

**CN100B110-\***

**EVALUATION DATA**

型式データ

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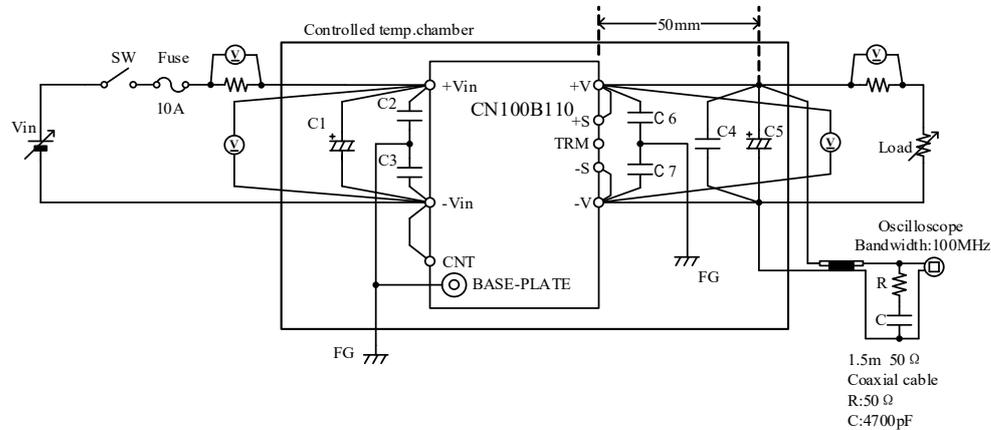
## 使用記号 Terminology used

Definition		
$V_{in}$ .....	入力電圧	Input voltage
$V_o$ .....	出力電圧	Output voltage
$V_{cnt}$ .....	CNT電圧	CNT voltage
$I_{in}$ .....	入力電流	Input current
$I_o$ .....	出力電流	Output current
$T_{bp}$ .....	ベースプレート温度	Base-plate temperature
$T_a$ .....	周囲温度	Ambient temperature
$f$ .....	周波数	Frequency

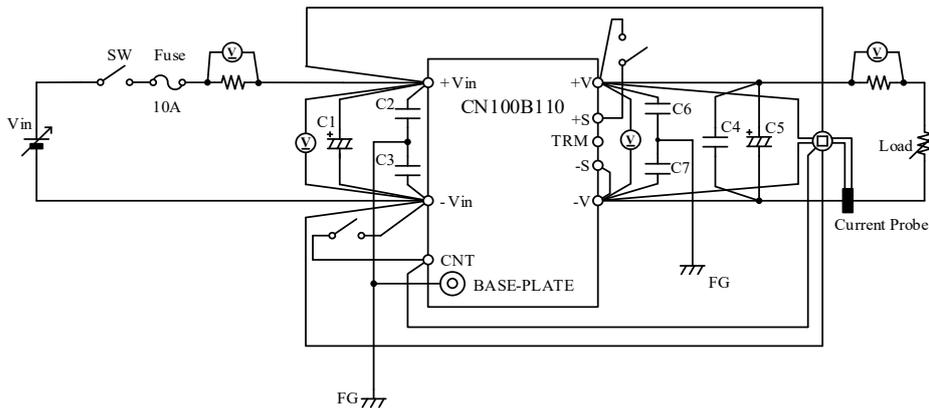
1. 評価方法 Evaluation Method

1.1 測定回路 Measurement Circuits

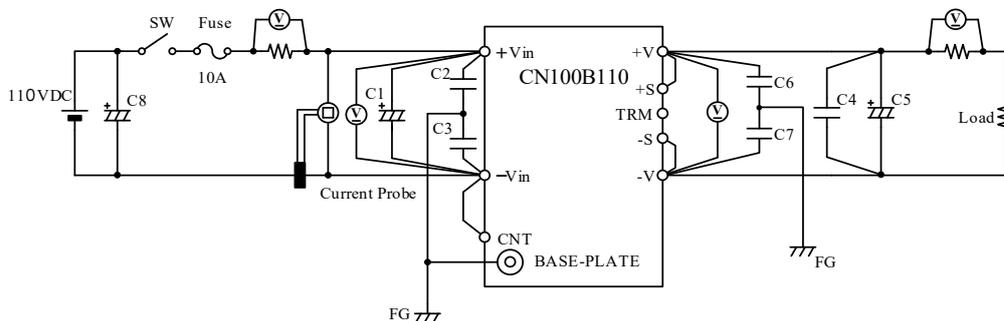
- (1) 静特性、過電流保護特性、出力リップル・ノイズ波形  
 Steady state characteristics, Over current protection (OCP) characteristics  
 and Output ripple and noise waveform



- (2) 過渡応答、過電圧保護特性、その他  
 Dynamic response, Over voltage protection (OVP) characteristics  
 and Other characteristics



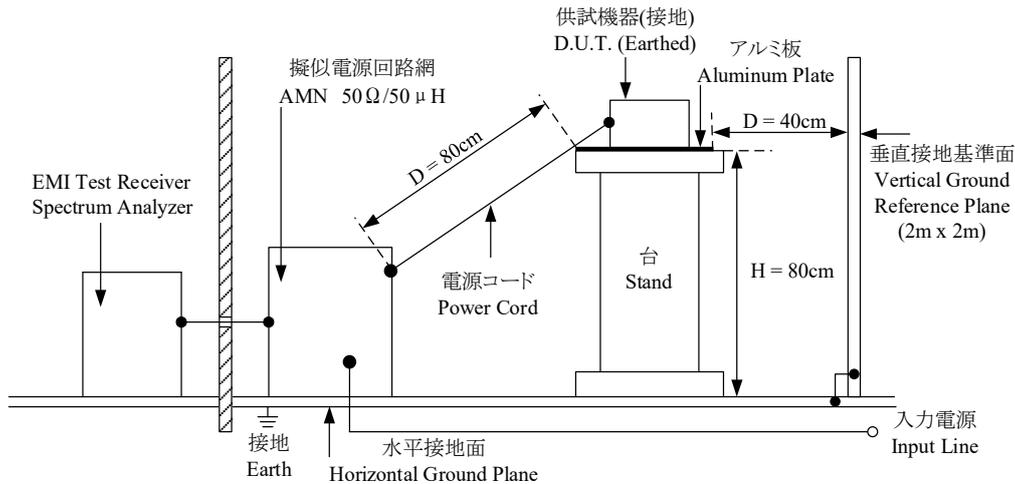
- (3) 入力サージ電流 (突入電流) 特性  
 Inrush current characteristics



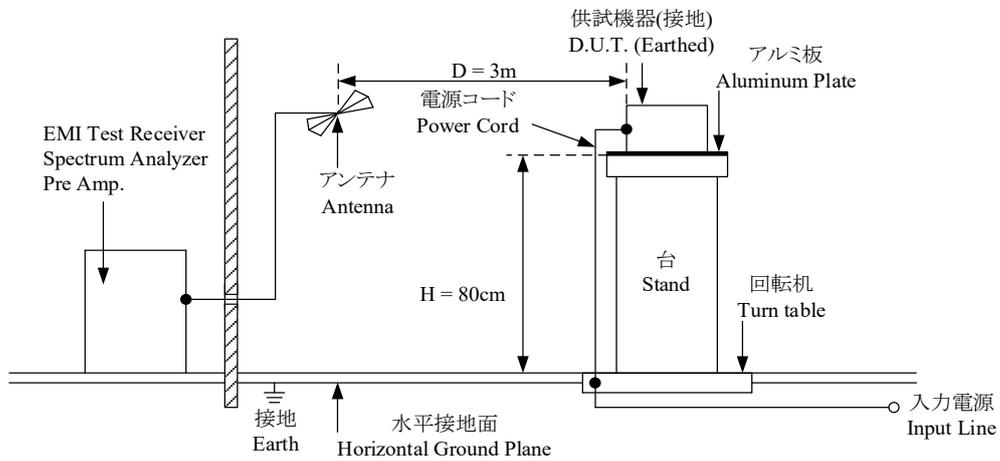
C1 : 100μF Electrolytic Capacitor	C5 : 5V- 1000μF Solid Capacitor
C2,C3 : 4700pF Ceramic Capacitor	: 12V- 680μF Solid Capacitor
C4 : 2.2μF Ceramic Capacitor	: 15V- 680μF Solid Capacitor
C6,C7 : 0.022μF Film Capacitor	: 24V- 220μF Electrolytic Capacitor
C8 : 20000μF Electrolytic Capacitor	: 48V- 220μF x2 Series Electrolytic Capacitor

(4) EMI特性 Electro-Magnetic Interference characteristics

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

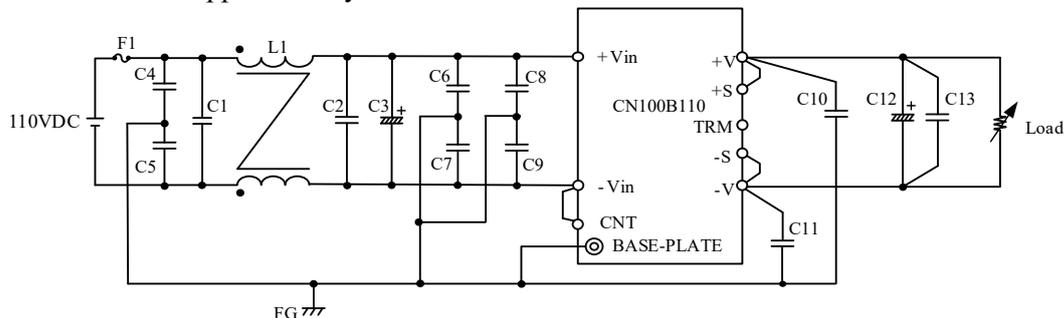


(b) 雑音電界強度 (輻射ノイズ) Radiated Emission Noise



\*入出力ケーブルとしてシールドケーブルを使用  
Shielded cable used to input and output cable.

VCCI class A対応アプリケーションシステム  
VCCI class A application system



- |  |   |
|--|---|
| C1 : 1.5μF Film Capacitor              | C12 : 5V- 1000μF Solid Capacitor              |
| C2 : 1.5μF Film Capacitor              | : 12V- 680μF Solid Capacitor                  |
| C3 : 100μF Electrolytic Capacitor      | : 15V- 680μF Solid Capacitor                  |
| C4,C5 : 100pF Ceramic Capacitor        | : 24V- 220μF Electrolytic Capacitor           |
| C6,C7,C8,C9 : 4700pF Ceramic Capacitor | : 48V- 220μF x2 Series Electrolytic Capacitor |
| C10,C11 : 0.022μF Film Capacitor       | F1 : 10A                                      |
| C13 : 2.2μF Ceramic Capacitor          | L1 : 2mH                                      |

\*詳細な周辺パラメータ情報(参照用)

The detailed peripheral parameter information ( for reference )

	SYMBOL	PRODUCT TYPE	ITEM DESCRIPTION	NOTE	MANUFACTURER	
1	F1	Fuse	WN30-10-P	500VDC, 10A	WALTER	
2	C1,C2	Cap., Film	MDX22W155K-F	450VDC , 1.5 $\mu$	NITSUKO	
3	C3	Cap., Elect	EKXJ201ELL101MJ35S	200V, 100 $\mu$	NI-CHEMI	
4	C4,C5	Cap.,Ceramic(AC)	DE1B3RA101KJ4BN01F	250V, 100p	MURATA	
5	C6,C7,C8,C9	Cap.,Ceramic(AC)	DE1E3KX472MJ4BN04F	250V, 4,700p	MURATA	
6	C10,C11	Cap., Film	MMCF0630K22300000100	630V, 0.022 $\mu$	NISSEI	
7	C12	5V Model	APSG160ELL102MJB5S	16V, 1,000 $\mu$	NI-CHEMI	
8		12V Model	APSG250ELL681MJB5S	25V, 680 $\mu$	NI-CHEMI	
9		15V Model	APSG250ELL681MJB5S	25V, 680 $\mu$	NI-CHEMI	
10		24V Model	Cap., Elect	ELXY500ELL221MJ25S	50V, 220 $\mu$	NI-CHEMI
11		48V Model	Cap., Elect $\times$ 2 Series	ELXY500ELL221MJ25S	50V, 220 $\mu$ $\times$ 2	NI-CHEMI
12	C13	MLCC	C3225X7R2A225KT	100V, 2.2 $\mu$	TDK	
13	L1	Noise Filter Coil	TC580020S	2mH, 8A	TNC	

## 1.2 使用測定機器 List of equipment used

	EQUIPMENT USED	MANUFACTURER	MODEL NO.
1	AMN	SCHWARZBECK	NNLK8121
2	ANTENNA(BI-LOG ANTENNA)	TESEQ	CBL6111D
3	CONTROLLED TEMP. CHAMBER	ESPEC CORP.	SU-662
4	CURRENT PROBE	YOKOGAWA ELECT.	701930
5	CURRENT PROBE AMPLIFIER	YOKOGAWA ELECT.	700938
6	CVCF	KIKUSUI	PCR2000L
7	DC POWER SUPPLY	TDK-Lambda	GEN200-25
8	DIGITAL MULTIMETER	Agilent	34970A
9	DIGITAL POWER METER	YOKOGAWA ELECT.	WT210
10	DIGITAL STORAGE OSCILLOSCOPE	YOKOGAWA ELECT.	DLM2054
11	DYNAMIC DUMMY LOAD	Chroma	63203
12	EMI TEST RECEIVER SPECTRUM ANALYZER	ROHDE & SCHWARZ	ESCI
13	PRE AMP.	SONOMA	310N
14	SHUNT RESISTER	YOKOGAWA ELECT.	2215

## 2. 特性データ Characteristics

## 2.1 静特性 Steady state data

(1) 入力変動、負荷変動、温度変動 Line regulation, Load regulation, Temperature drift

5V

## 1. Line regulation and Load regulation

Condition Tbp : 25°C

Io \ Vin	43VDC	72VDC	110VDC	160VDC	Line regulation	
0%	4.989V	4.989V	4.989V	4.989V	0mV	0.000%
50%	4.989V	4.989V	4.989V	4.989V	0mV	0.000%
100%	4.989V	4.989V	4.989V	4.988V	0mV	0.000%
Load regulation	0mV	0mV	0mV	1mV		
	0.000%	0.000%	0.000%	0.020%		

## 2. Temperature drift

Conditions Vin : 110VDC

Io : 100%

Tbp	-40°C	+25°C	+100°C	Temperature stability	
Vo	4.996V	4.989V	4.990V	7mV	0.143%

12V

## 1. Line regulation and Load regulation

Condition Tbp : 25°C

Io \ Vin	43VDC	72VDC	110VDC	160VDC	Line regulation	
0%	11.950V	11.950V	11.950V	11.950V	0mV	0.000%
50%	11.949V	11.949V	11.949V	11.949V	0mV	0.000%
100%	11.948V	11.948V	11.948V	11.948V	0mV	0.000%
Load regulation	2mV	2mV	2mV	2mV		
	0.017%	0.017%	0.017%	0.017%		

## 2. Temperature drift

Conditions Vin : 110VDC

Io : 100%

Tbp	-40°C	+25°C	+100°C	Temperature stability	
Vo	11.963V	11.948V	11.950V	15mV	0.125%

(1) 入力変動、負荷変動、温度変動 Line regulation, Load regulation, Temperature drift

15V

## 1. Line regulation and Load regulation

Condition Tbp : 25°C

Io \ Vin	43VDC	72VDC	110VDC	160VDC	Line regulation	
0%	14.988V	14.988V	14.988V	14.987V	1mV	0.007%
50%	14.987V	14.987V	14.987V	14.987V	0mV	0.000%
100%	14.986V	14.986V	14.986V	14.985V	1mV	0.007%
Load regulation	2mV	2mV	2mV	2mV		
	0.013%	0.013%	0.013%	0.013%		

## 2. Temperature drift

Conditions Vin : 110VDC

Io : 100%

Tbp	-40°C	+25°C	+100°C	Temperature stability	
Vo	15.013V	14.986V	14.959V	54mV	0.360%

24V

## 1. Line regulation and Load regulation

Condition Tbp : 25°C

Io \ Vin	43VDC	72VDC	110VDC	160VDC	Line regulation	
0%	24.001V	24.001V	24.001V	24.001V	0mV	0.000%
50%	24.000V	24.000V	24.000V	24.000V	0mV	0.000%
100%	24.000V	24.000V	24.000V	24.000V	0mV	0.000%
Load regulation	1mV	1mV	1mV	1mV		
	0.004%	0.004%	0.004%	0.004%		

## 2. Temperature drift

Conditions Vin : 110VDC

Io : 100%

Tbp	-40°C	+25°C	+100°C	Temperature stability	
Vo	24.030V	24.000V	23.995V	35mV	0.146%

(1) 入力変動、負荷変動、温度変動 Line regulation, Load regulation, Temperature drift

48V

## 1. Line regulation and Load regulation

Condition Tbp : 25°C

Io \ Vin	43VDC	72VDC	110VDC	160VDC	Line regulation	
0%	48.014V	48.013V	48.014V	48.013V	1mV	0.007%
50%	48.012V	48.012V	48.012V	48.012V	0mV	0.000%
100%	48.011V	48.011V	48.011V	48.011V	0mV	0.000%
Load regulation	3mV	2mV	3mV	2mV		
	0.020%	0.013%	0.020%	0.013%		

## 2. Temperature drift

Conditions Vin : 110VDC

Io : 100%

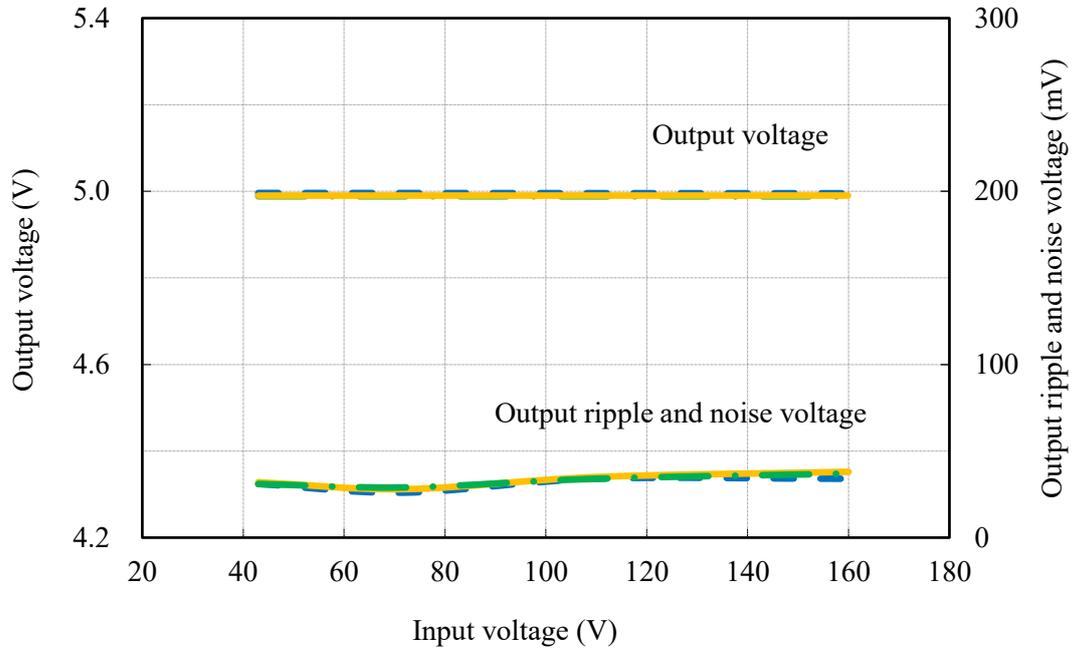
Tbp	-40°C	+25°C	+100°C	Temperature stability	
Vo	48.062V	48.011V	48.017V	51mV	0.106%

(2) 出力電圧、出力リップル・ノイズ電圧 対 入力電圧

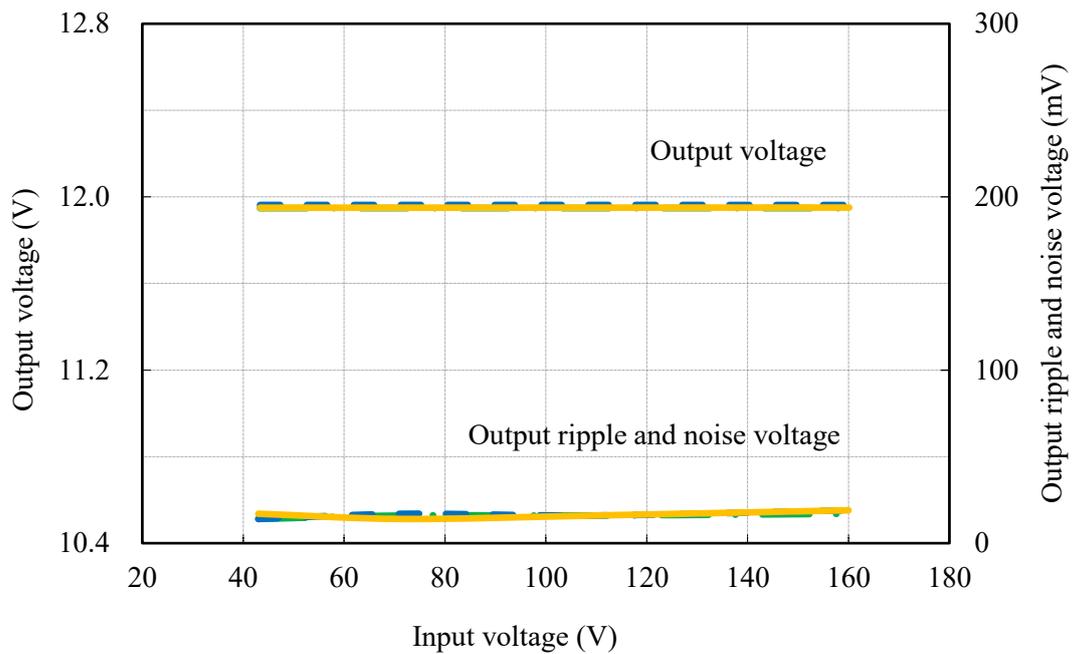
Output voltage and Output ripple and noise voltage vs. Input voltage

