





2.8 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

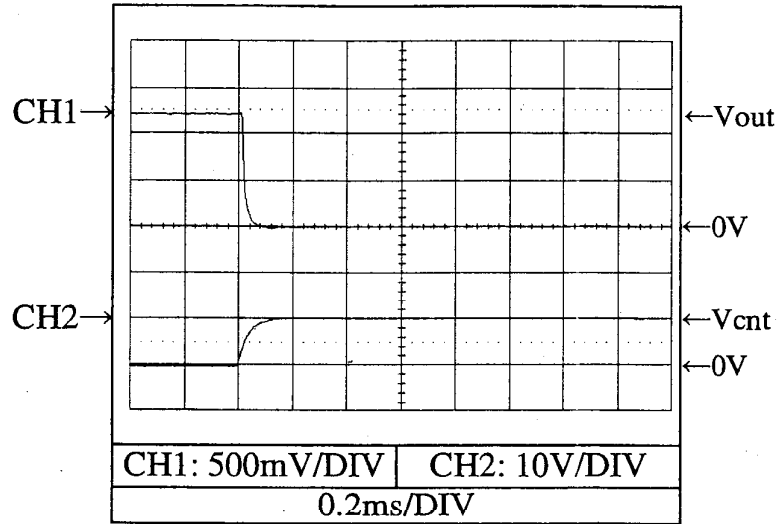
Conditions Vin : 48 VDC

Iout : 100 %

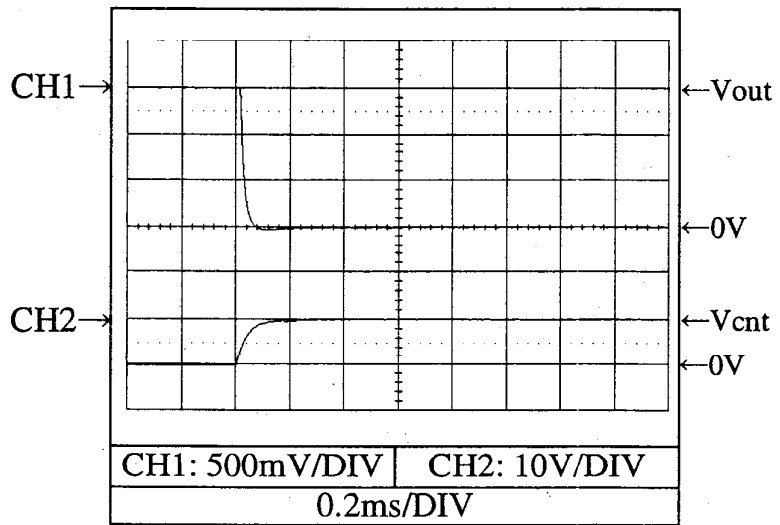
Ta : 25 °C

Air Velocity : 2 m/s

1.2V



1.5V



2.8 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

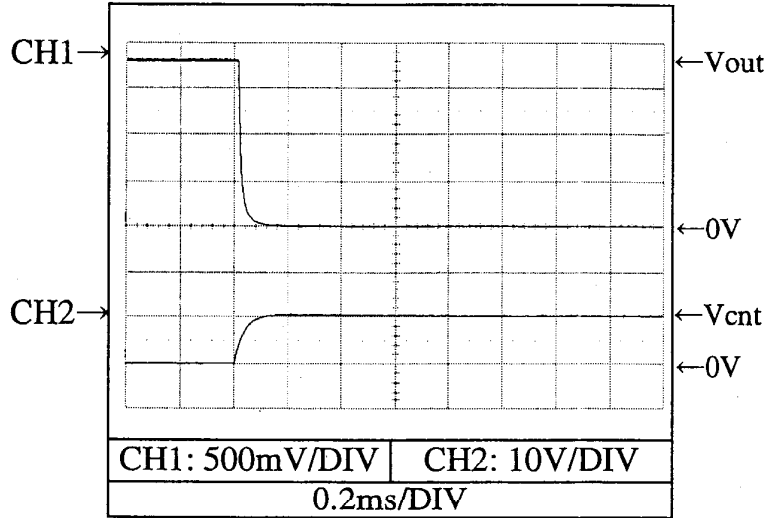