Conditions    I<sub>o</sub> : 100 %  
                   T<sub>bp</sub> : -40 °C    - - - -  
                   : 25 °C        - · - · -  
                   : 100 °C       - - - -

5V



12V

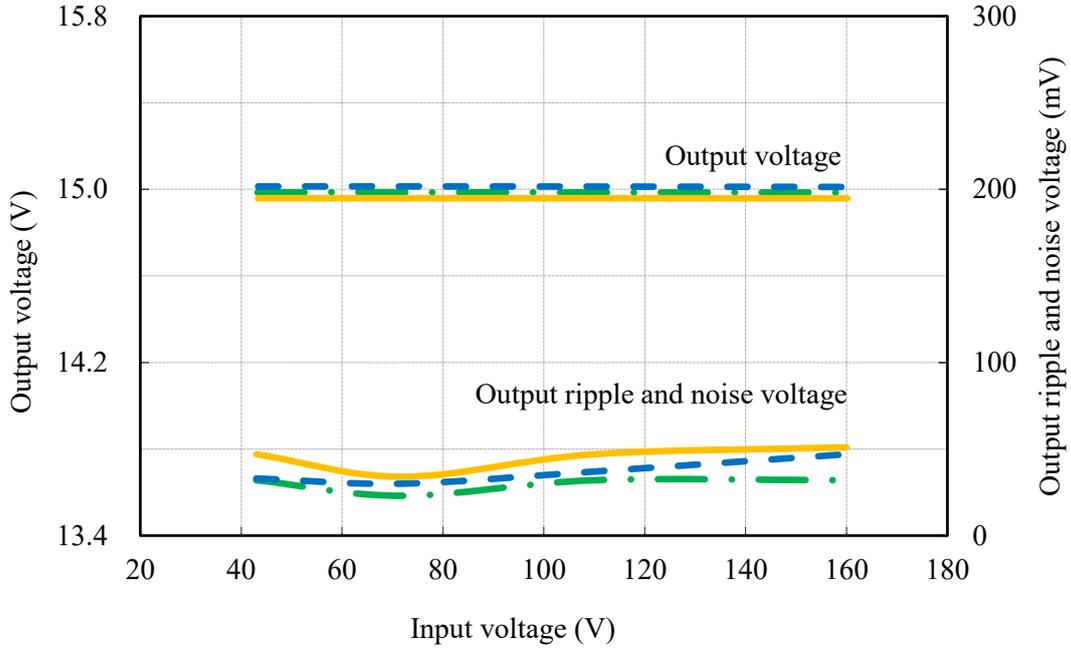


(2) 出力電圧、出力リップル・ノイズ電圧 対 入力電圧

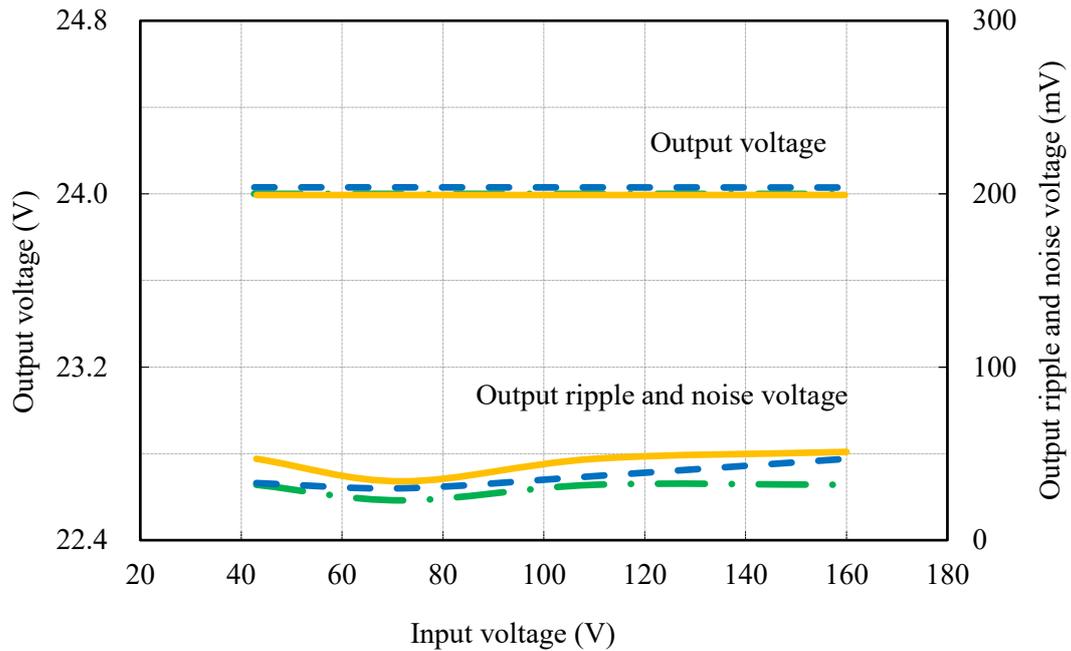
Output voltage and Output ripple and noise voltage vs. Input voltage

Conditions    I<sub>o</sub> : 100 %  
                   T<sub>bp</sub> : -40 °C    - - - -  
                       : 25 °C     - · - · -  
                       : 100 °C    - - - -

15V



24V

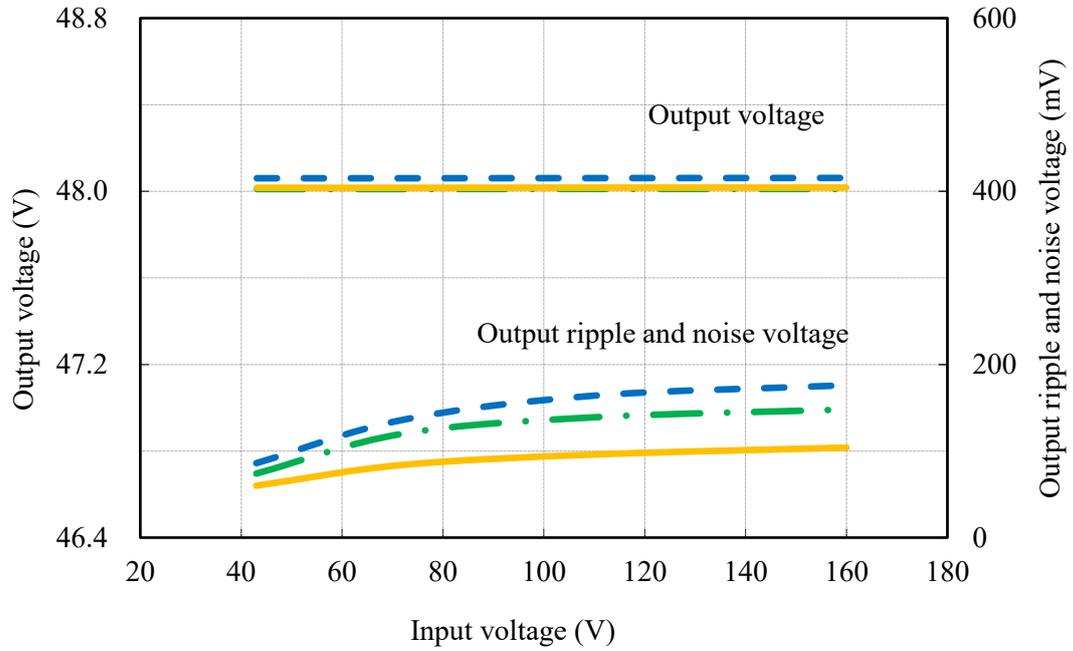


(2) 出力電圧、出力リップル・ノイズ電圧 対 入力電圧

Output voltage and Output ripple and noise voltage vs. Input voltage

Conditions    I<sub>o</sub> : 100 %  
                   T<sub>bp</sub> : -40 °C    ---  
                   : 25 °C        -.-  
                   : 100 °C        —

48V

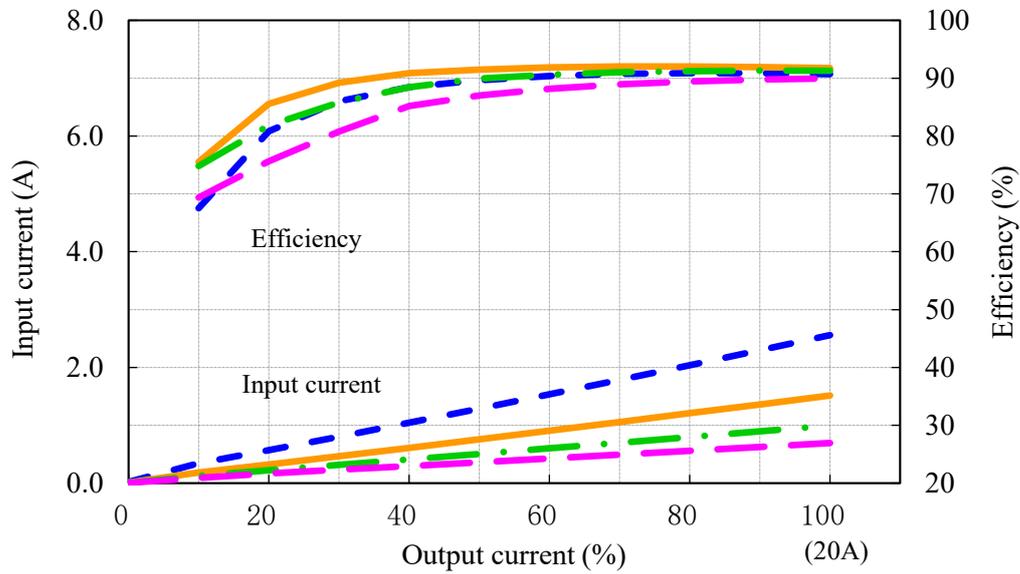


(3) 入力電流、効率 対 出力電流

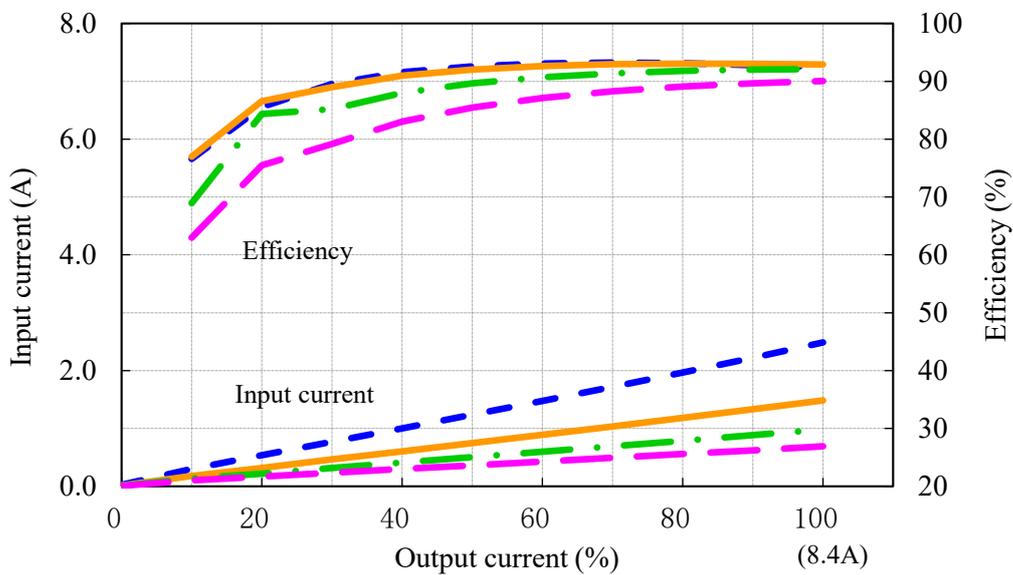
Input current and Efficiency vs. Output current

Conditions Vin : 43 VDC ---  
 : 72 VDC —  
 : 110 VDC - · - ·  
 : 160 VDC - · - ·  
 Tbp : 25 °C

5V



12V

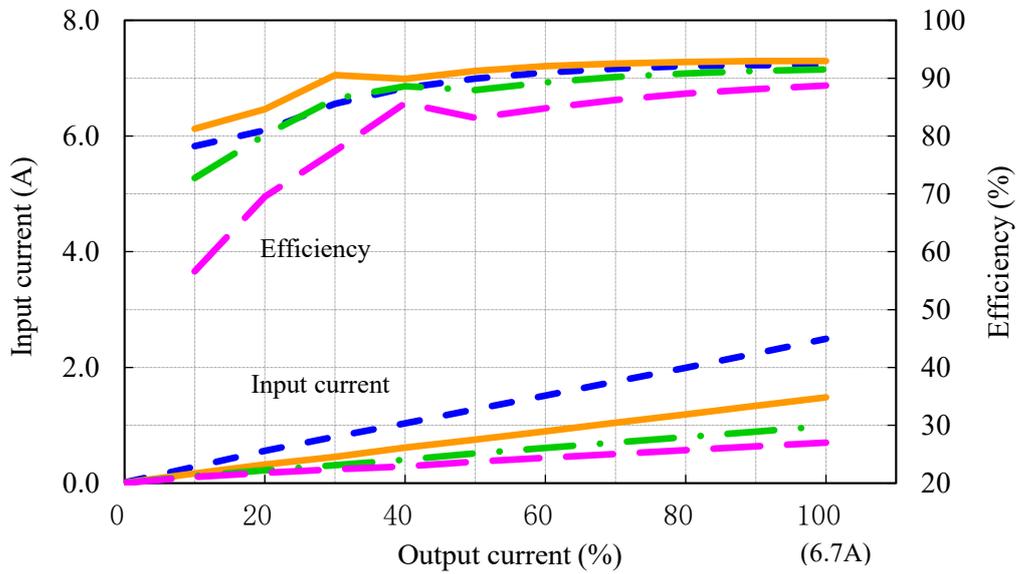


(3) 入力電流、効率 対 出力電流

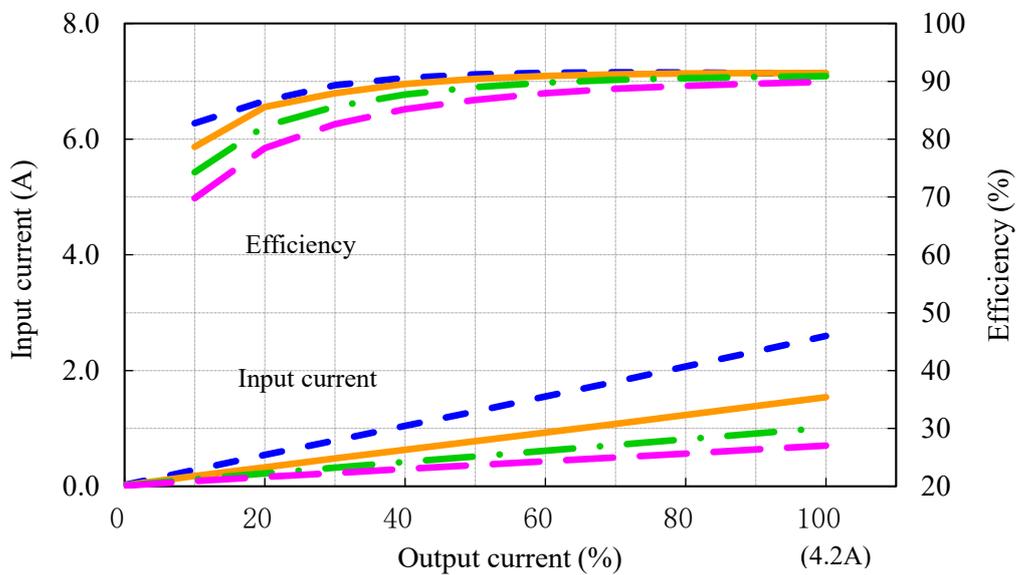
Input current and Efficiency vs. Output current

Conditions Vin : 43 VDC ---  
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 : 110 VDC - · -  
 : 160 VDC - · -  
 Tbp : 25 °C

15V



24V

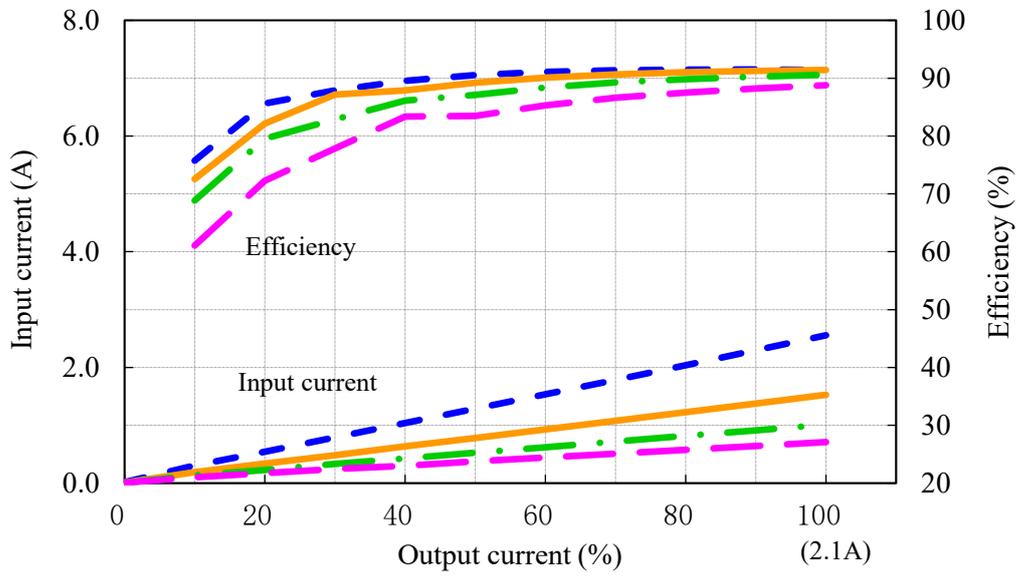


(3) 入力電流、効率 対 出力電流

Input current and Efficiency vs. Output current

Conditions Vin : 43 VDC ---  
 : 72 VDC —  
 : 110 VDC - · - ·  
 : 160 VDC - · - ·  
 Tbp : 25 °C

48V

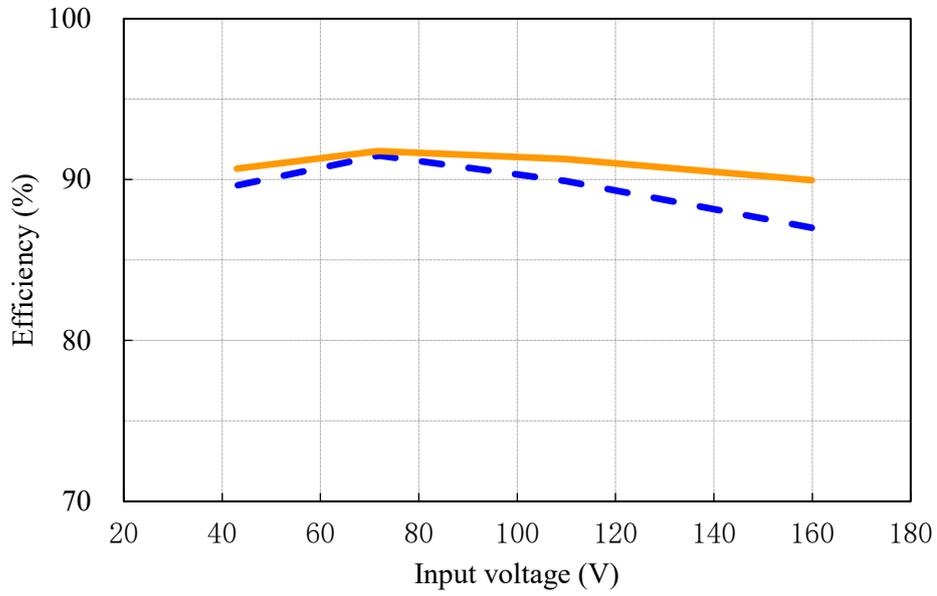


(4) 効率 対 入力電圧

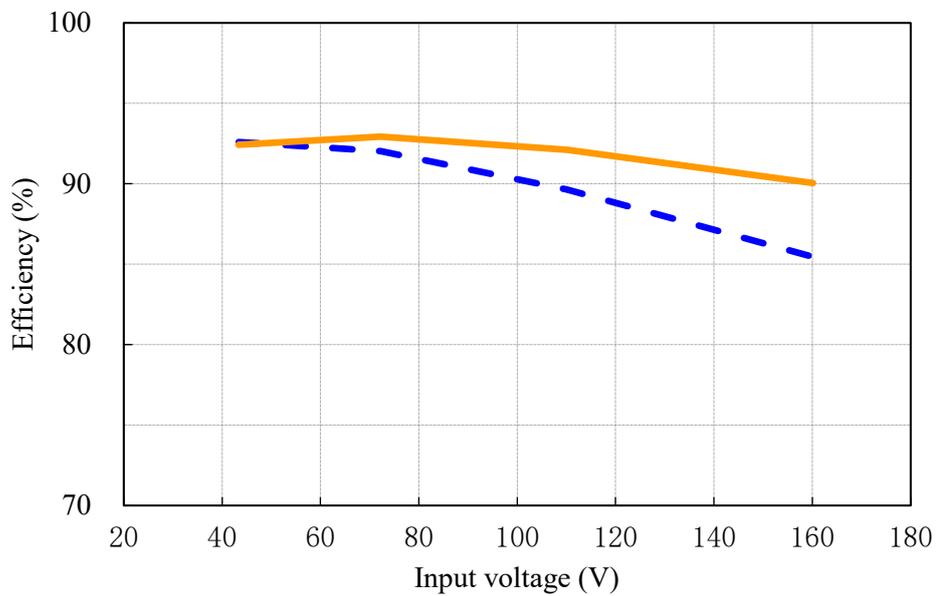
Efficiency vs. Input voltage

Conditions    I<sub>o</sub> :    50 %    - - - -  
                       :    100 %    ————  
                       T<sub>bp</sub> :    25 °C

5V



12V

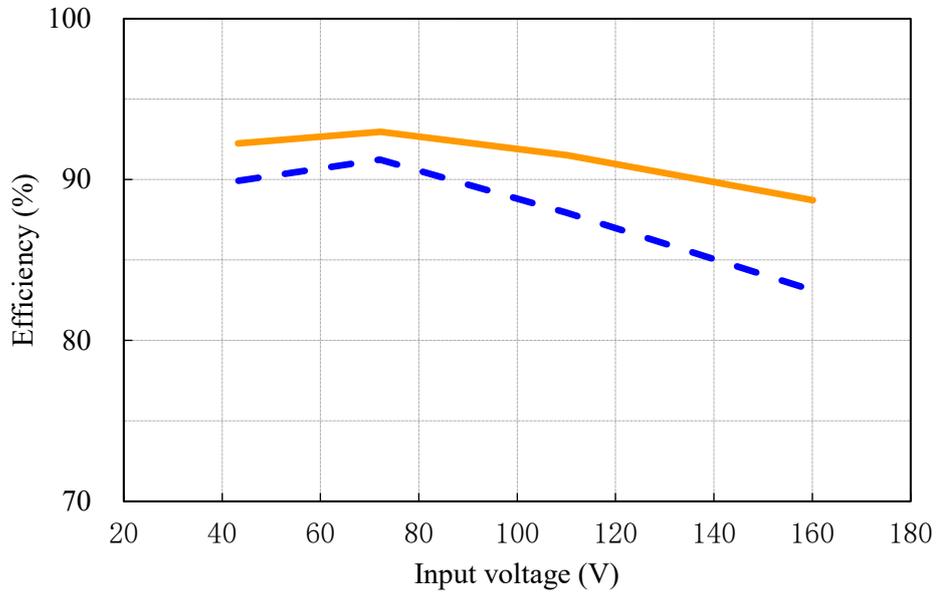


(4) 効率 対 入力電圧

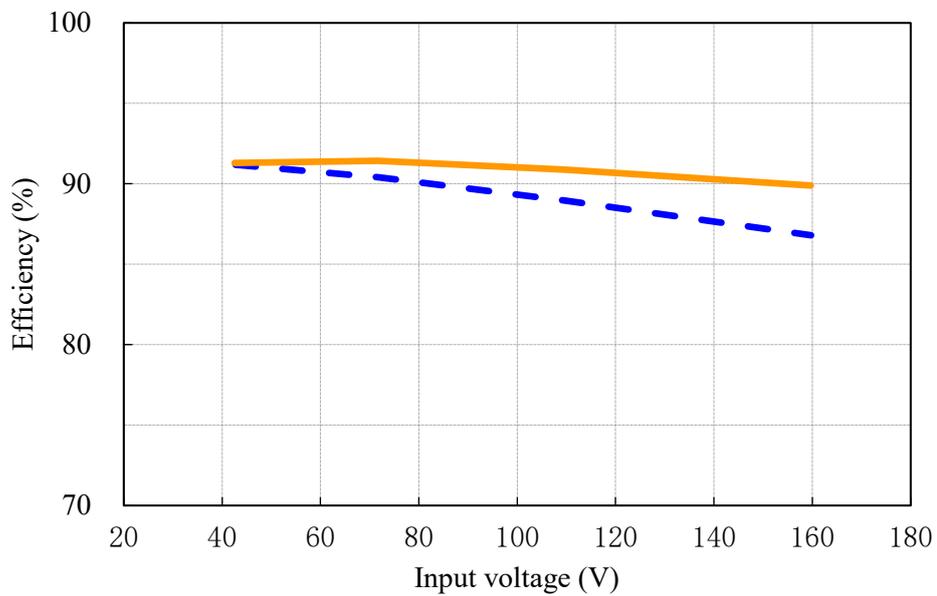
Efficiency vs. Input voltage

Conditions    I<sub>o</sub> : 50 %    - - - -  
                       : 100 %    ————  
                       T<sub>bp</sub> : 25 °C

15V



24V

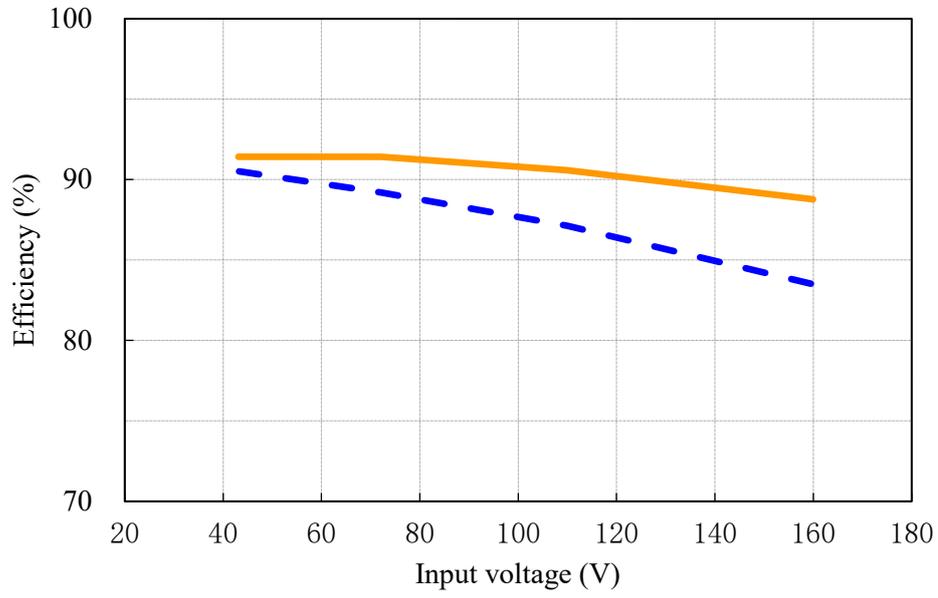


(4) 効率 対 入力電圧

Efficiency vs. Input voltage

Conditions    I<sub>o</sub> : 50 %    - - - -  
                       : 100 %    ————  
                       T<sub>bp</sub> : 25 °C

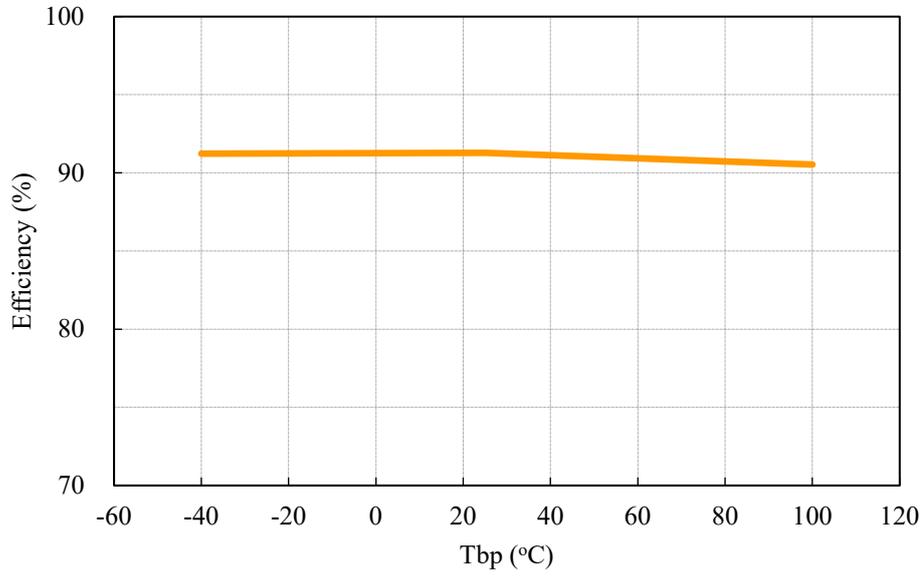
48V



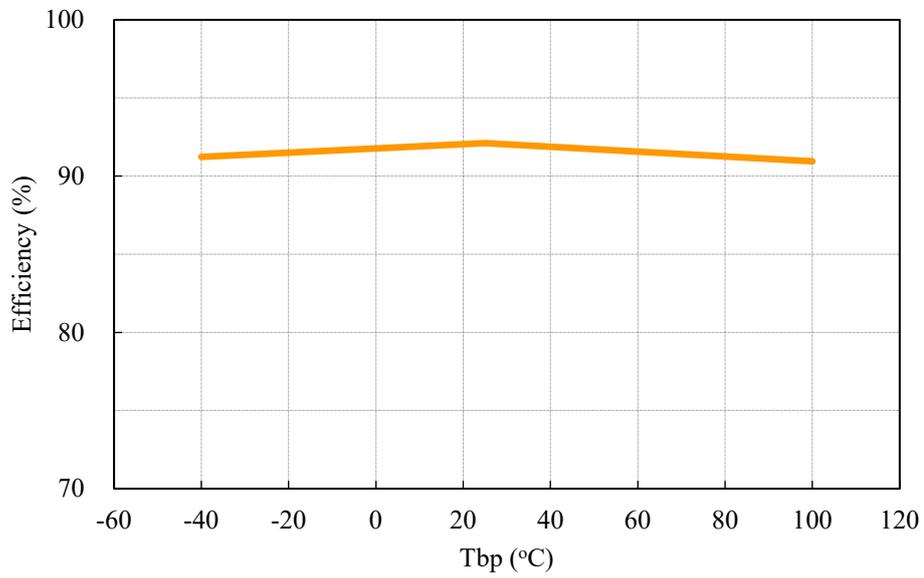
(5) 効率 対 ベースプレート温度  
Efficiency vs. Base-plate temperature

Conditions Vin : 110 VDC  
Io : 100 %

5V



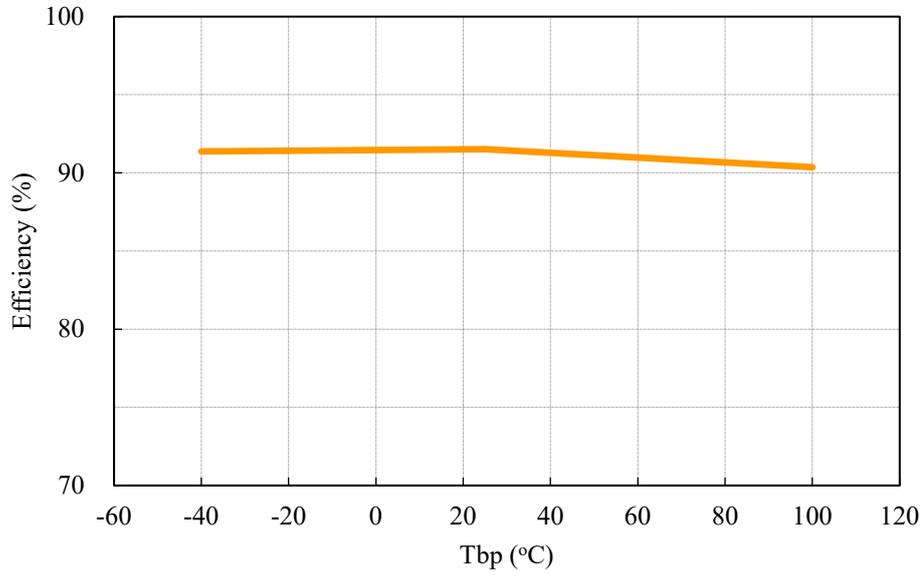
12V



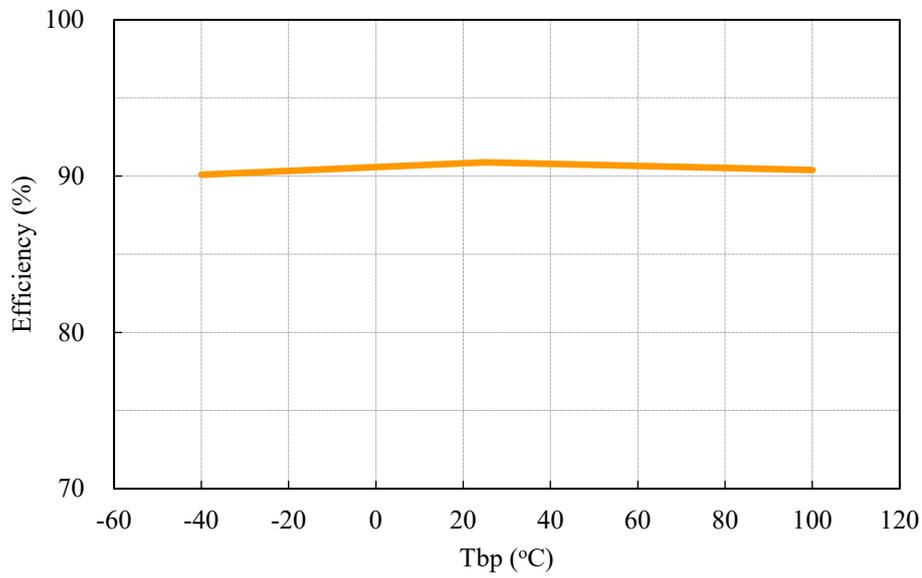
(5) 効率 対 ベースプレート温度  
Efficiency vs. Base-plate temperature

Conditions Vin : 110 VDC  
Io : 100 %

15V



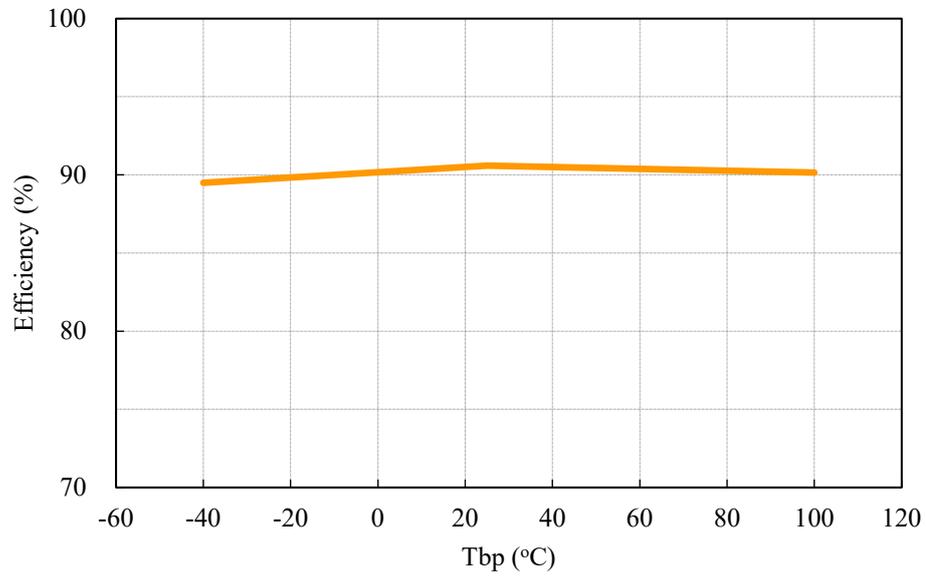
24V



(5) 効率 対 ベースプレート温度  
Efficiency vs. Base-plate temperature

Conditions Vin : 110 VDC  
Io : 100 %

48V



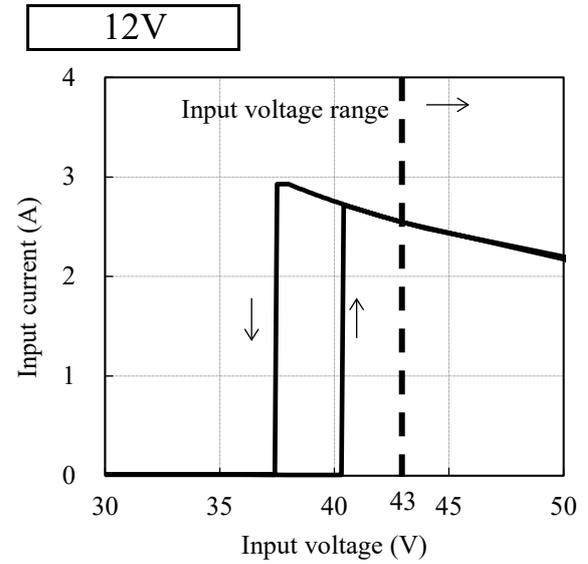
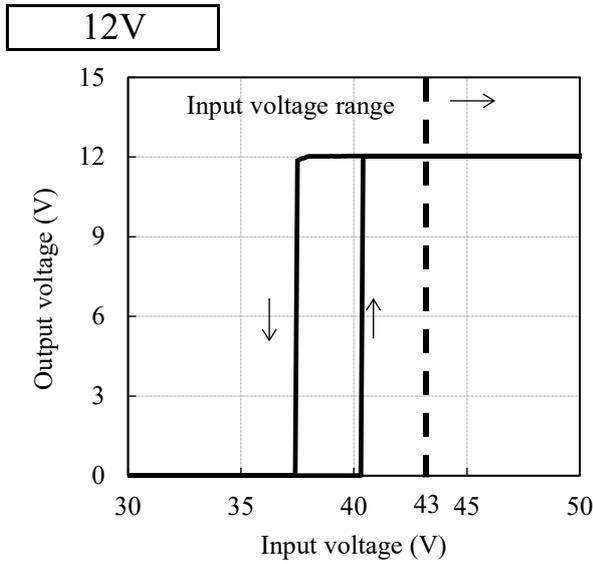
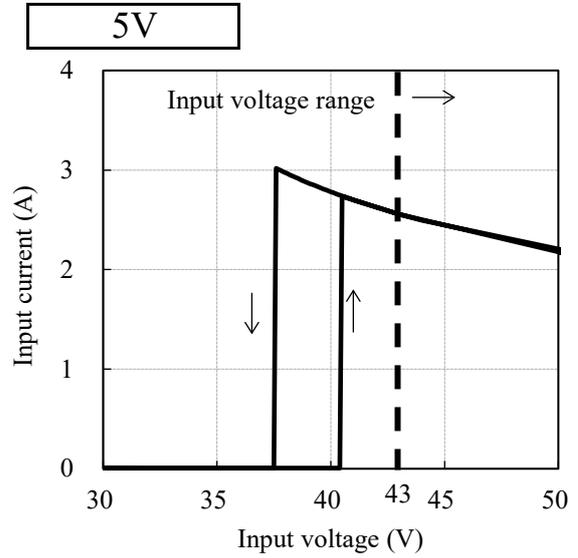
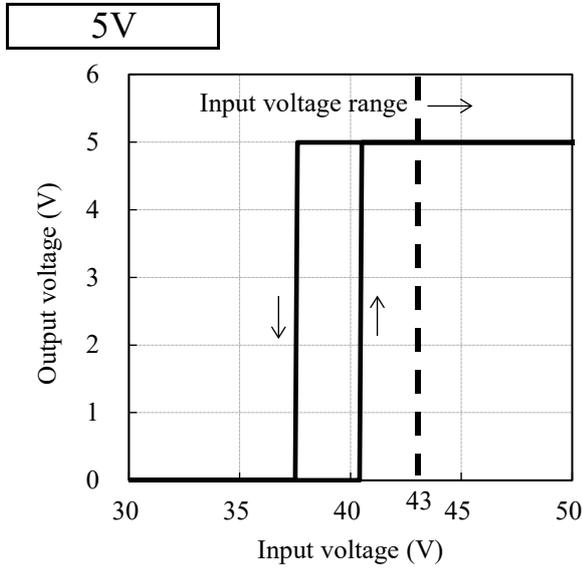
(6) 起動、停止電圧特性  
Start and Stop voltage characteristics

出力電圧 対 入力電圧  
Output voltage vs. Input voltage

Conditions  $I_o$  : 100 %  
 $T_{bp}$  : 25 °C

入力電流 対 入力電圧  
Input current vs. Input voltage

Conditions  $I_o$  : 100 %  
 $T_{bp}$  : 25 °C



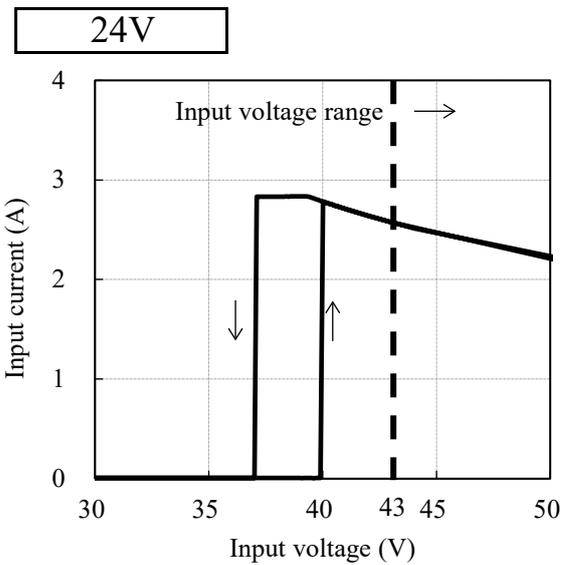
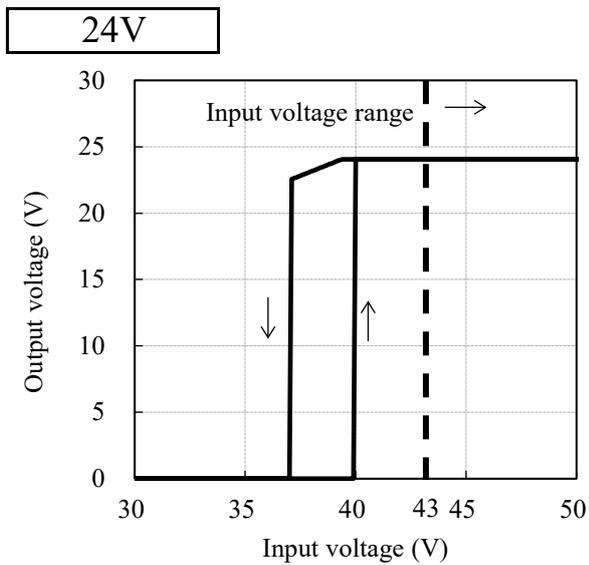
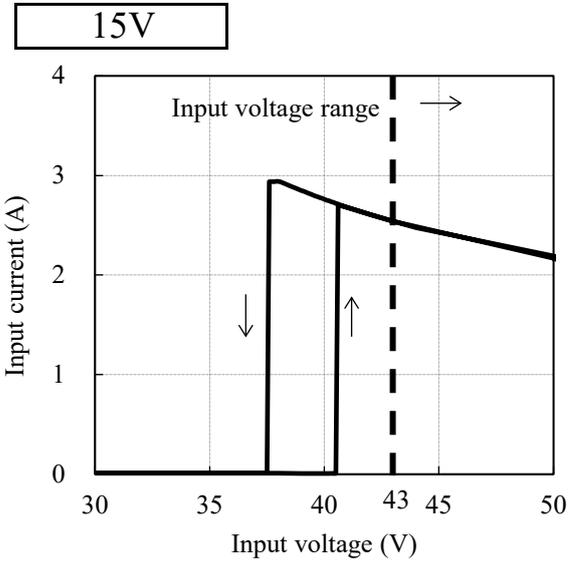
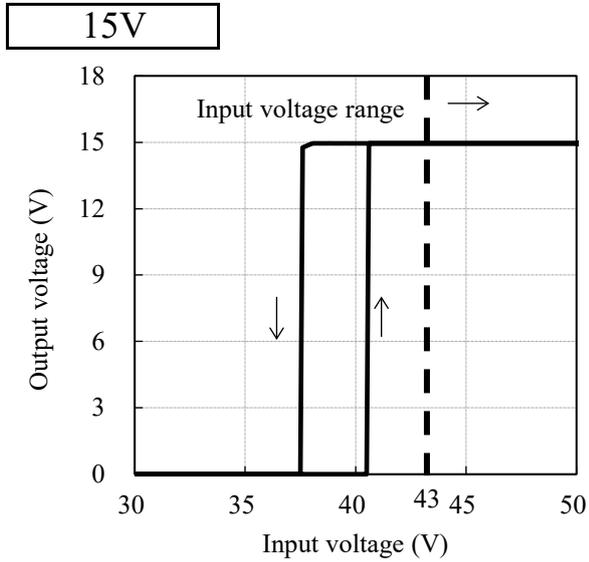
(6) 起動、停止電圧特性  
Start and Stop voltage characteristics