Conditions  $V_{in}$  : 48 VDC

$I_{out}$  : 100 %

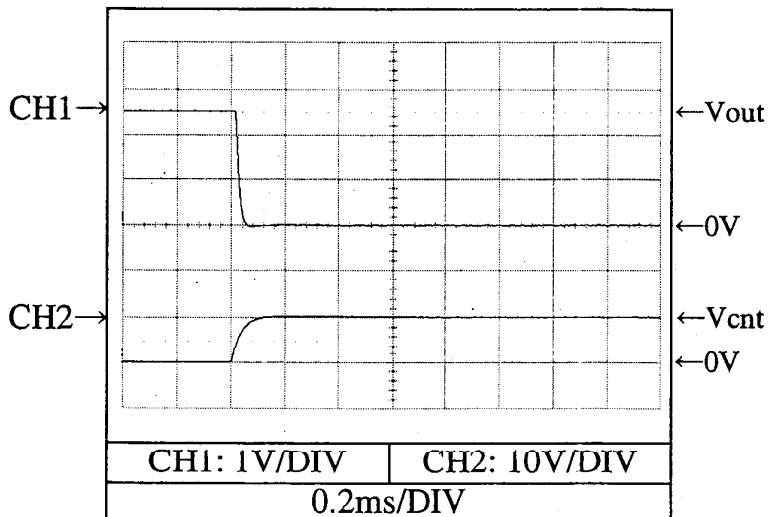
$T_a$  : 25 °C

Air Velocity : 2 m/s

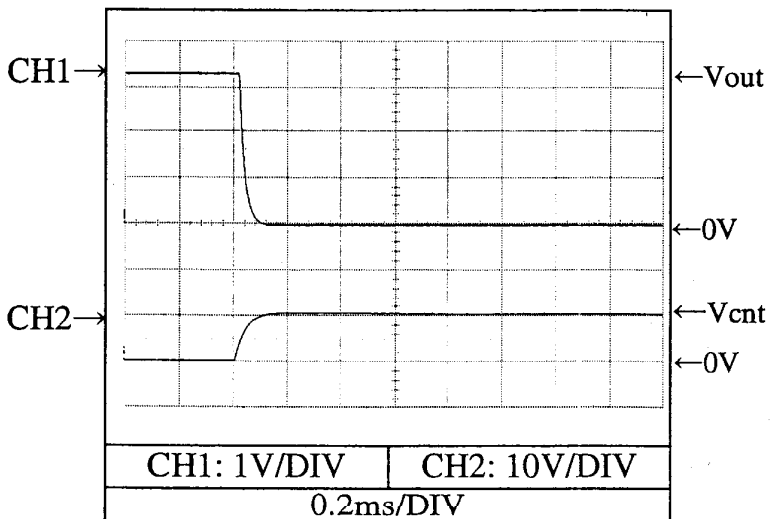
1.8V



2.5V



3.3V



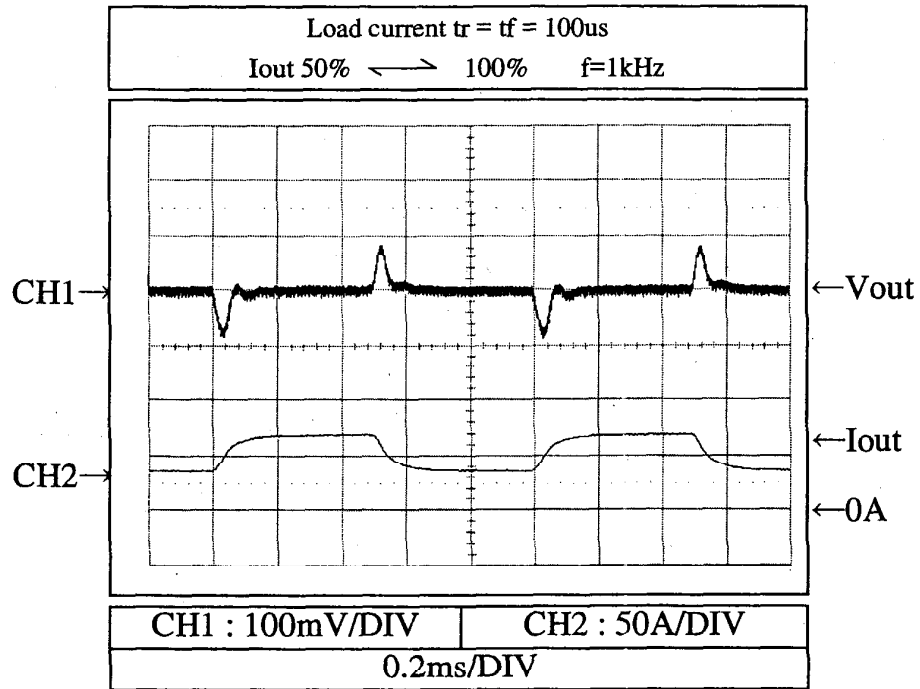
2.9 過渡応答 (負荷急変) 特性  
Dynamic load response characteristics

Conditions Vin : 48 VDC

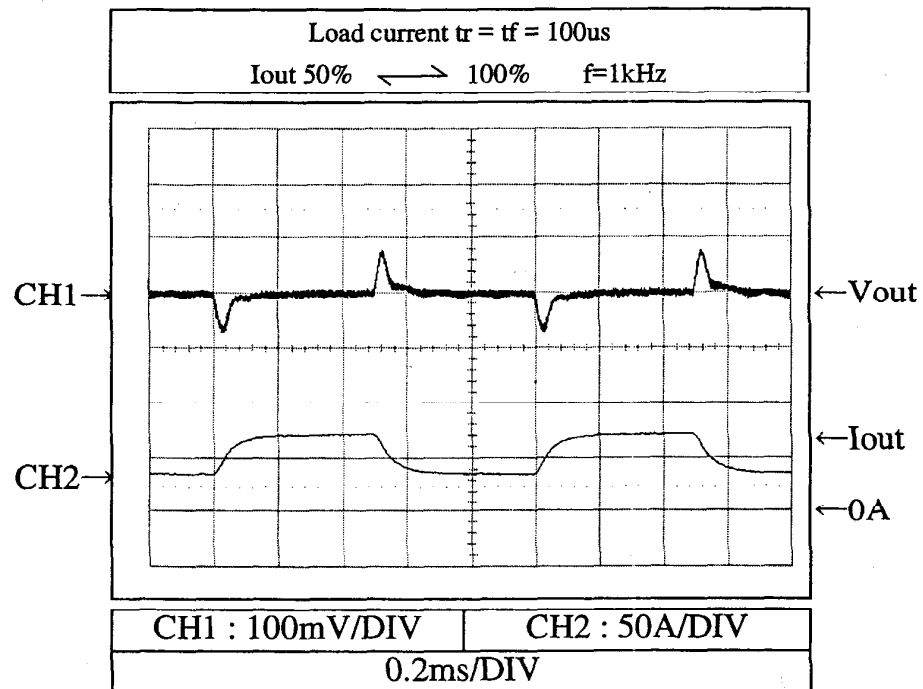
Ta : 25 °C

Air Velocity : 2 m/s

1.2V



1.5V



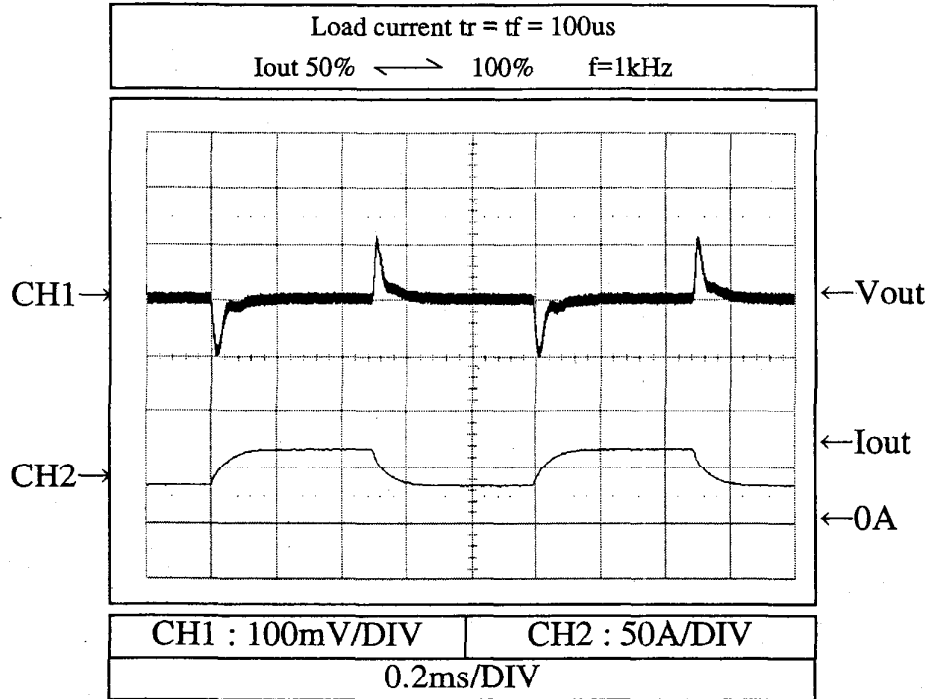
2.9 過渡応答（負荷急変）特性  
Dynamic load response characteristics

Conditions Vin : 48 VDC

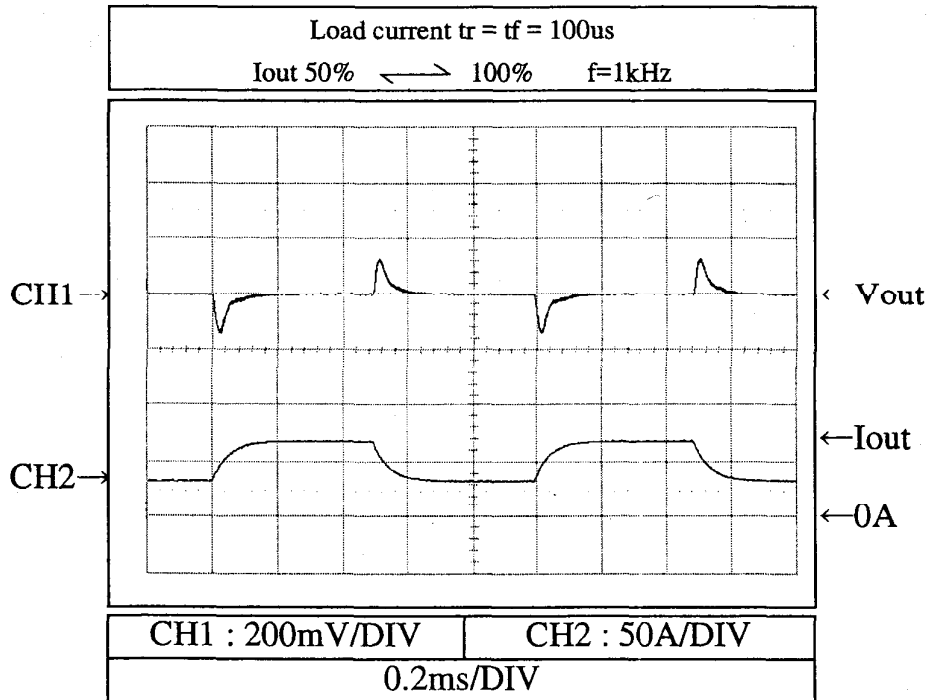
Ta : 25 °C

Air Velocity : 2 m/s

1.8V



2.5V



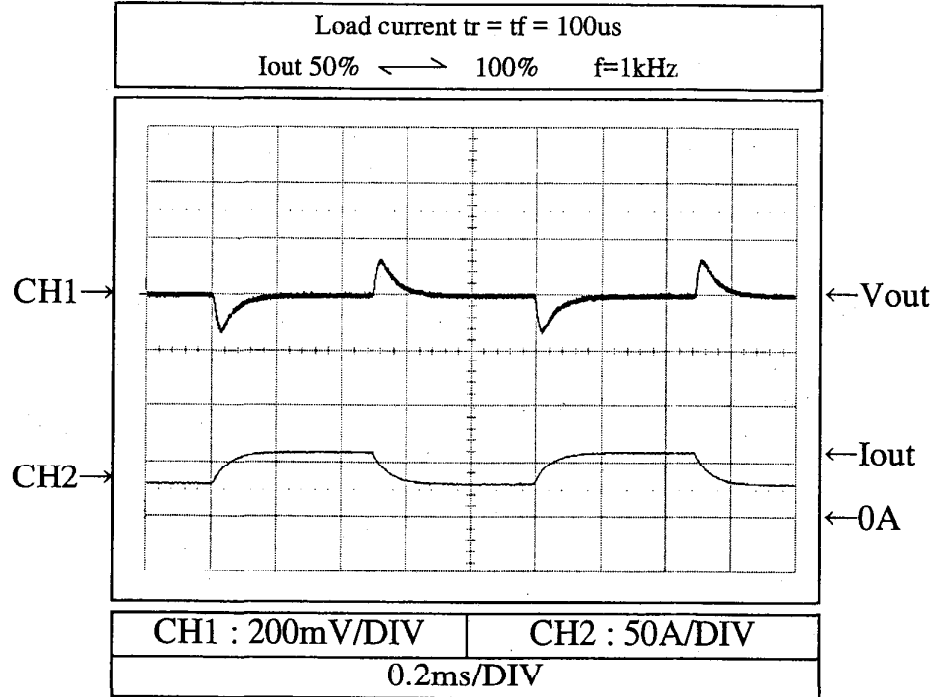
2.9 過渡応答 (負荷急変) 特性  
Dynamic load response characteristics