出力電圧 対 入力電圧  
Output voltage vs. Input voltage

Conditions  $I_o$  : 100 %  
 $T_{bp}$  : 25 °C

入力電流 対 入力電圧  
Input current vs. Input voltage

Conditions  $I_o$  : 100 %  
 $T_{bp}$  : 25 °C



(6) 起動、停止電圧特性

Start and Stop voltage characteristics

出力電圧 対 入力電圧

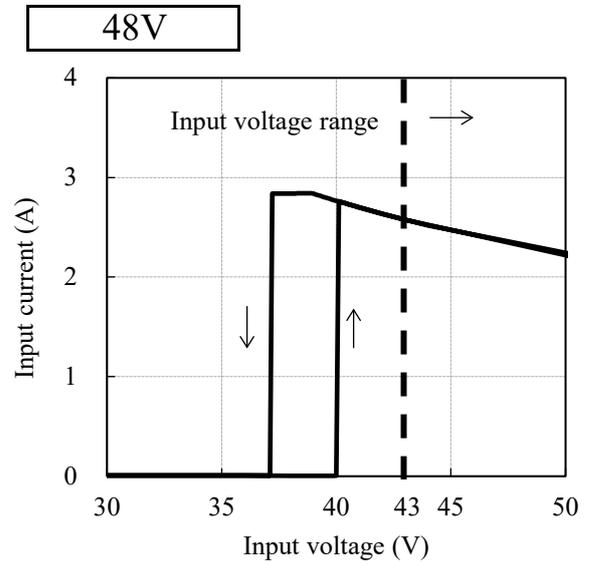
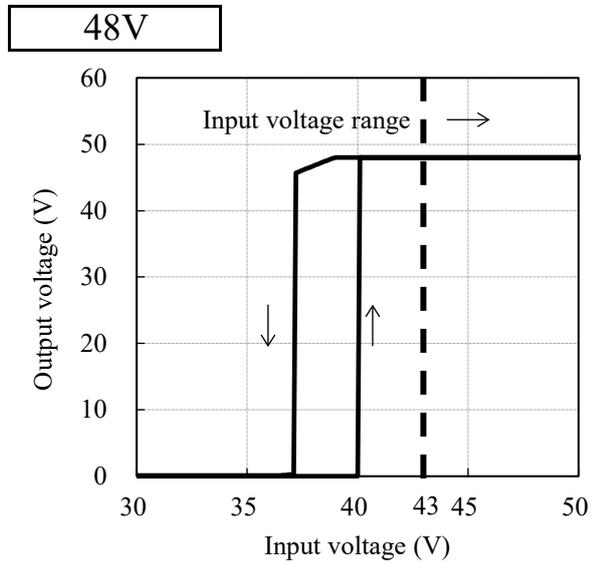
Output voltage vs. Input voltage

Conditions  $I_o$  : 100 %  
 $T_{bp}$  : 25 °C

入力電流 対 入力電圧

Input current vs. Input voltage

Conditions  $I_o$  : 100 %  
 $T_{bp}$  : 25 °C



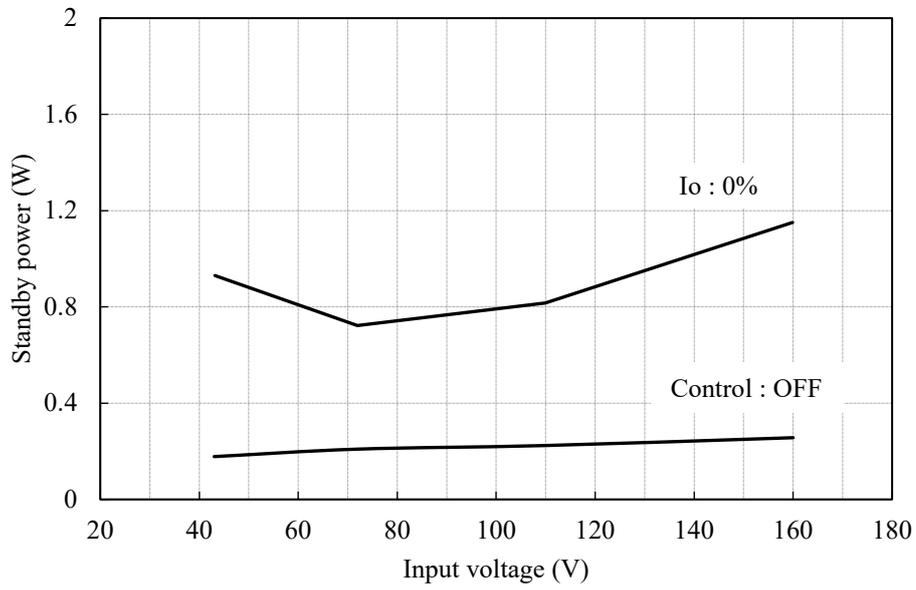
2.2 待機電力特性

Standby power characteristics

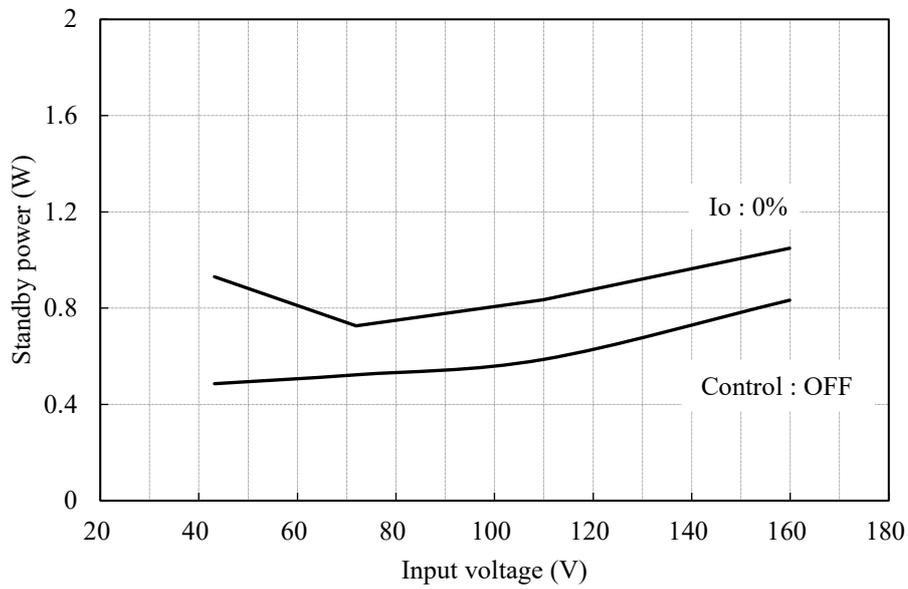
Conditions

Tbp: 25°C

5V



12V



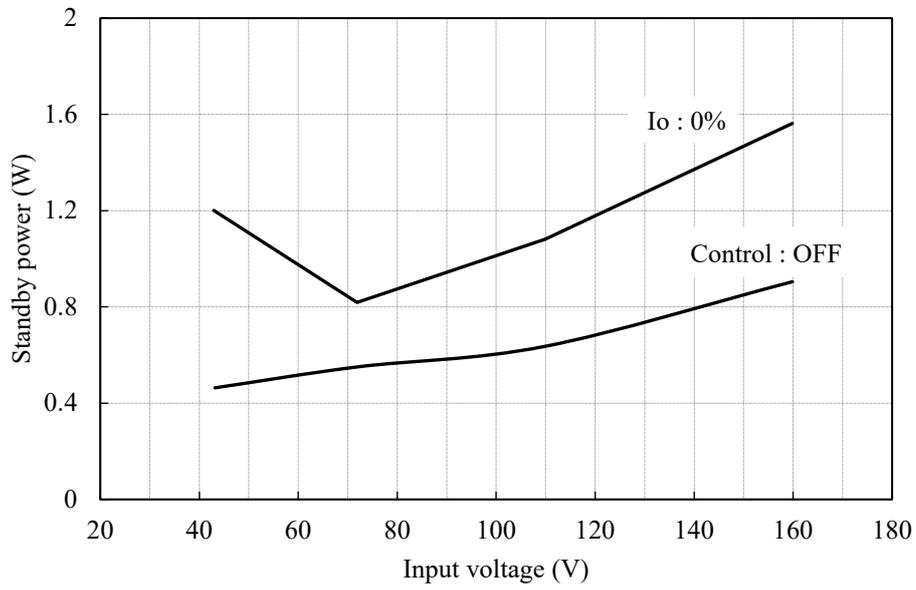
2.2 待機電力特性

Standby power characteristics

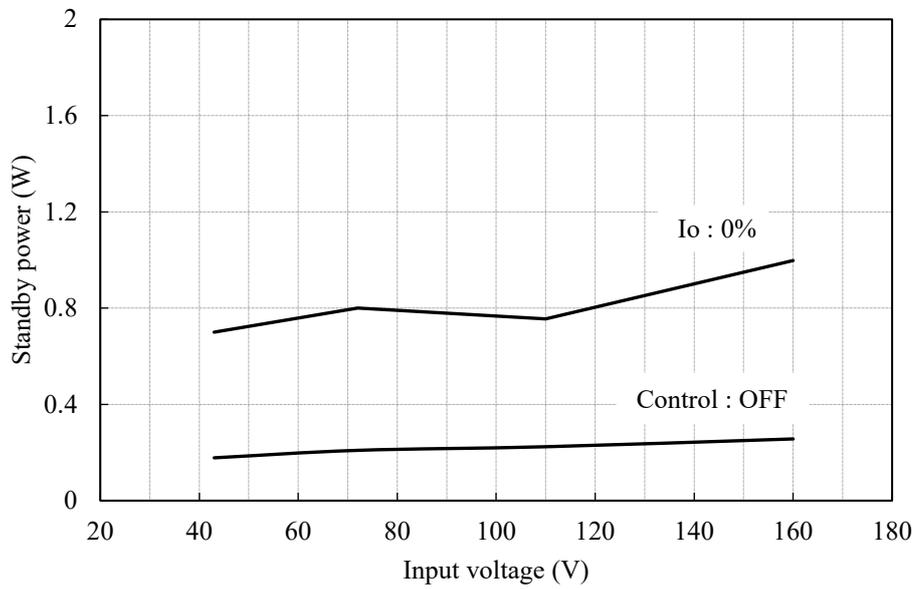
Conditions

Tbp: 25°C

15V



24V



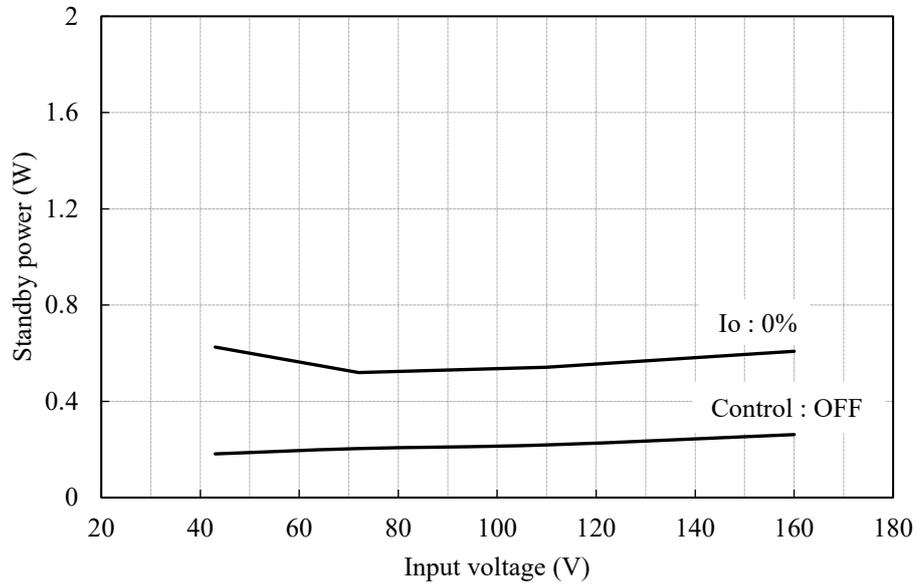
## 2.2 待機電力特性

Standby power characteristics

Conditions

Tbp: 25°C

48V



2.3 通電ドリフト特性

Warm up voltage drift characteristics

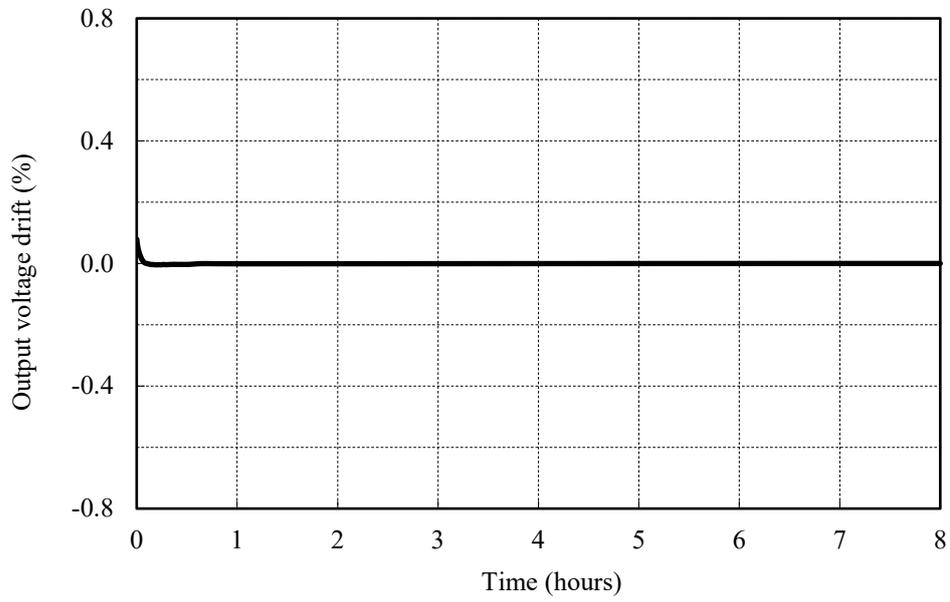
Conditions

V<sub>in</sub> : 110VDC

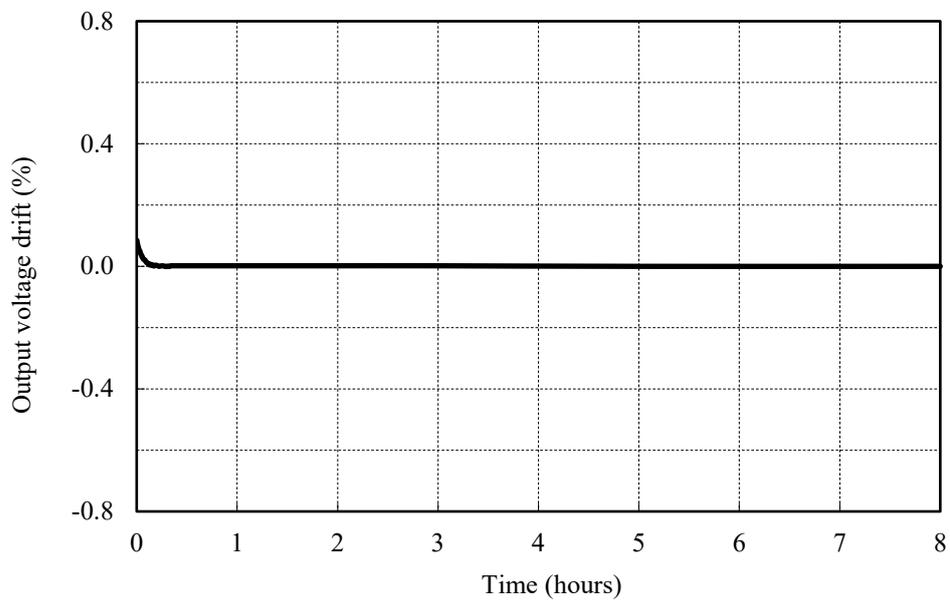
I<sub>o</sub> : 100%

T<sub>a</sub> : 25°C

5V



12V



2.3 通電ドリフト特性

Warm up voltage drift characteristics

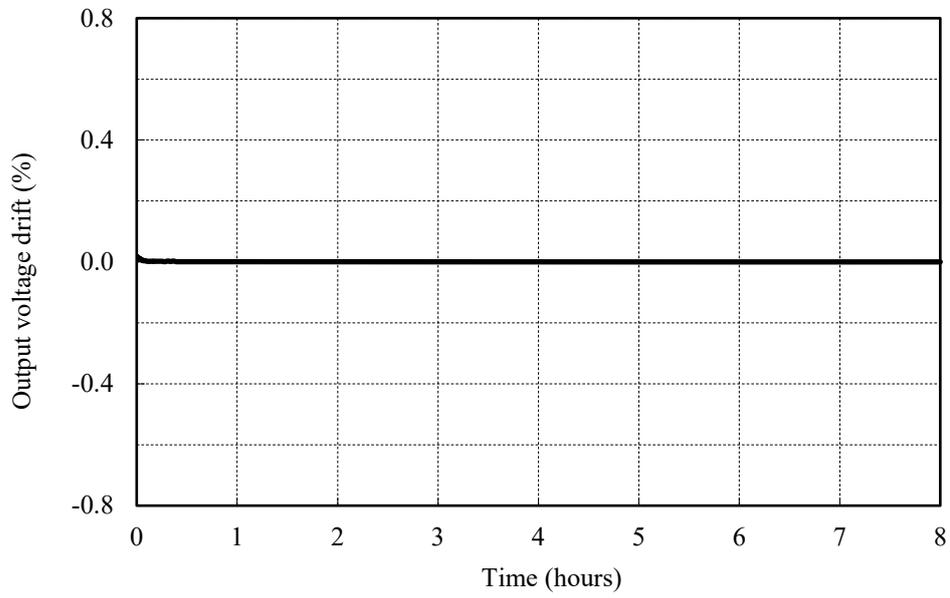
Conditions

V<sub>in</sub> : 110VDC

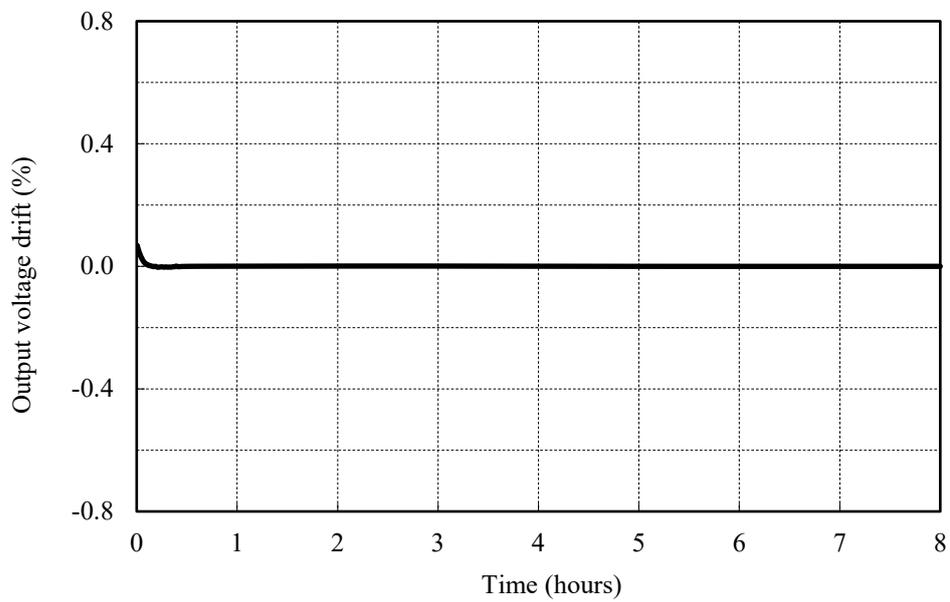
I<sub>o</sub> : 100%

T<sub>a</sub> : 25°C

15V



24V



2.3 通電ドリフト特性

Warm up voltage drift characteristics

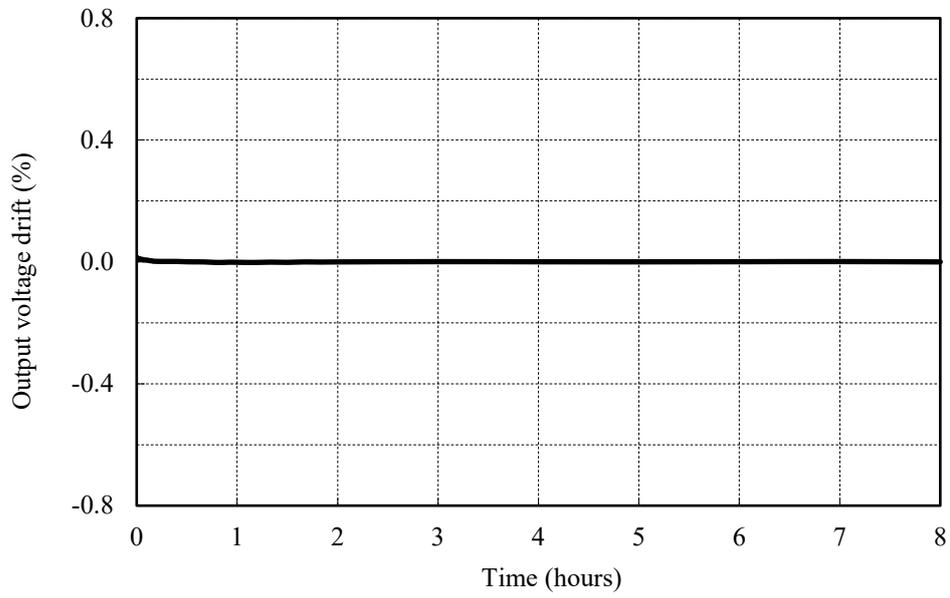
Conditions

Vin : 110VDC

Io : 100%

Ta : 25°C

48V



2.4 過電流保護特性

Over current protection (OCP) characteristics

入力電圧依存性

Input voltage dependence

Conditions Vin : 43 VDC ---  
 : 72 VDC -.-  
 : 110 VDC ...  
 : 160 VDC -.-  
 Tbp : 25 °C