Conditions Vin : 48 VDC

Ta : 25 °C

Air Velocity : 2 m/s

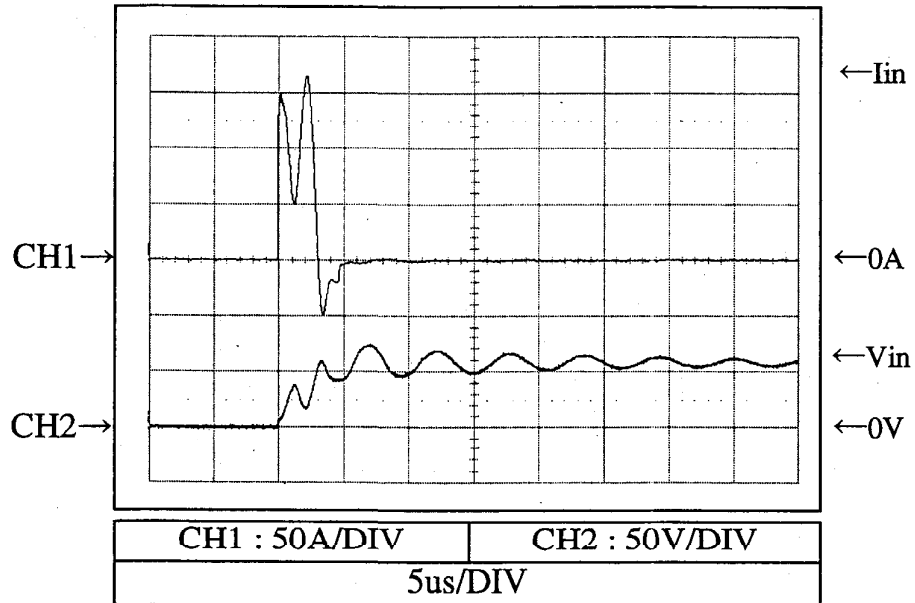
3.3V



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

Conditions Vin : 48 VDC  
Iout : 100 %  
Ta : 25 °C  
Air Velocity : 2 m/s

3.3V

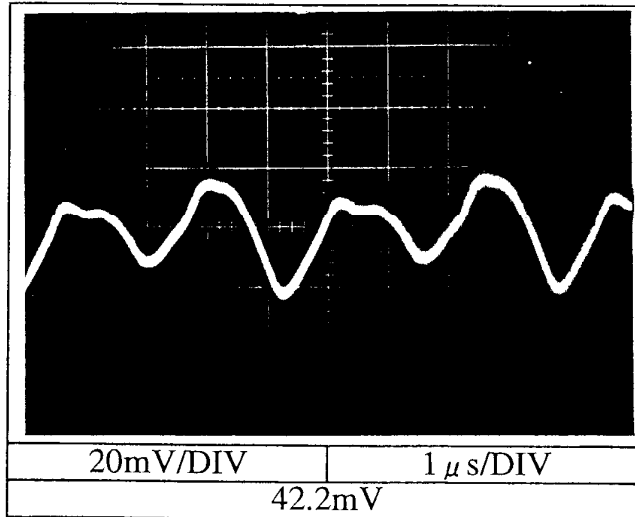


2.11 出力リップル、ノイズ波形  
Output ripple and noise waveform

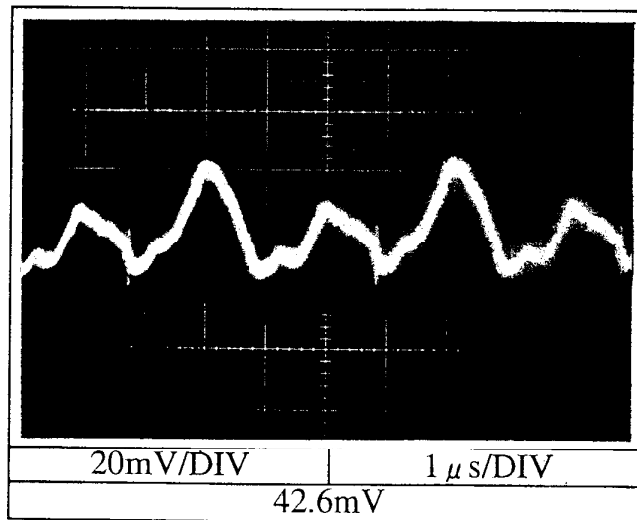
PAH200II48-\*

Conditions Vin : 48 VDC  
Iout : 100 %  
Ta : 25 °C  
Air Velocity : 2 m/s

1.2V



1.5V



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

PAH200H48-\*

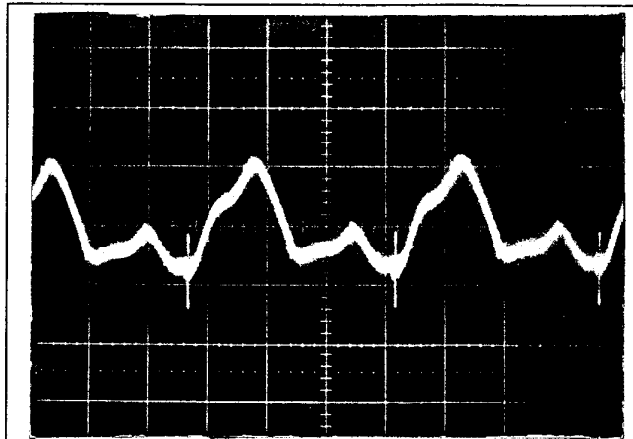
Conditions  $V_{in}$  : 48 VDC

$I_{out}$  : 100 %

$T_a$  : 25 °C

Air Velocity : 2 m/s

1.8V

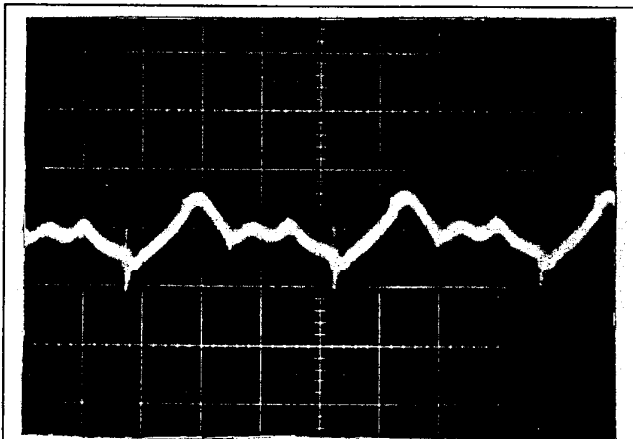


20mV/DIV

1  $\mu$ s/DIV

51.2mV

2.5V

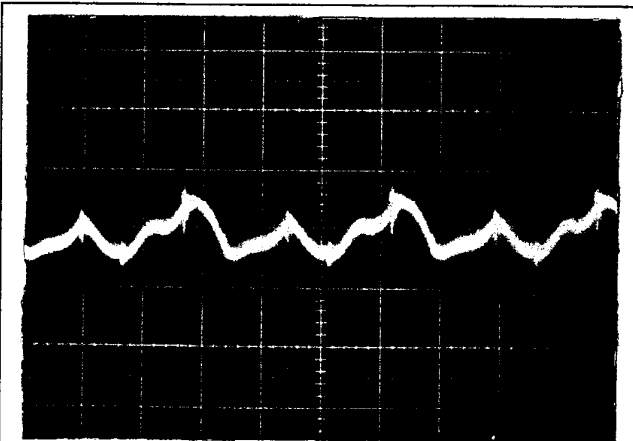


20mV/DIV

1  $\mu$ s/DIV

33mV

3.3V



20mV/DIV

1  $\mu$ s/DIV

27mV

DENSEI-LAMBDA



2.12 EMI特性

Electro-Magnetic Interference characteristics

(a) 雑音端子電圧 (帰還ノイズ)

Conducted Emission

(1) VCCI class A 対応アプリケーションシステム

VCCI class A application system

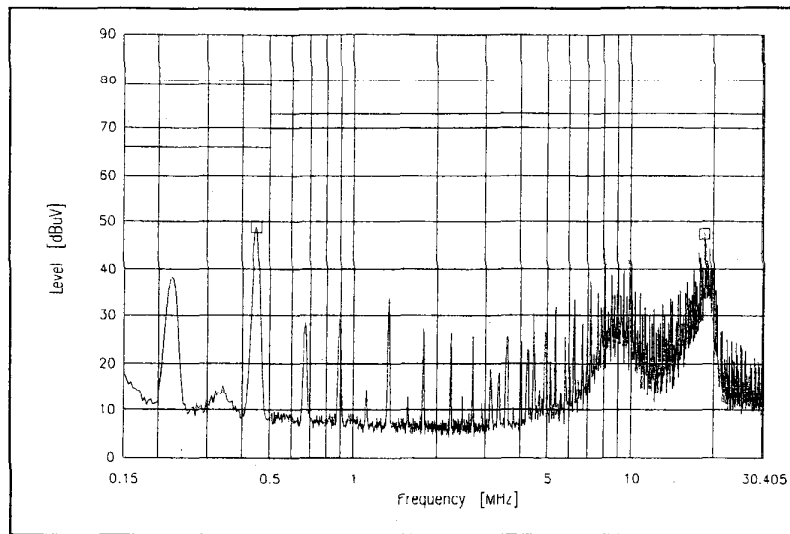
Conditions Vin : 48 VDC

Iout : 100 %

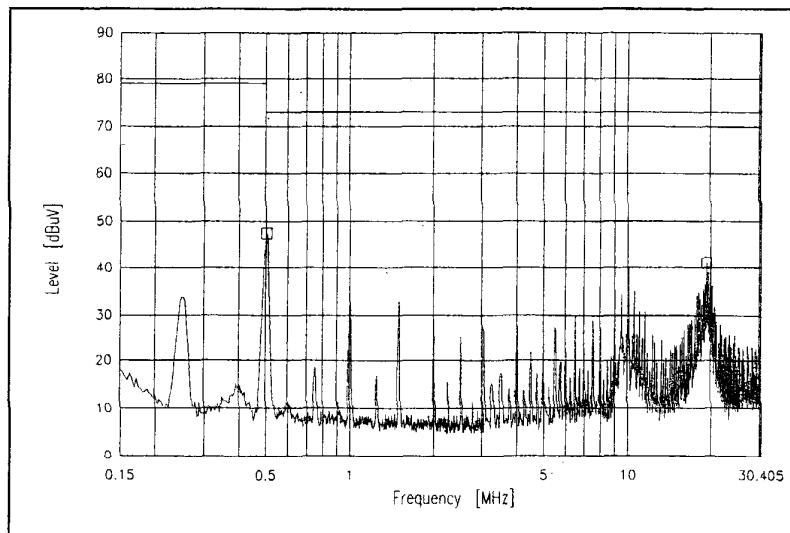
Ta : 25 °C

Air Velocity : 2 m/s

1.2V



1.5V



2.12 EMI特性

Electro-Magnetic Interference characteristics

(a) 雑音端子電圧 (帰還ノイズ)