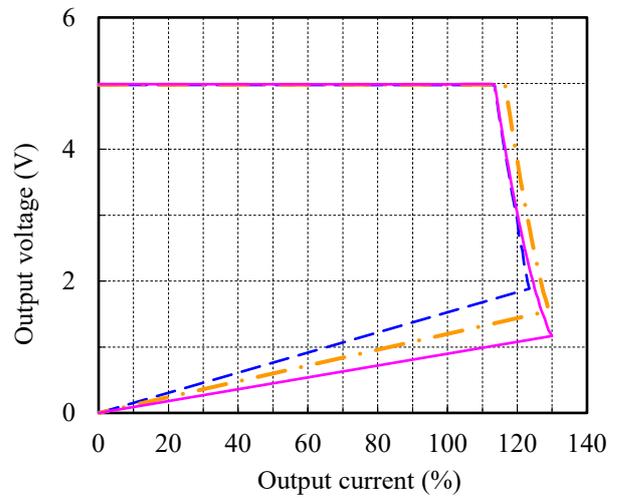
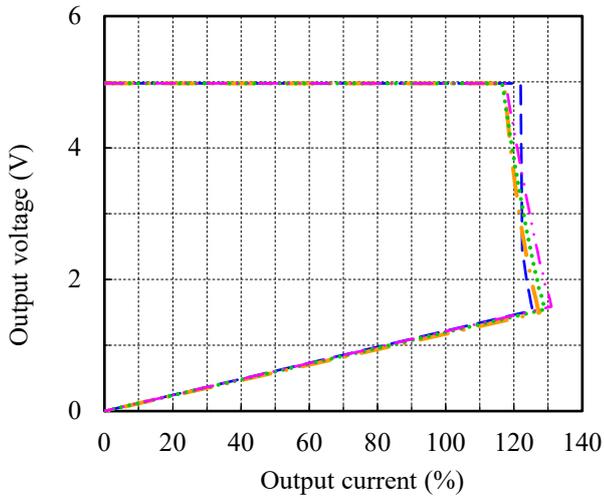
ベースプレート温度依存性

Base-plate temperature dependence

Conditions Vin : 110 VDC  
 Tbp : -40 °C ---  
 : 25 °C -.-  
 : 100 °C -.-

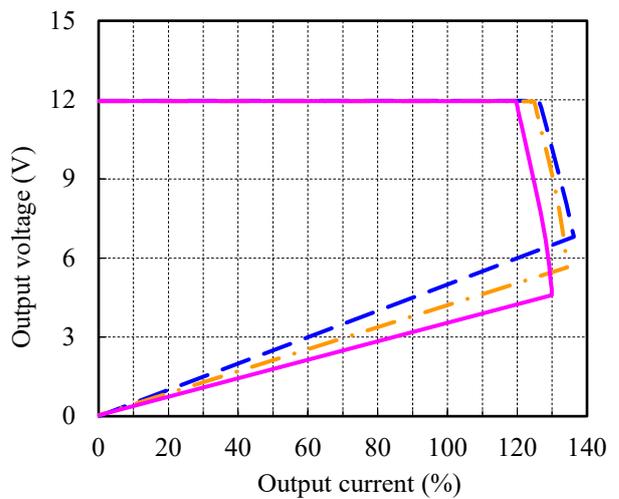
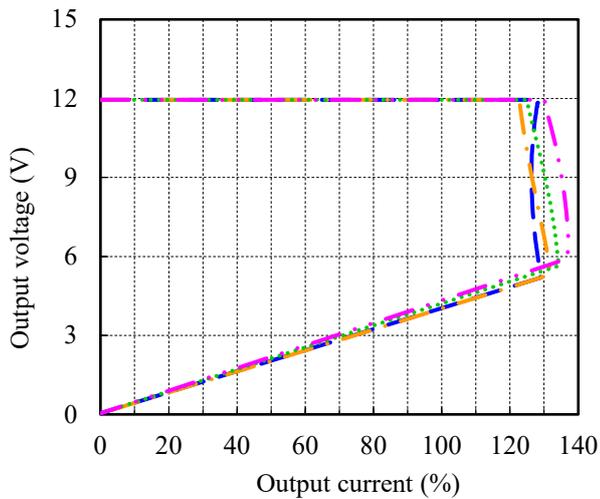
5V

5V



12V

12V



2.4 過電流保護特性

Over current protection (OCP) characteristics

入力電圧依存性

Input voltage dependence

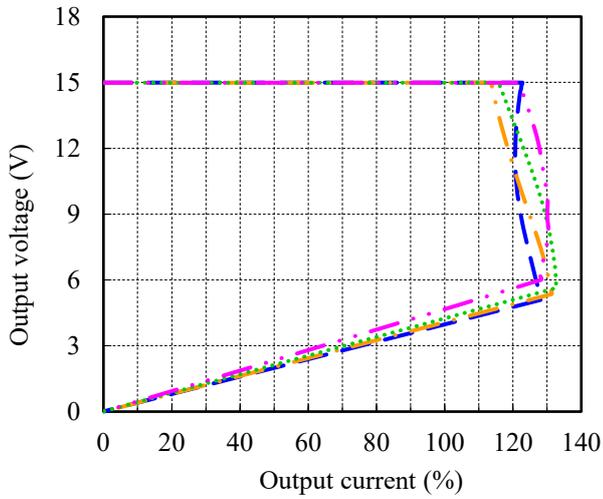
Conditions Vin : 43 VDC ---  
 : 72 VDC - - -  
 : 110 VDC .....  
 : 160 VDC - · - · -  
 Tbp : 25 °C

ベースプレート温度依存性

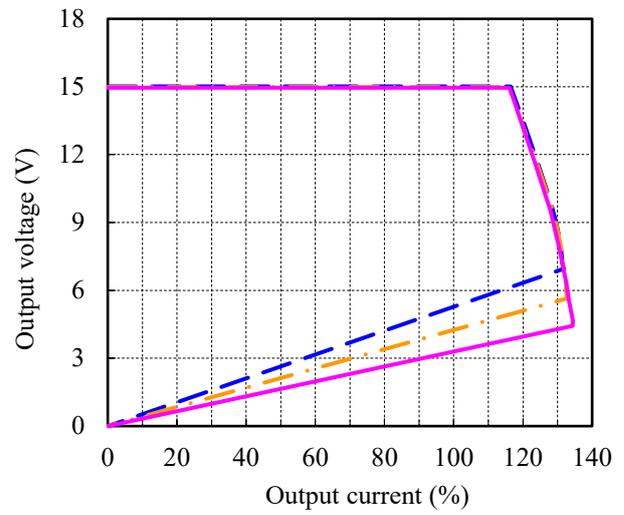
Base-plate temperature dependence

Conditions Vin : 110 VDC  
 Tbp : -40 °C ---  
 : 25 °C - - -  
 : 100 °C - · - · -

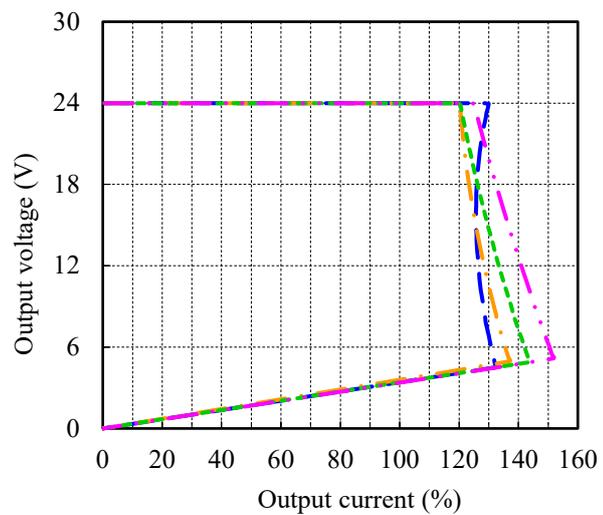
15V



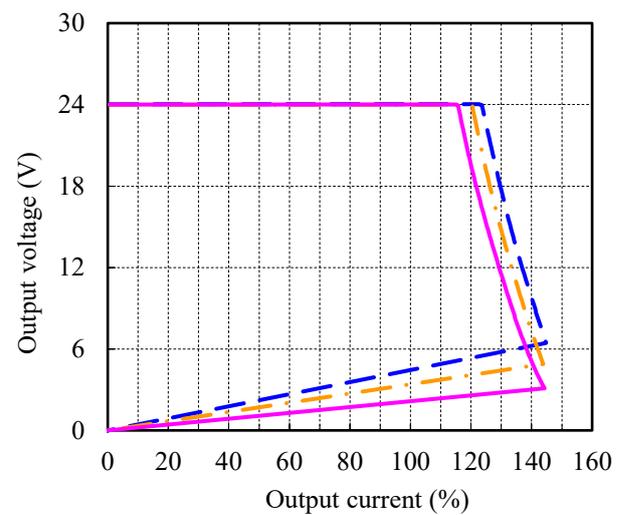
15V



24V



24V



2.4 過電流保護特性

Over current protection (OCP) characteristics

入力電圧依存性

Input voltage dependence

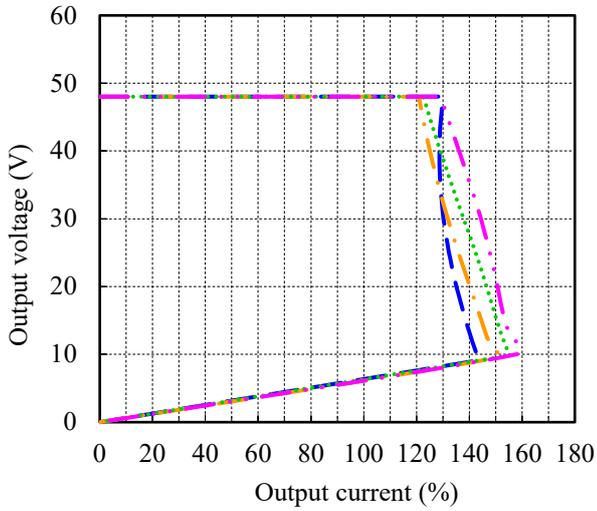
Conditions Vin : 43 VDC ---  
 : 72 VDC -.-  
 : 110 VDC .....  
 : 160 VDC -·-·-  
 Tbp : 25 °C

ベースプレート温度依存性

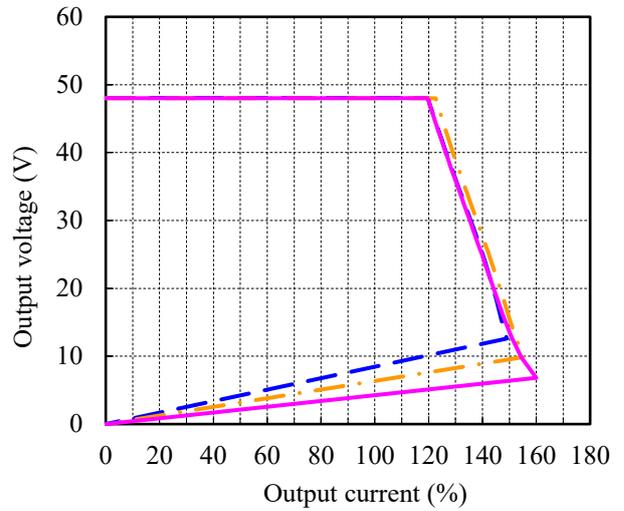
Base-plate temperature dependence

Conditions Vin : 110 VDC  
 Tbp : -40 °C ---  
 : 25 °C -.-  
 : 100 °C -·-·-

48V



48V

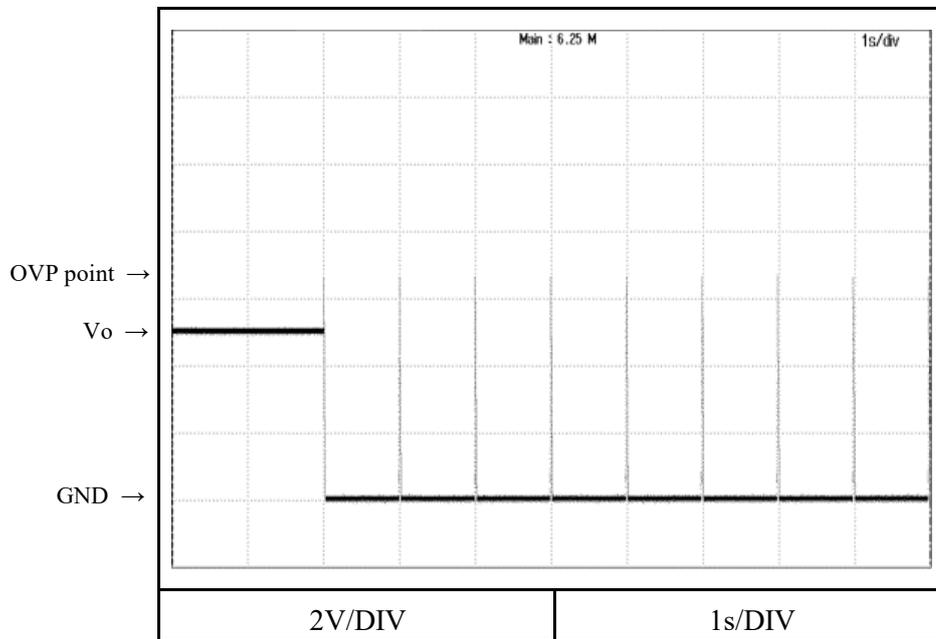


2.5 過電圧保護特性

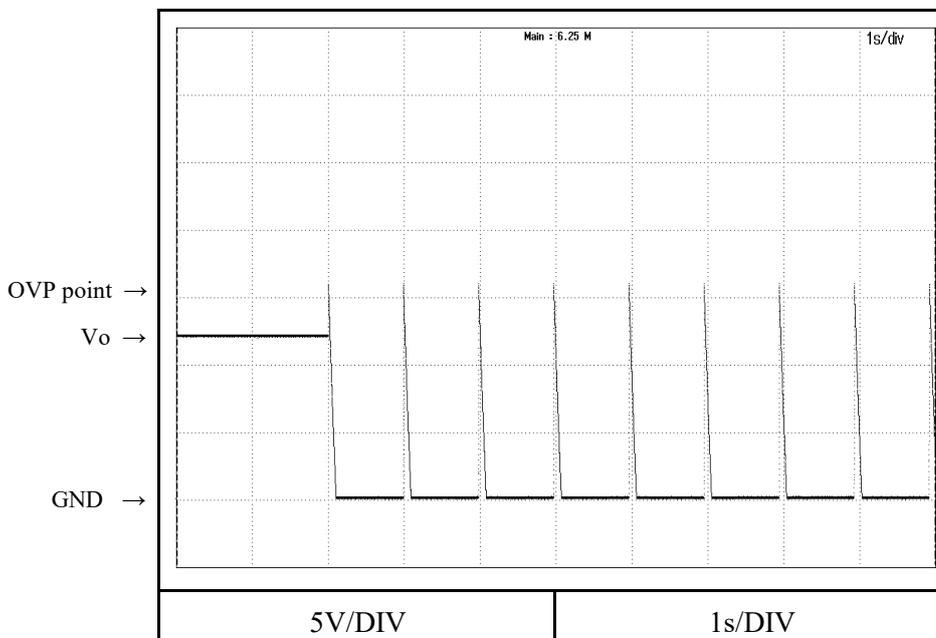
Over voltage protection (OVP) characteristics

Conditions Vin : 110 VDC  
 Io : 1%  
 Tbp : 25 °C

5V



12V

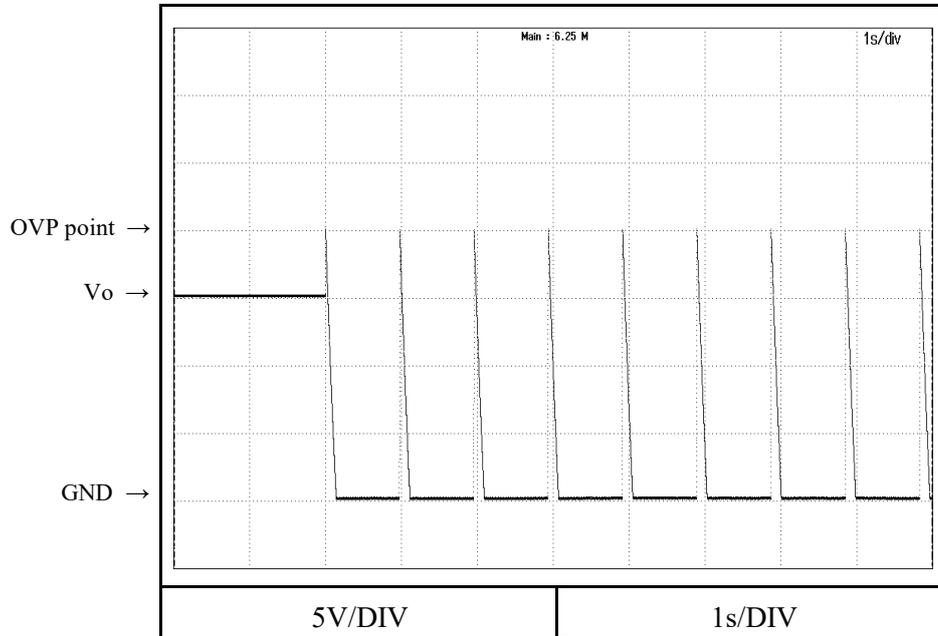


2.5 過電圧保護特性

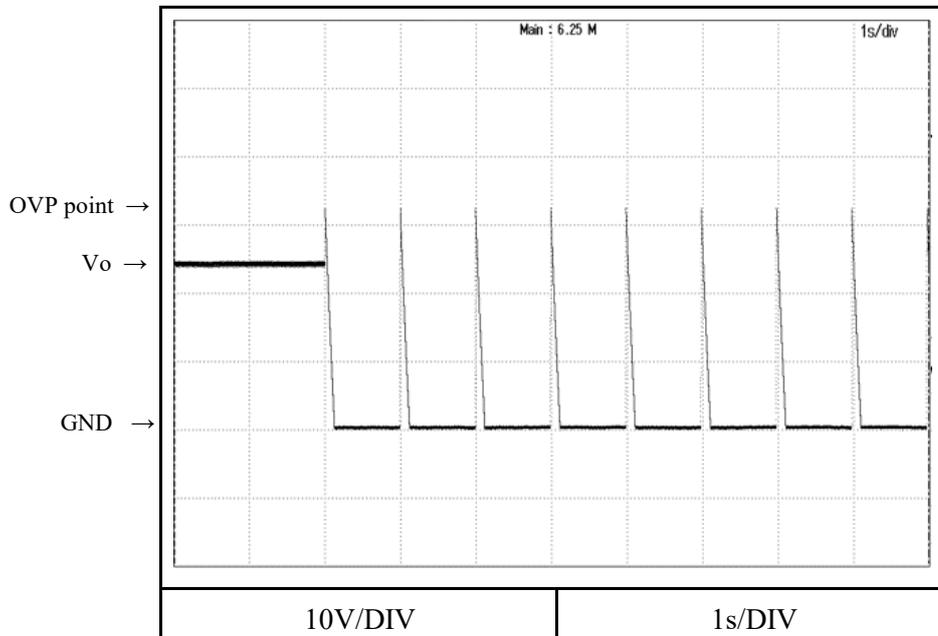
Over voltage protection (OVP) characteristics

Conditions Vin : 110 VDC  
 Io : 1%  
 Tbp : 25 °C

15V



24V

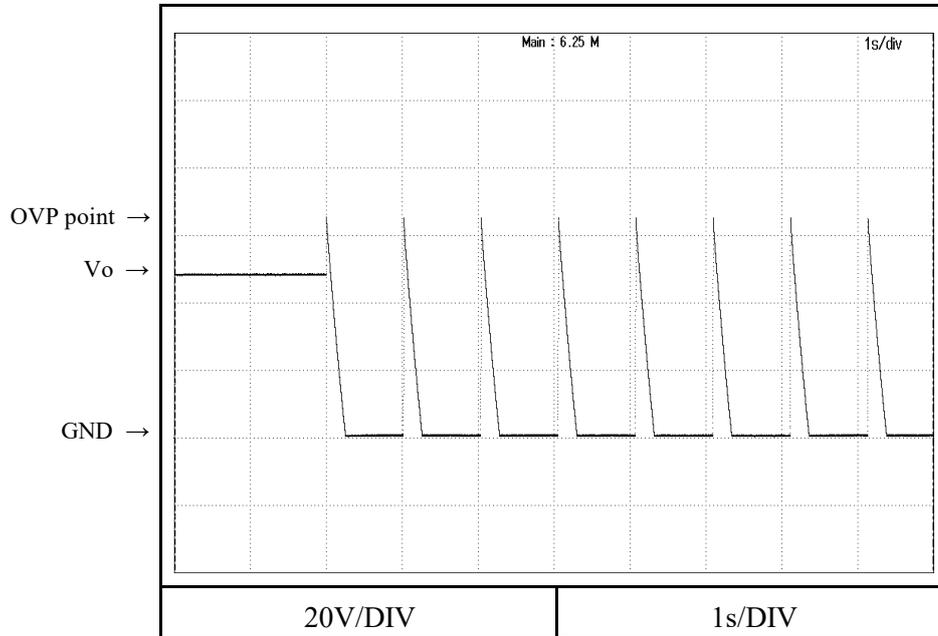


2.5 過電圧保護特性

Over voltage protection (OVP) characteristics

Conditions Vin : 110 VDC  
 Io : 1%  
 Tbp : 25 °C

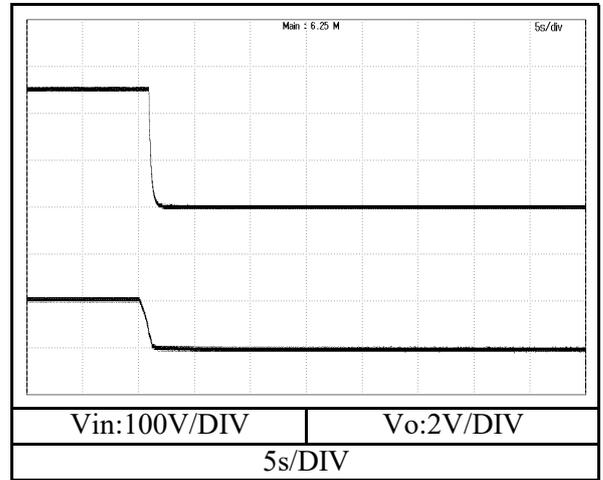
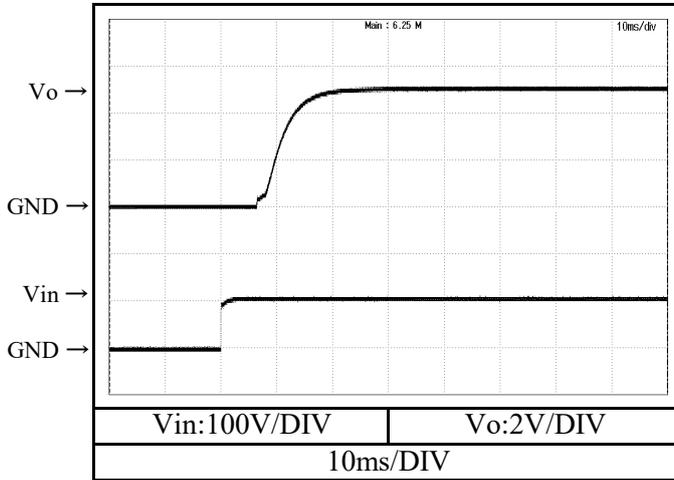
48V



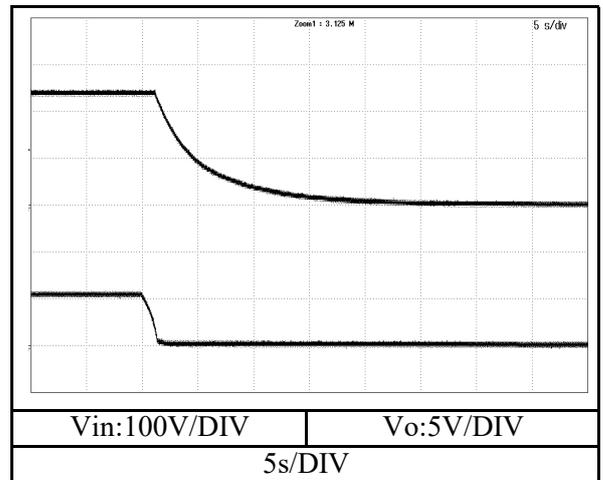
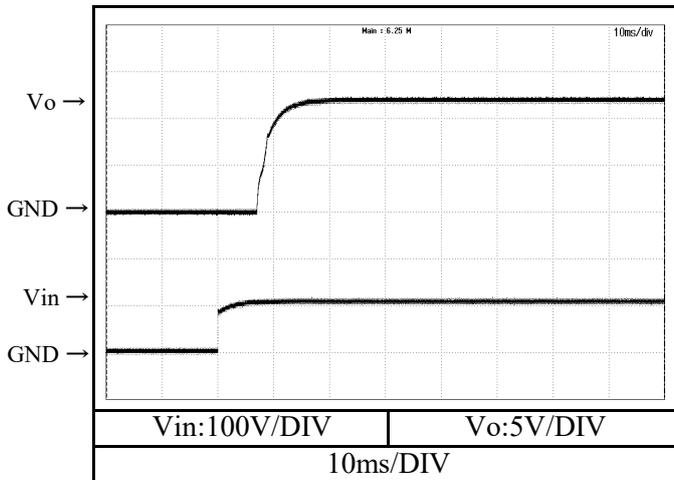
2.6 出力立ち上がり、立ち下がり特性  
Output rise and fall characteristics

Conditions Vin : 110 VDC  
Io : 0 %  
Tbp : 25°C

5V



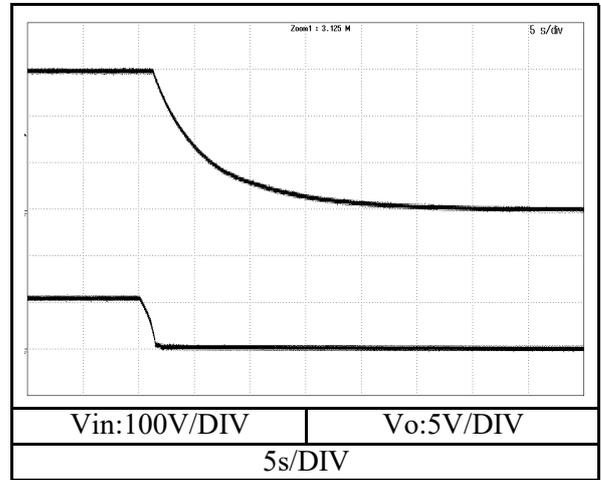
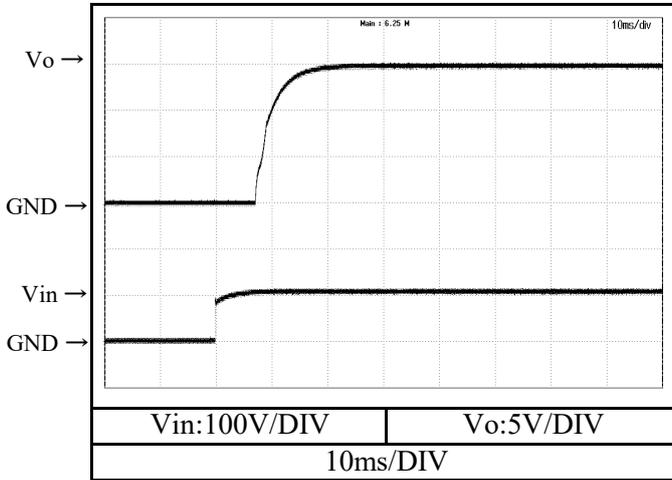
12V



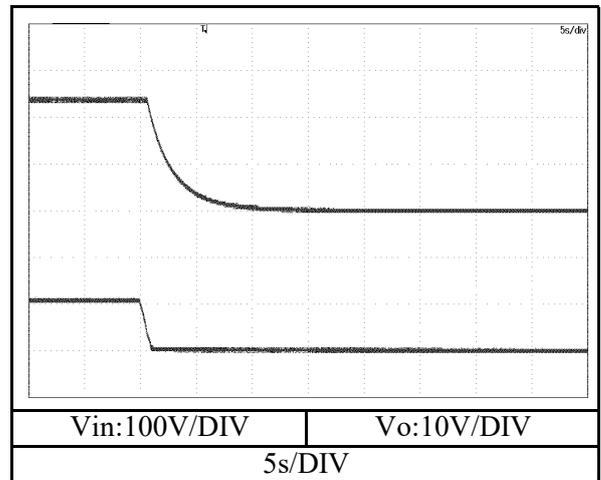
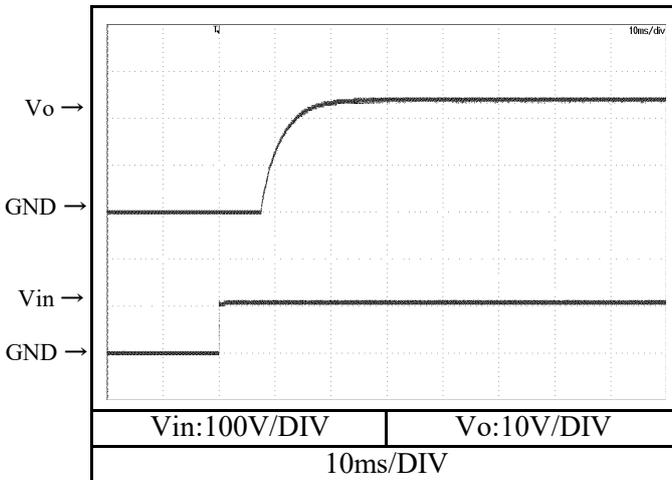
2.6 出力立ち上がり、立ち下がり特性  
Output rise and fall characteristics

Conditions Vin : 110 VDC  
Io : 0 %  
Tbp : 25°C

15V



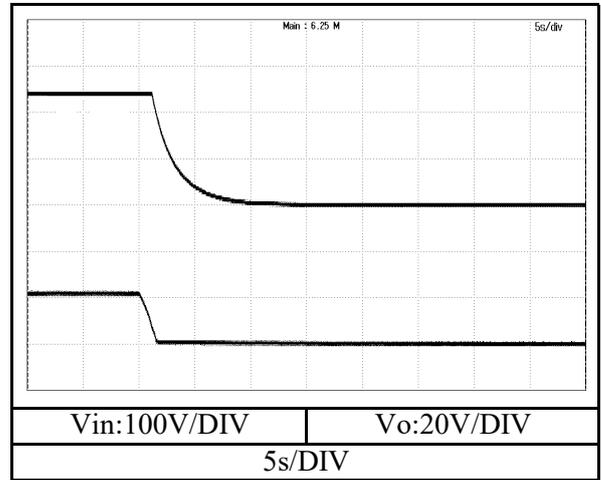
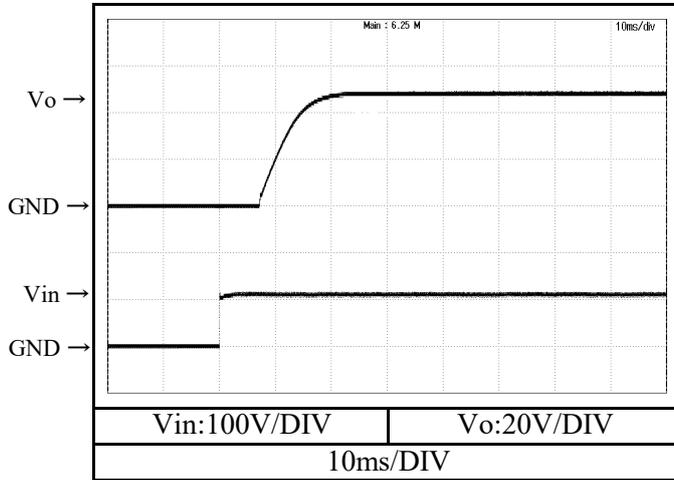
24V



2.6 出力立ち上がり、立ち下がり特性  
Output rise and fall characteristics

Conditions       $V_{in}$  : 110 VDC  
                           $I_o$  : 0 %  
                           $T_{bp}$  : 25°C

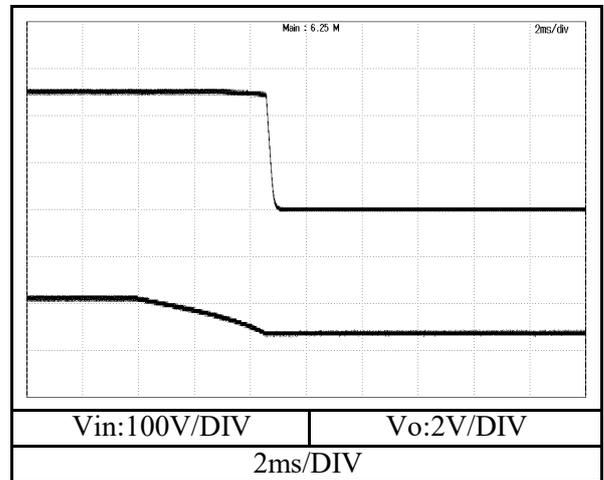
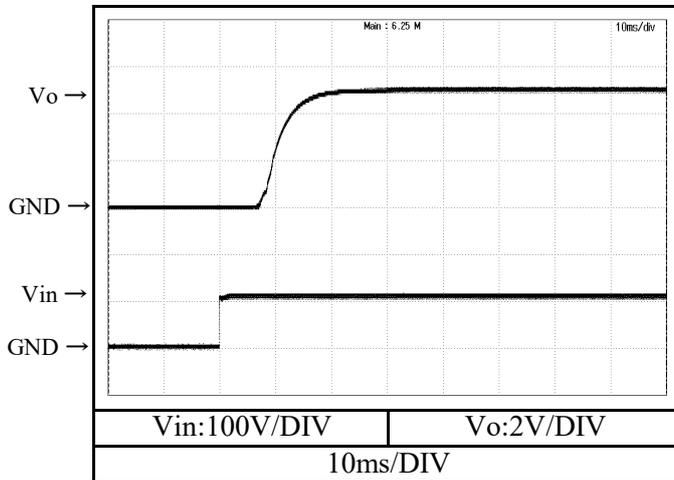
48V



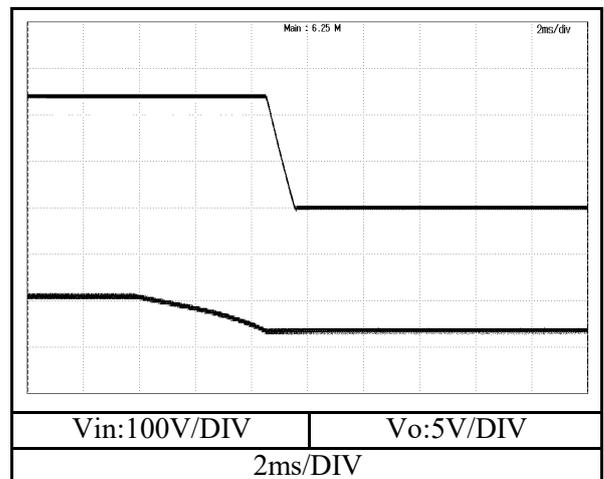
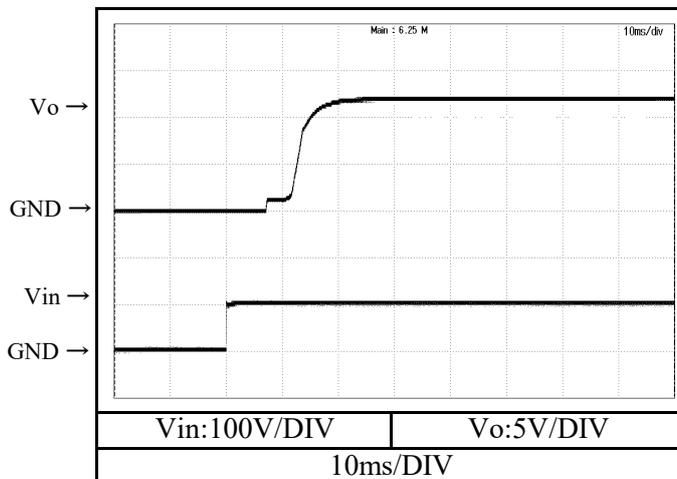
2.6 出力立ち上がり、立ち下がり特性  
Output rise and fall characteristics

Conditions Vin : 110 VDC  
Io : 100 %  
Tbp : 25 °C

5V



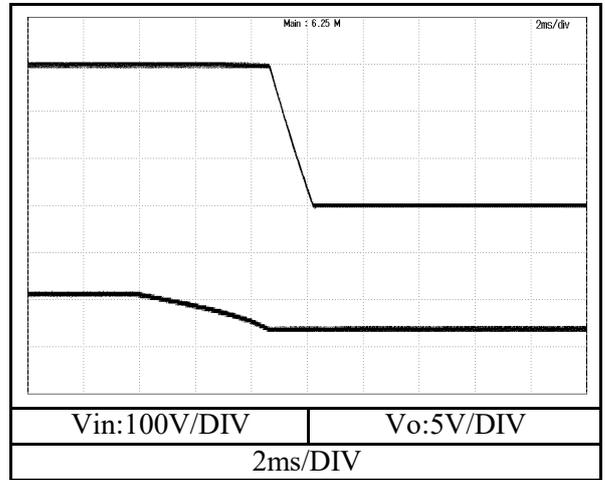
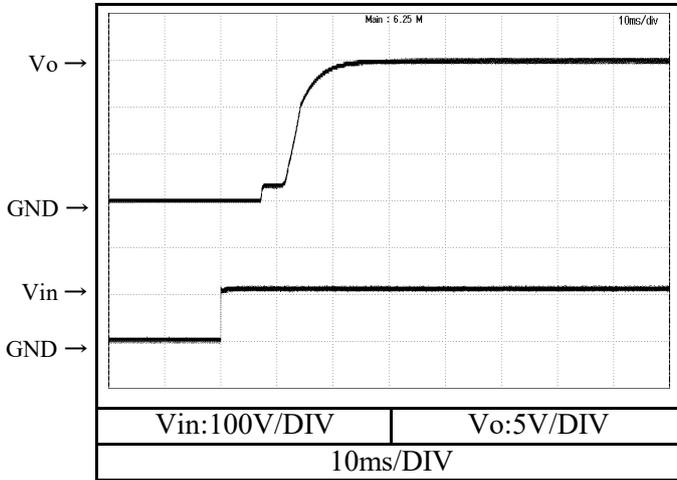
12V



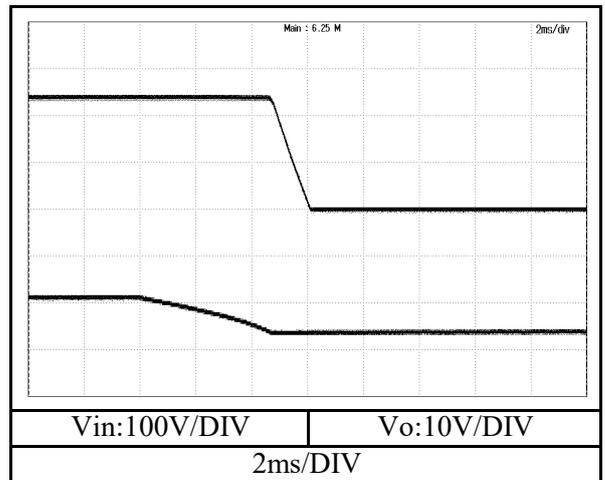
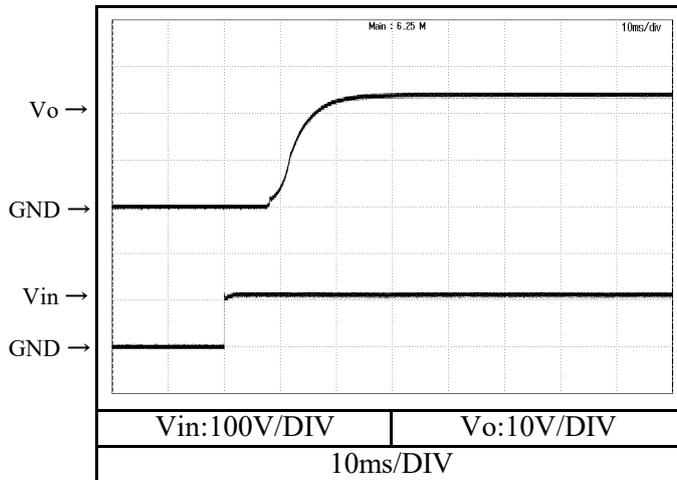
2.6 出力立ち上がり、立ち下がり特性  
Output rise and fall characteristics