Conducted Emission

(1) VCCI class A 対応アプリケーションシステム

VCCI class A application system

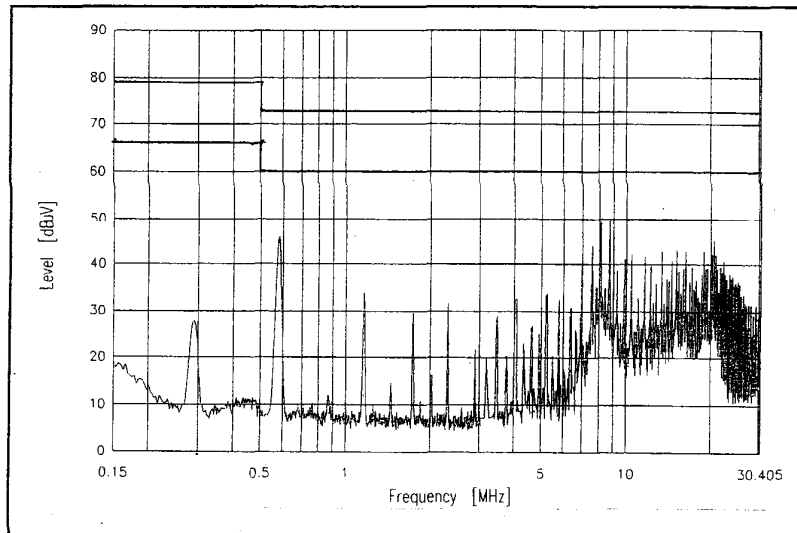
Conditions Vin : 48 VDC

Iout : 100 %

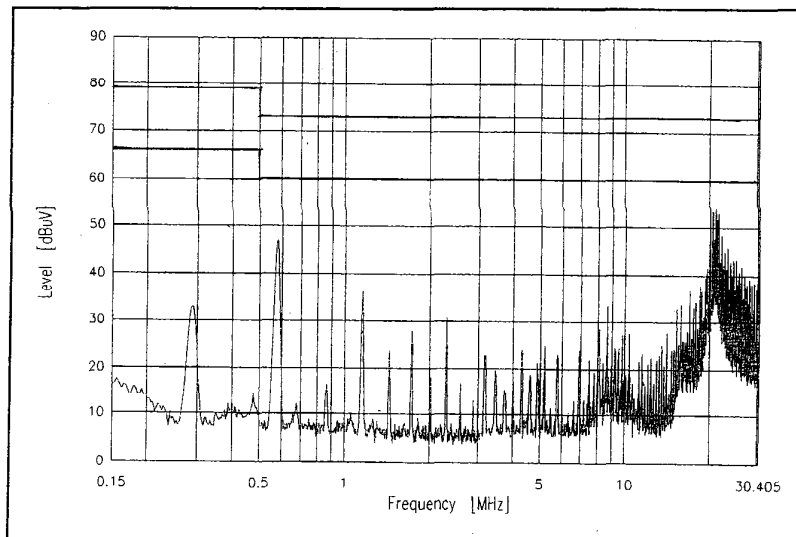
Ta : 25 °C

Air Velocity : 2 m/s

1.8V



2.5V



2.12 EMT特性

Electro-Magnetic Interference characteristics

(a) 雑音端子電圧 (帰還ノイズ)

Conducted Emission

(1) VCCI class A 対応アプリケーションシステム

VCCI class A application system

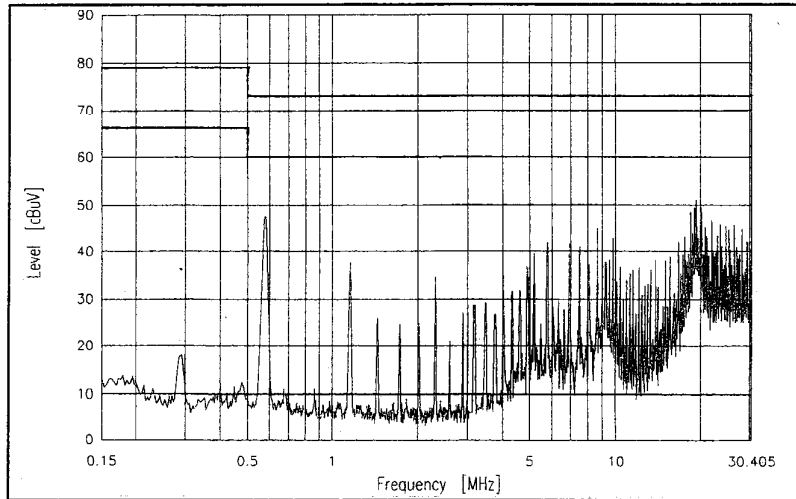
Conditions Vin : 48 VDC

Iout : 100 %

Ta : 25 °C

Air Velocity : 2 m/s

3.3V



2.12 EMI特性

Electro-Magnetic Interference characteristics

(b) 雑音電界強度 (輻射ノイズ)

Conditions Vin : 48 VDC

Radiated Emission

Iout : 100 %

(1) VCCI class A 対応アプリケーションシステム

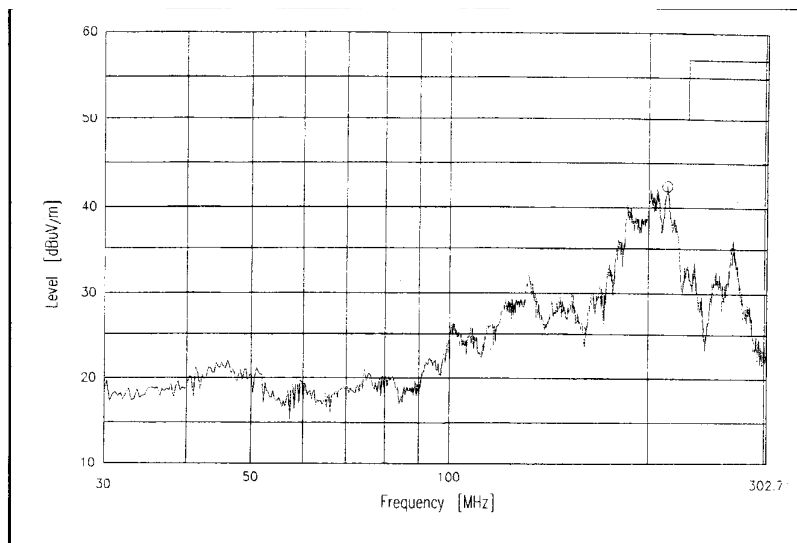
Ta : 25 °C

VCCI class A application system

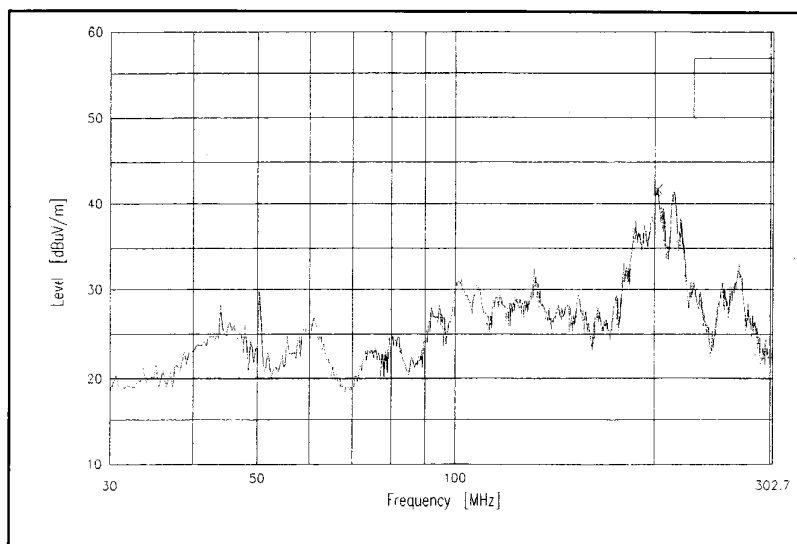
Air Velocity : 2 m/s

1.2V

HORIZONTAL:



VERTICAL:



2.12 EMI特性

Electro-Magnetic Interference characteristics

(b) 雑音電界強度 (輻射ノイズ)

Radiated Emission

(1) 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

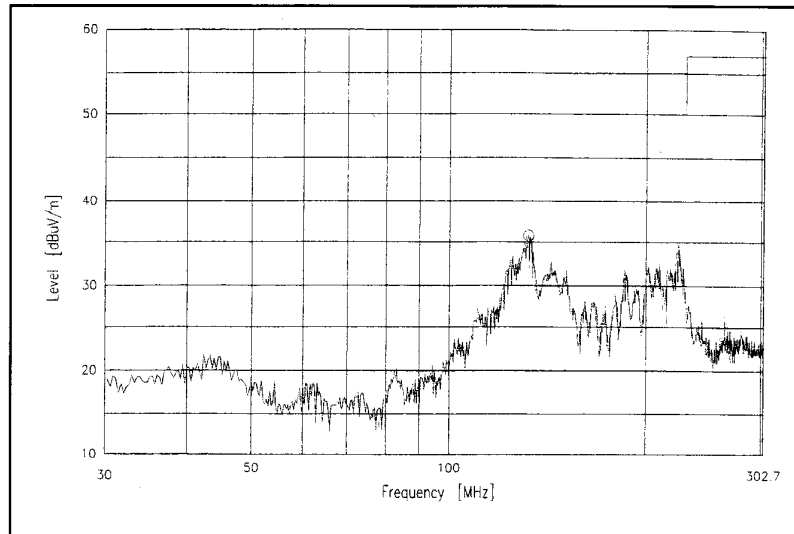
Iout : 100 %

Ta : 25 °C

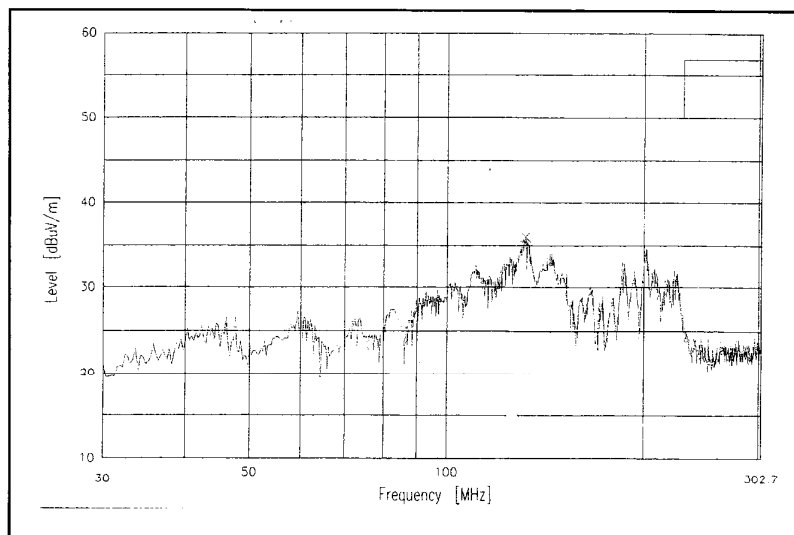
Air Velocity : 2 m/s

1.5V

HORIZONTAL:



VERTICAL:



2.12 EMI特性

Electro-Magnetic Interference characteristics

(b) 雑音電界強度 (輻射ノイズ)