Conditions Vin : 110 VDC  
Io : 100 %  
Tbp : 25 °C

15V



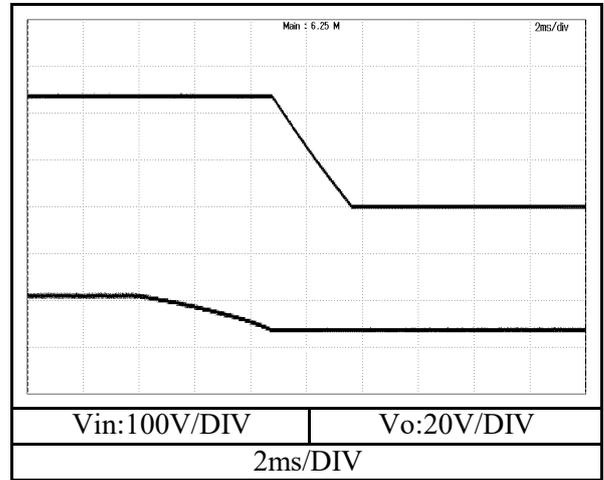
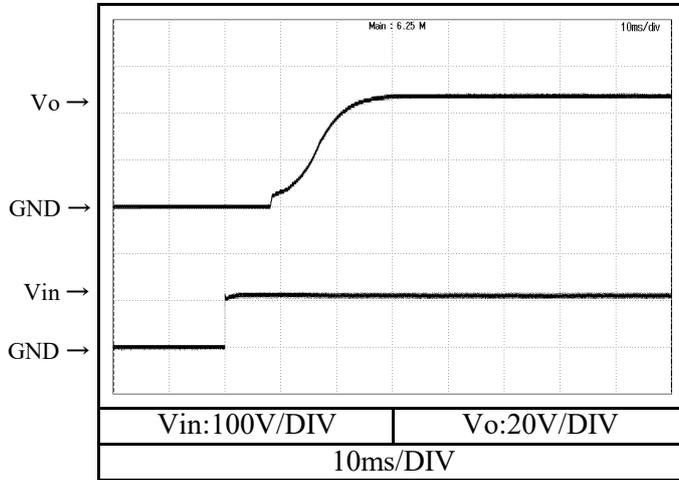
24V



2.6 出力立ち上がり、立ち下がり特性  
Output rise and fall characteristics

Conditions Vin : 110 VDC  
Io : 100 %  
Tbp : 25°C

48V



2.6 出力立ち上がり、立ち下がり特性 (ON/OFFコントロール時)

Output rise and fall characteristics with ON/OFF CONTROL

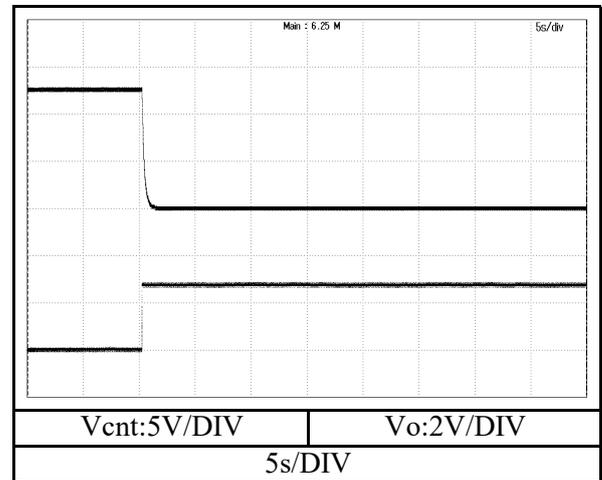
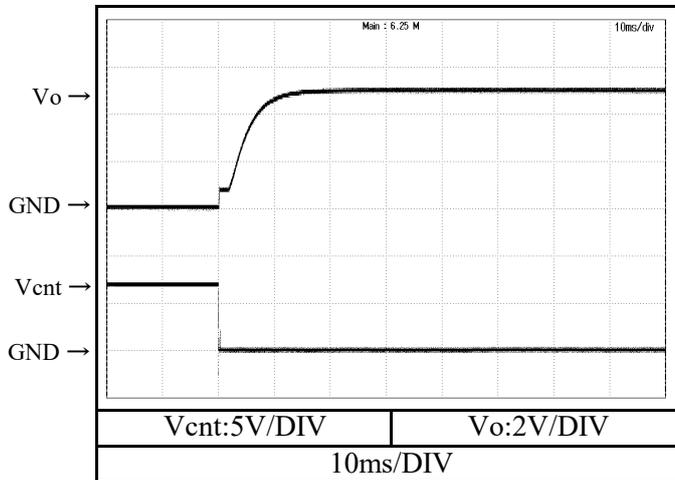
Conditions

Vin : 110 VDC

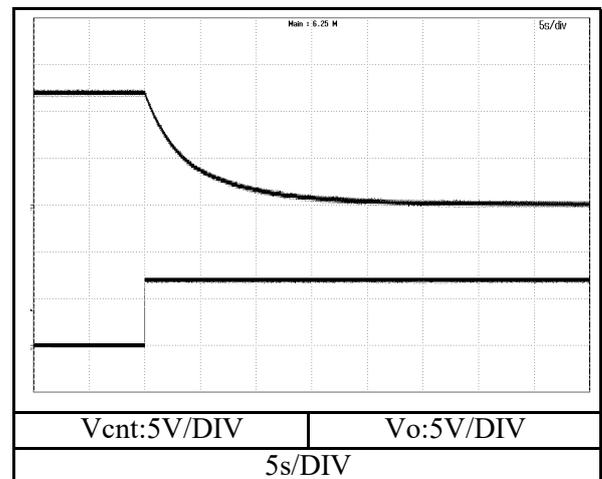
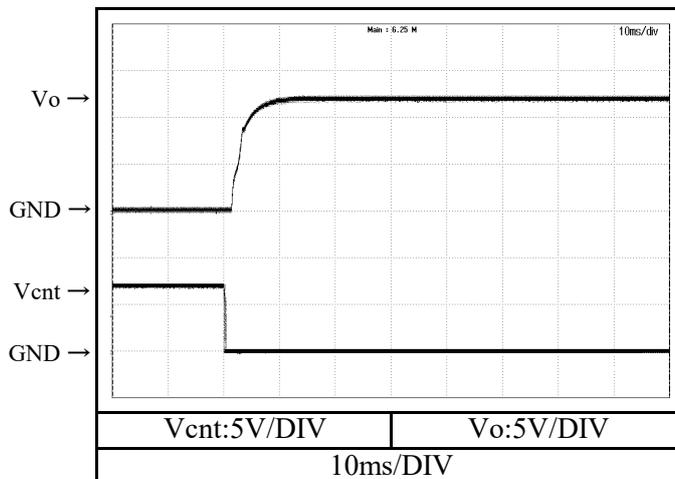
Io : 0 %

Tbp : 25°C

5V



12V



2.6 出力立ち上がり、立ち下がり特性 (ON/OFFコントロール時)

Output rise and fall characteristics with ON/OFF CONTROL

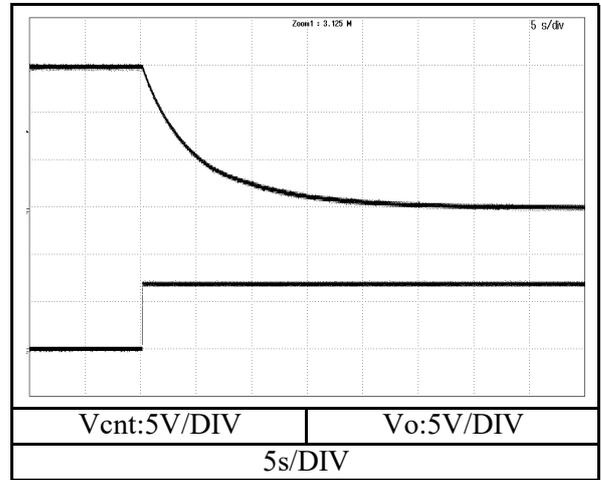
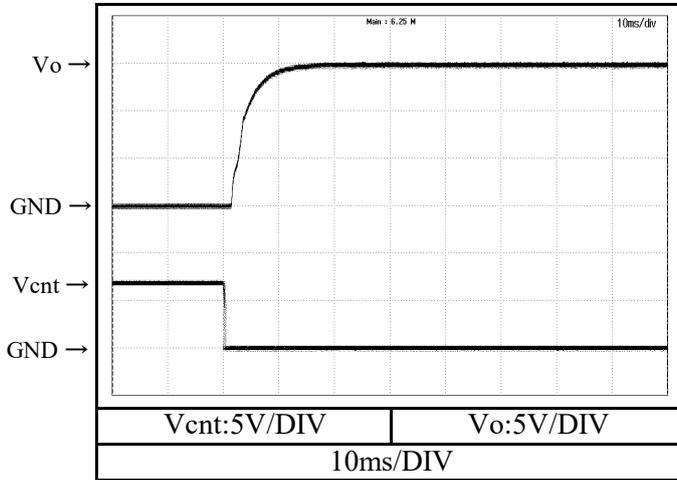
Conditions

$V_{in}$  : 110 VDC

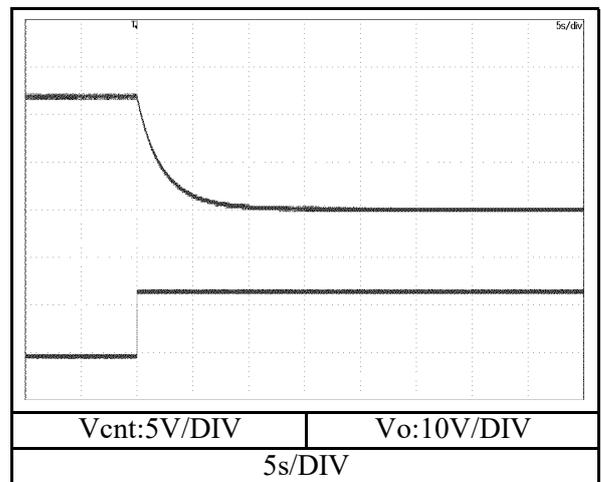
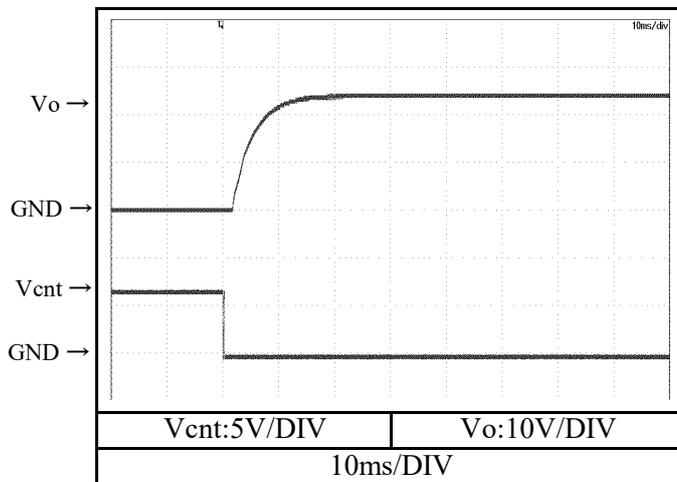
$I_o$  : 0 %

$T_{bp}$  : 25°C

15V



24V



2.6 出力立ち上がり、立ち下がり特性 (ON/OFFコントロール時)

Output rise and fall characteristics with ON/OFF CONTROL

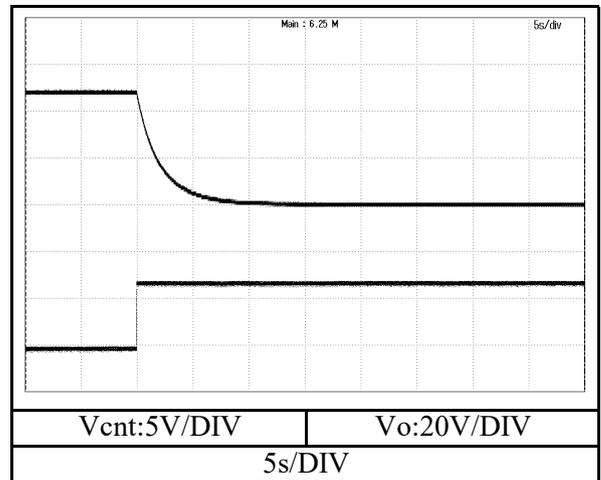
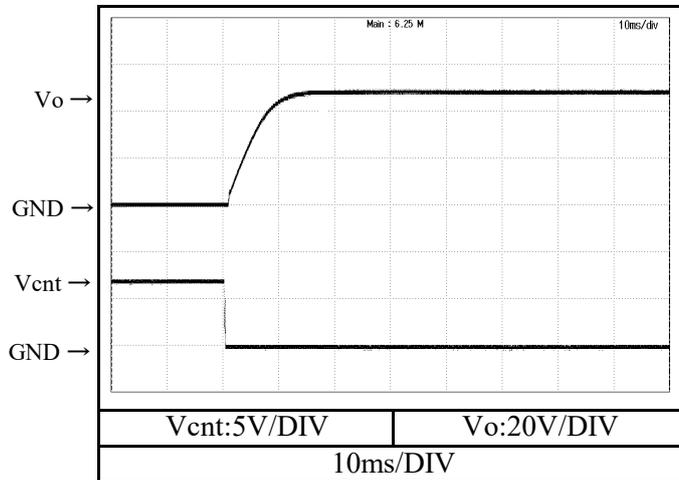
Conditions

Vin : 110 VDC

Io : 0 %

Tbp : 25°C

48V



2.6 出力立ち上がり、立ち下がり特性 (ON/OFFコントロール時)

Output rise and fall characteristics with ON/OFF CONTROL

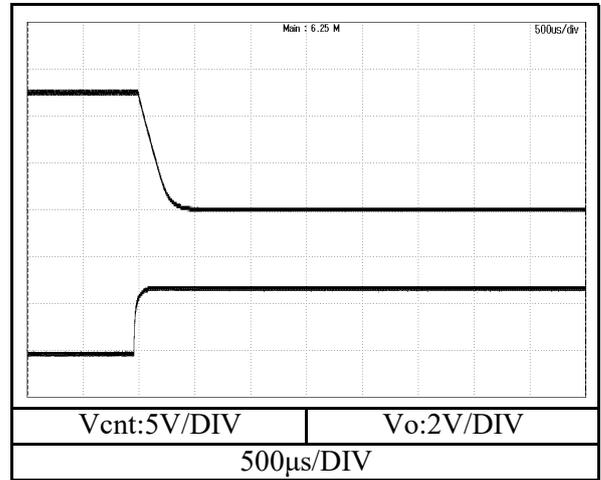
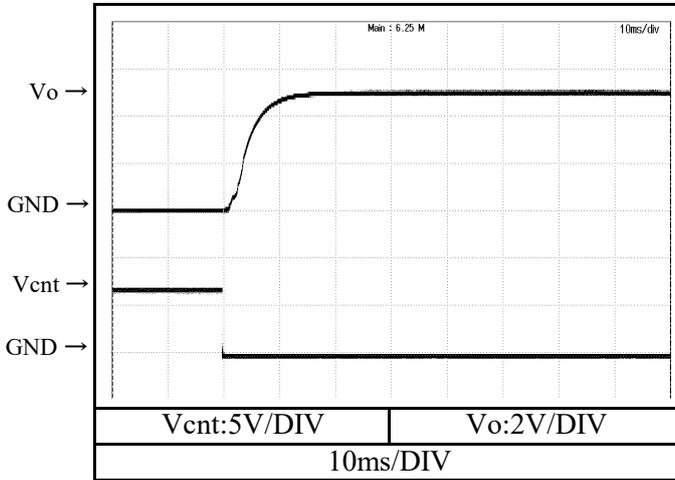
Conditions

$V_{in}$  : 110 VDC

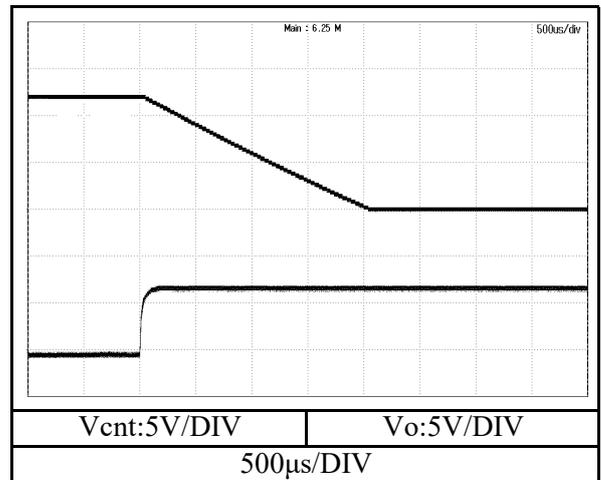
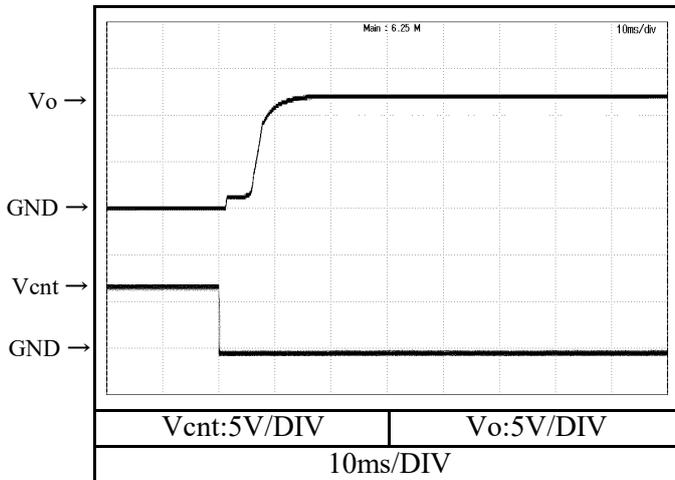
$I_o$  : 100 %

$T_{bp}$  : 25°C

5V



12V



2.6 出力立ち上がり、立ち下がり特性 (ON/OFFコントロール時)

Output rise and fall characteristics with ON/OFF CONTROL

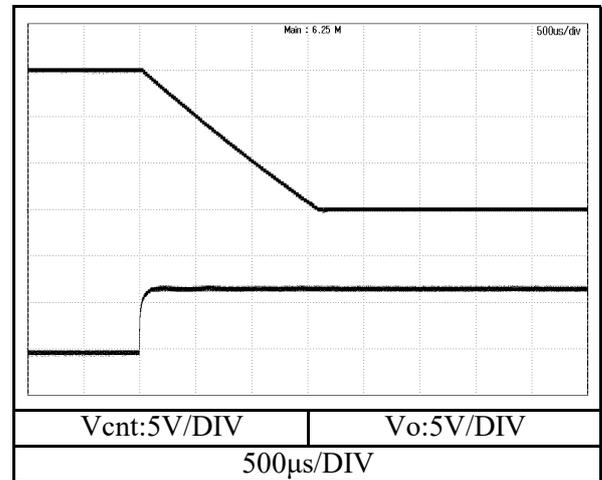
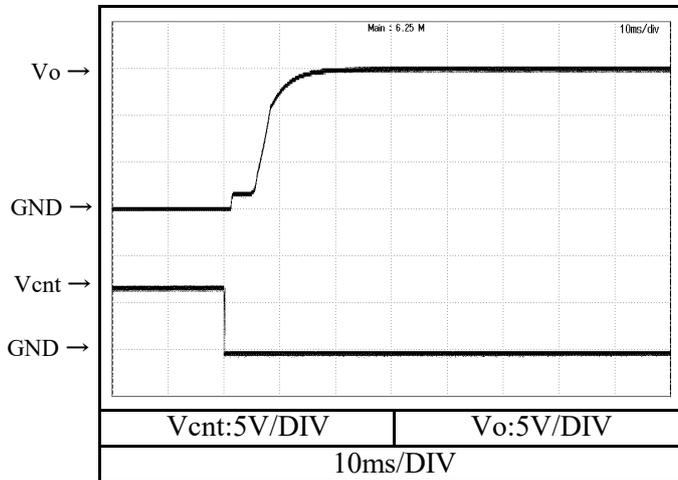
Conditions

Vin : 110 VDC

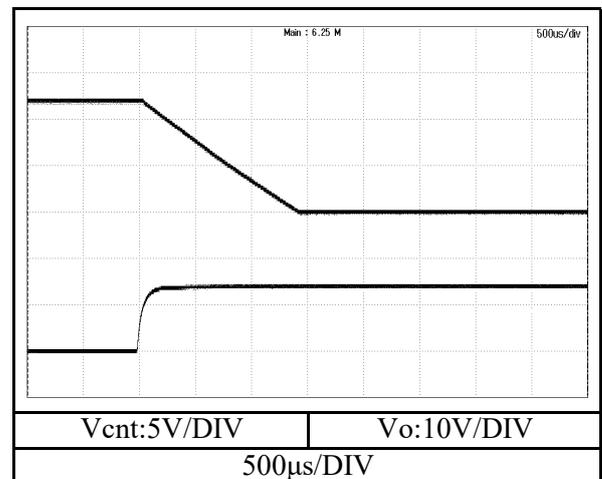
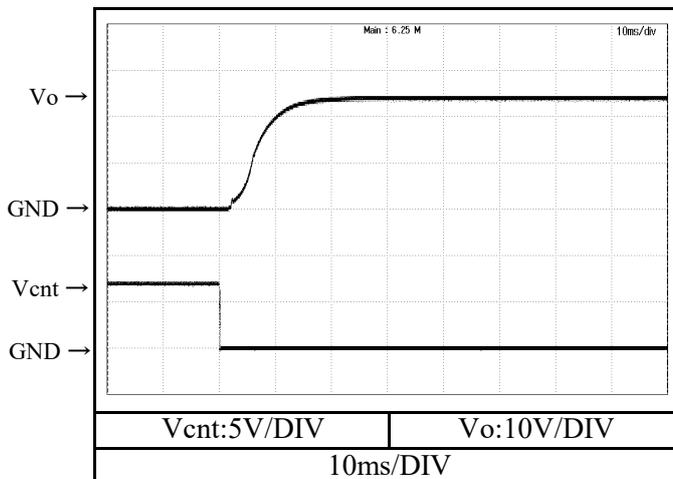
Io : 100 %

Tbp : 25°C

15V



24V



2.6 出力立ち上がり、立ち下がり特性 (ON/OFFコントロール時)

Output rise and fall characteristics with ON/OFF CONTROL

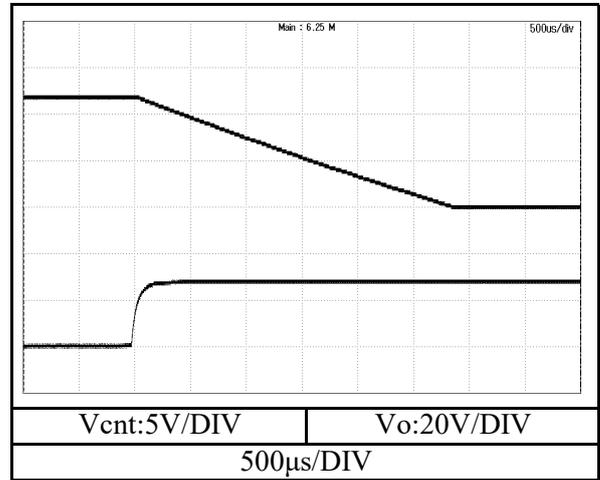
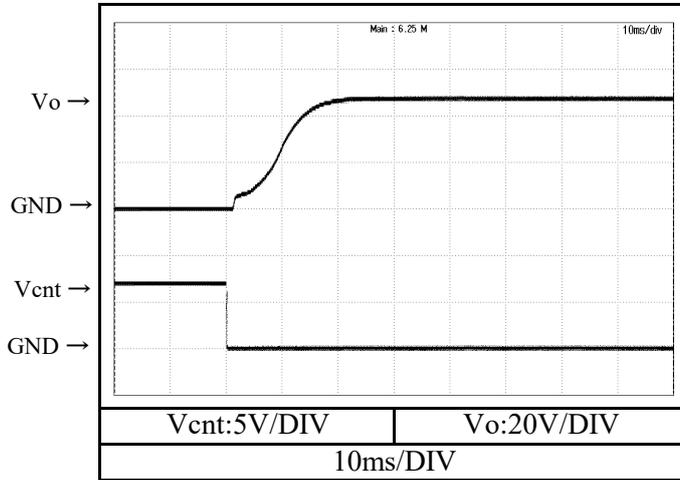
Conditions

$V_{in}$  : 110 VDC

$I_o$  : 100 %

$T_{bp}$  : 25°C

48V



2.7 過渡応答(負荷急変)特性

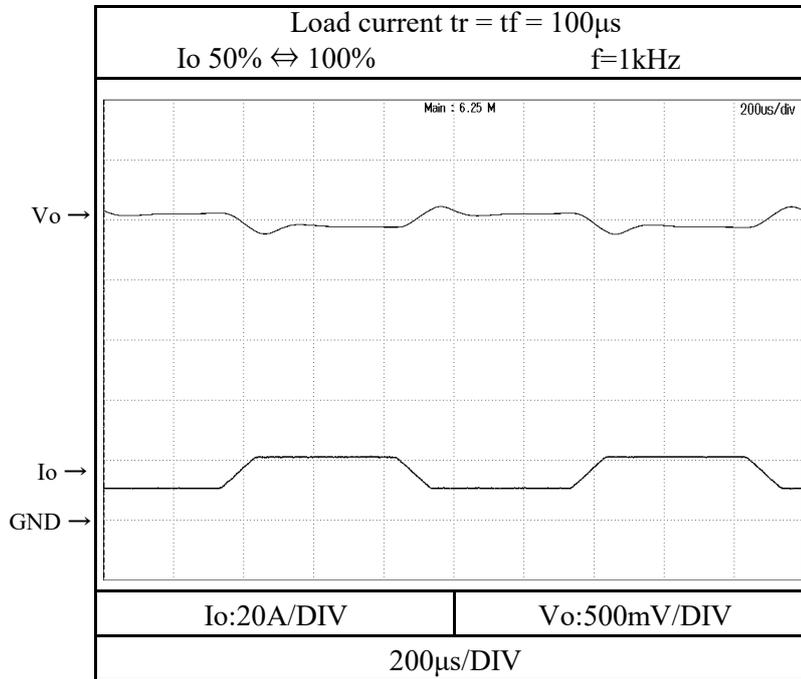
Dynamic load response characteristics

Conditions

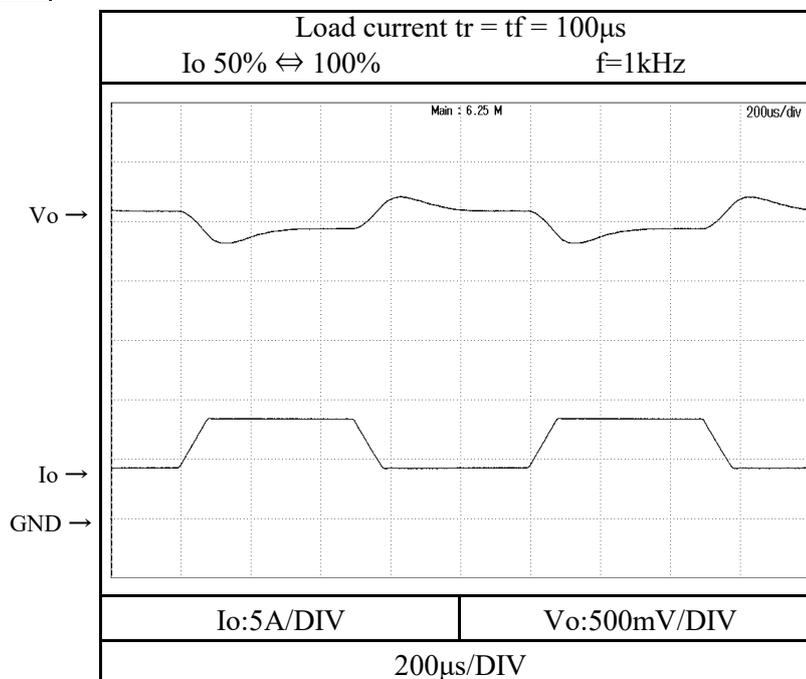
$V_{in}$  : 110VDC

$T_{bp}$  : 25°C

5V



12V



2.7 過渡応答(負荷急変)特性

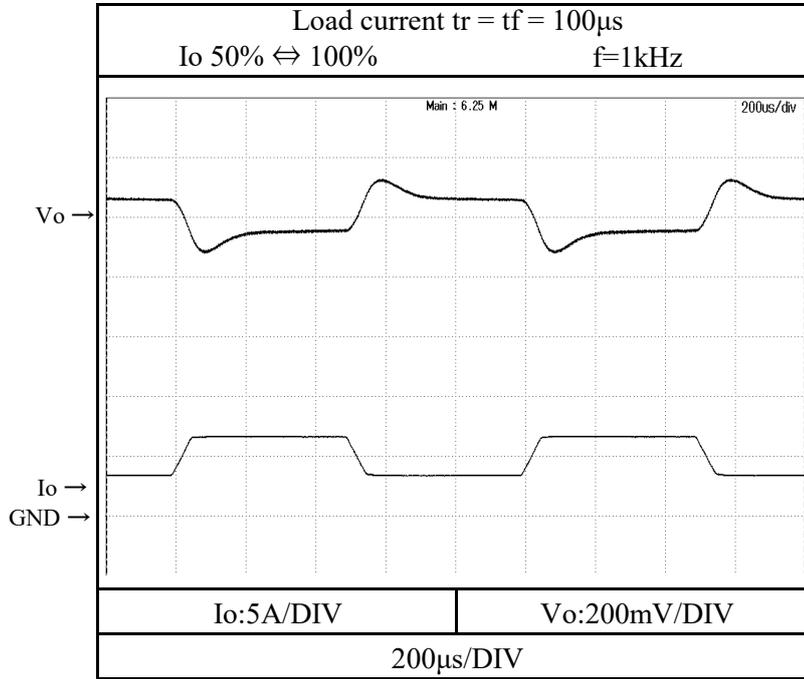
Dynamic load response characteristics

Conditions

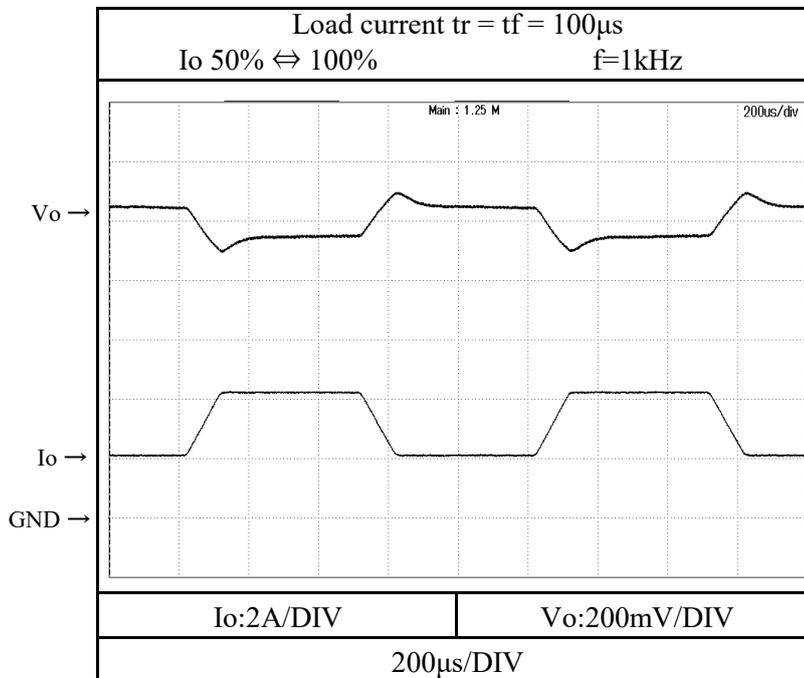
V<sub>in</sub> : 110VDC

T<sub>bp</sub> : 25°C

15V



24V



2.7 過渡応答(負荷急変)特性

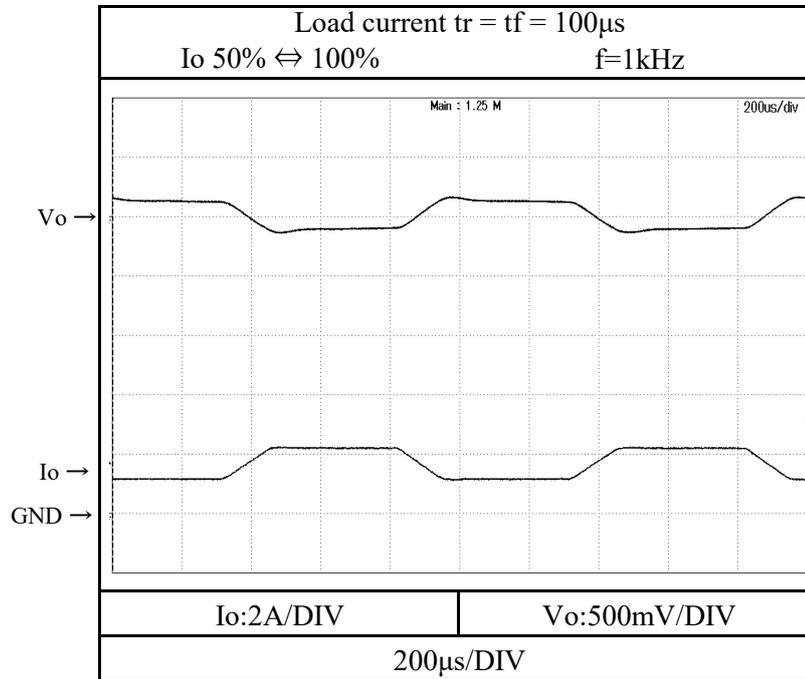
Dynamic load response characteristics

Conditions

V<sub>in</sub> : 110VDC

T<sub>bp</sub> : 25°C

48V

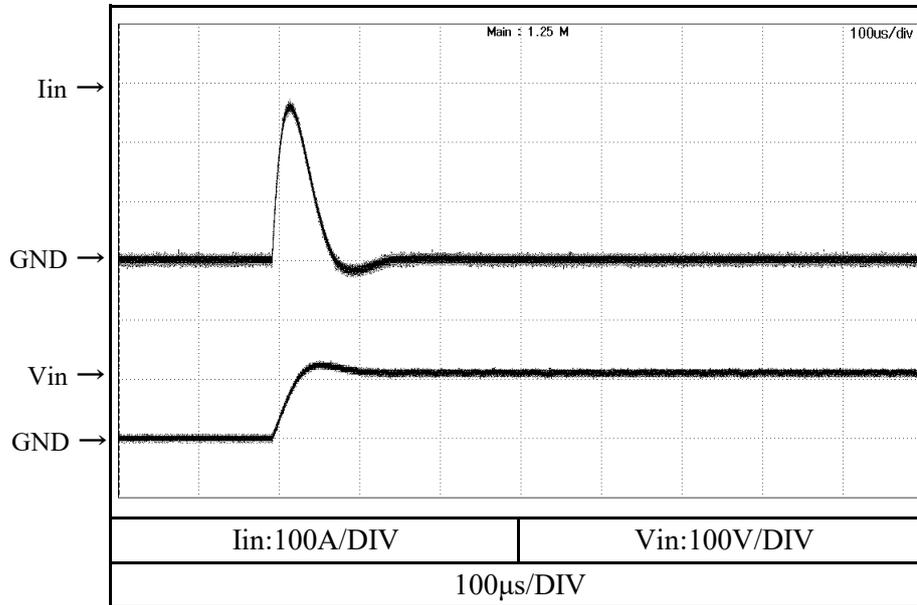


2.8 入力サージ電流(突入電流)特性

Inrush current characteristics

Conditions Vin : 110 VDC  
Io : 100%  
Tbp : 25°C

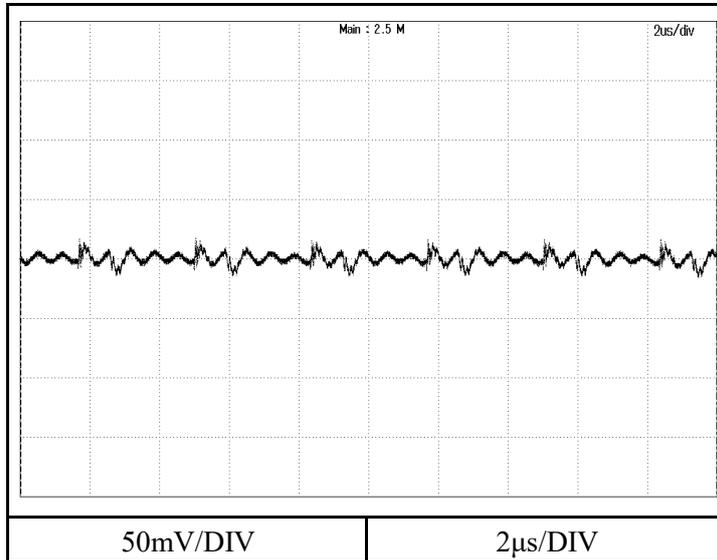
48V



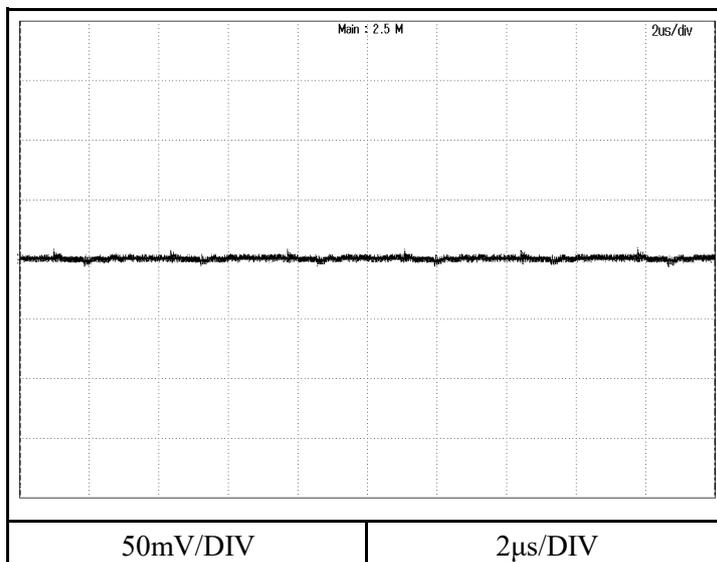
2.9 出力リップル・ノイズ波形  
Output ripple and noise waveform

Conditions  $V_{in}$  : 110VDC  
 $I_o$  : 100%  
 $T_{bp}$  : 25°C

5V



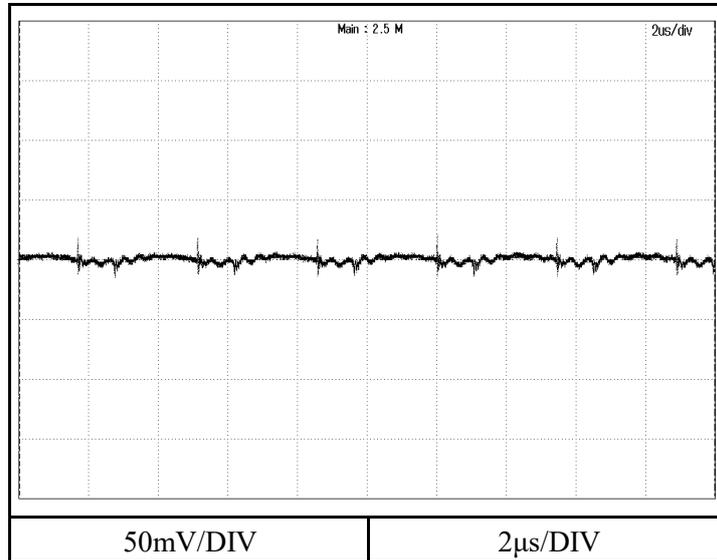
12V



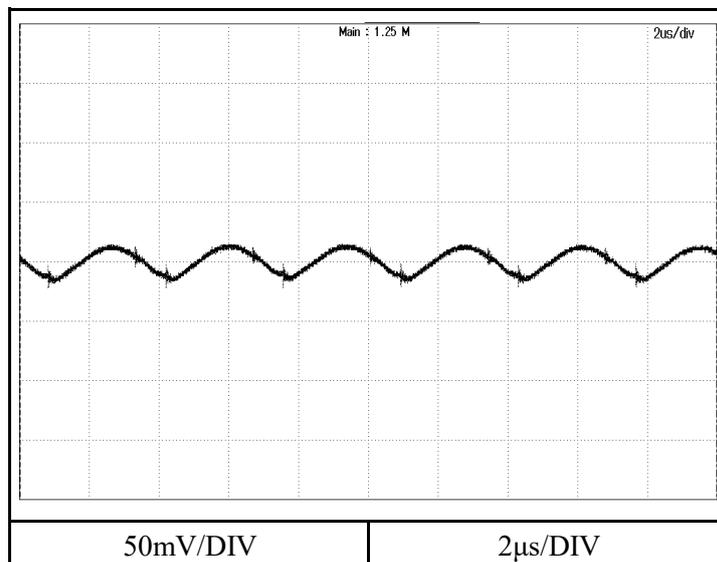
2.9 出力リップル・ノイズ波形  
Output ripple and noise waveform

Conditions  $V_{in}$  : 110VDC  
 $I_o$  : 100%  
 $T_{bp}$  : 25°C

15V



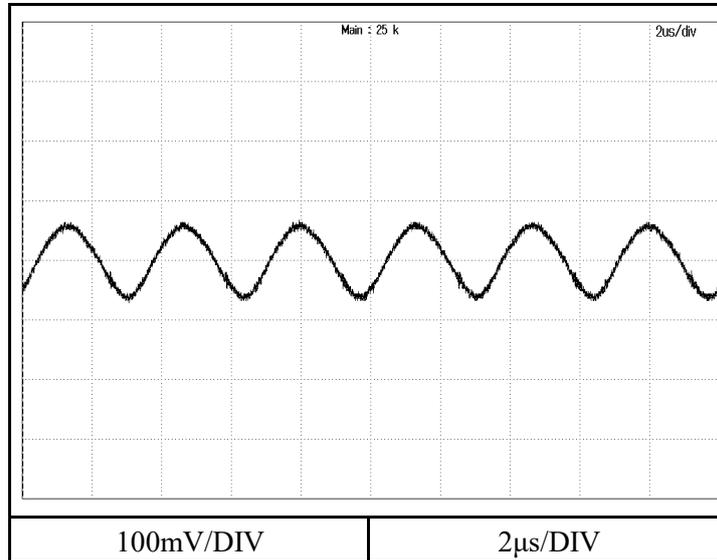
24V



2.9 出力リップル・ノイズ波形  
Output ripple and noise waveform

Conditions  $V_{in}$  : 110VDC  
 $I_o$  : 100%  
 $T_{bp}$  : 25°C

48V



2.10 EMI特性

Electro-Magnetic Interference characteristics

(a) 雑音端子電圧 (帰還ノイズ)

Conducted Emission Noise

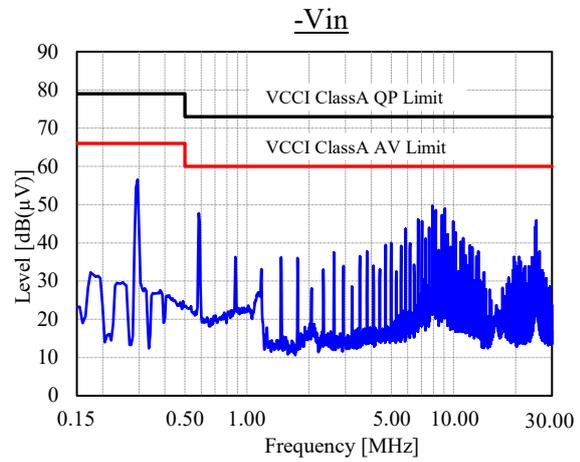
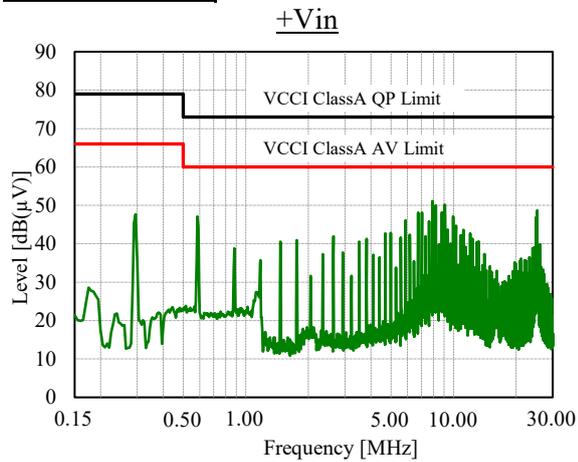
Conditions

Vin : 110VDC