Radiated Emission

(1) 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

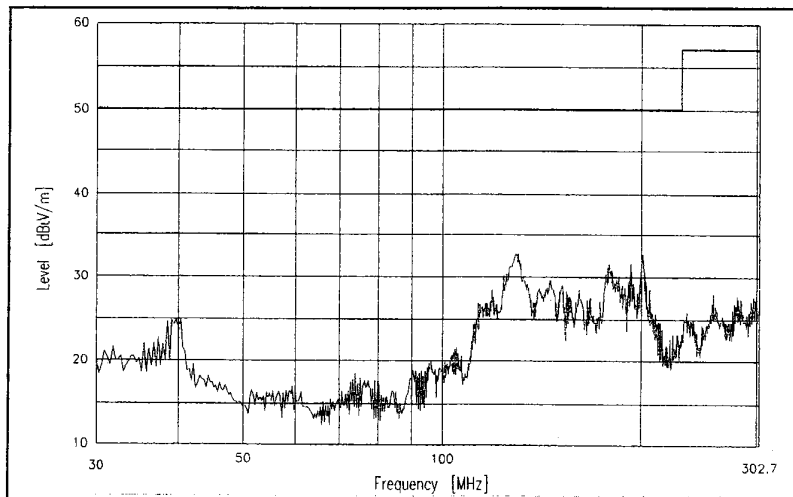
Iout : 100 %

Ta : 25 °C

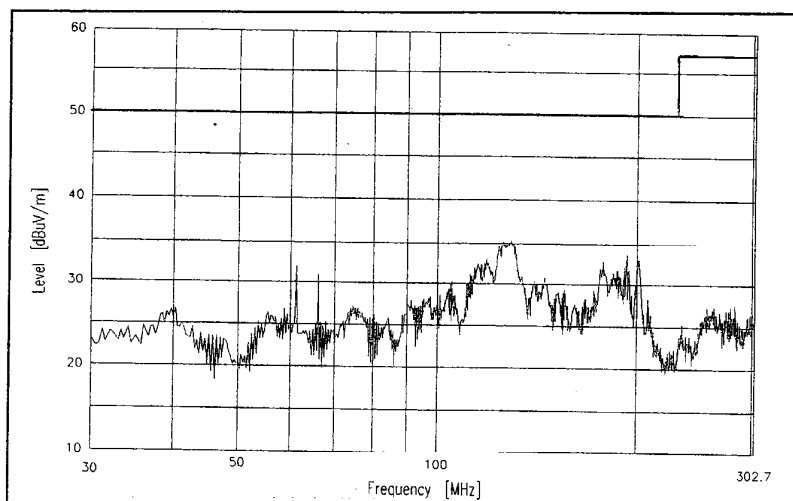
Air Velocity : 2 m/s

1.8V

HORIZONTAL:



VERTICAL:



2.12 EMI特性

Electro-Magnetic Interference characteristics

(b) 雑音電界強度 (輻射ノイズ)

Radiated Emission

(1) 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

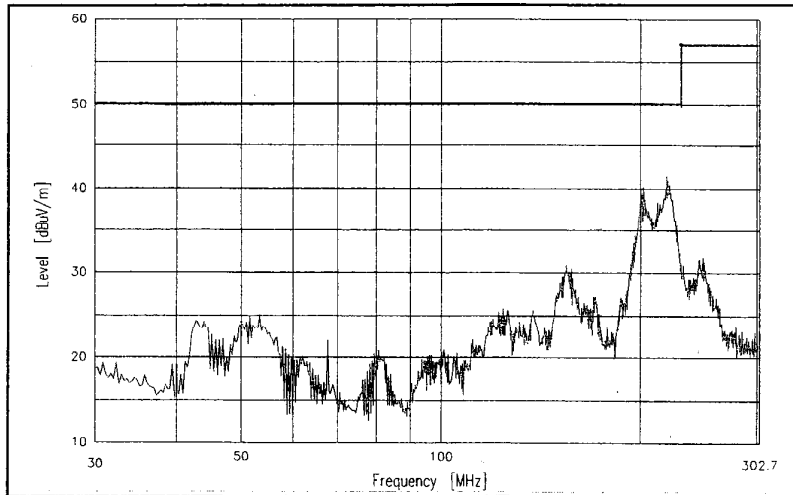
Iout : 100 %

Ta : 25 °C

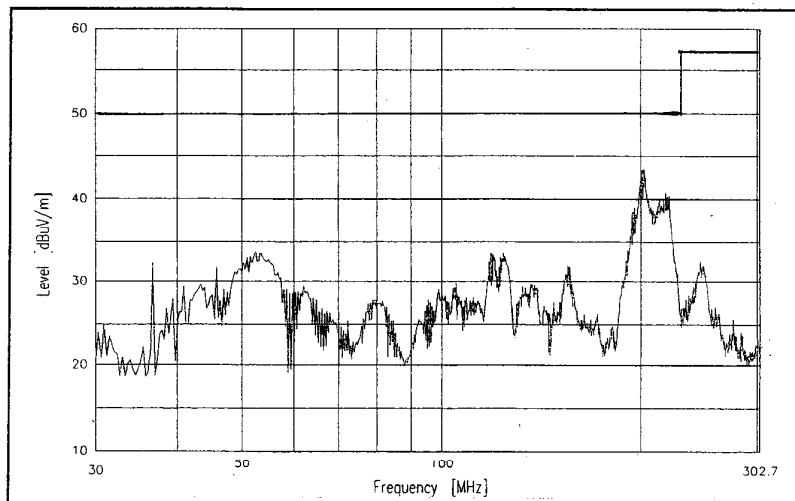
Air Velocity : 2 m/s

2.5V

HORIZONTAL:



VERTICAL:



2.12 EMI特性

Electro-Magnetic Interference characteristics

(b) 雑音電界強度 (輻射ノイズ)

Conditions Vin : 48 VDC

Radiated Emission

Iout : 100 %

(1) VCCI class A 対応アプリケーションシステム

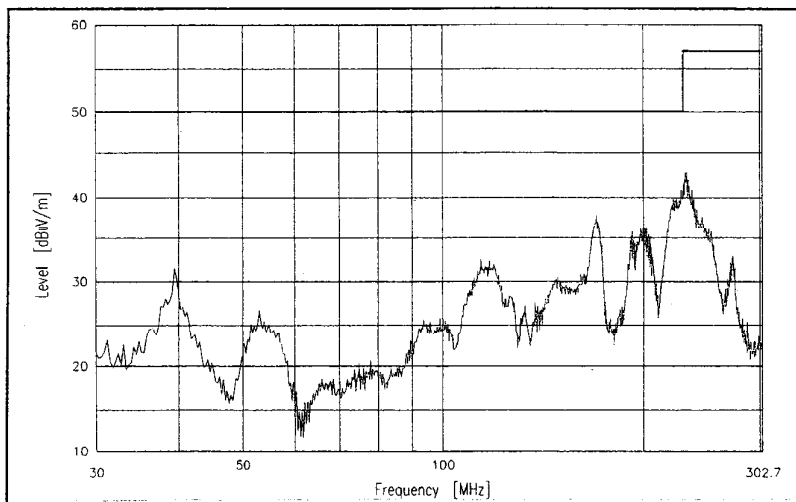
Ta : 25 °C

VCCI class A application system

Air Velocity : 2 m/s

3.3V

HORIZONTAL:



VERTICAL:

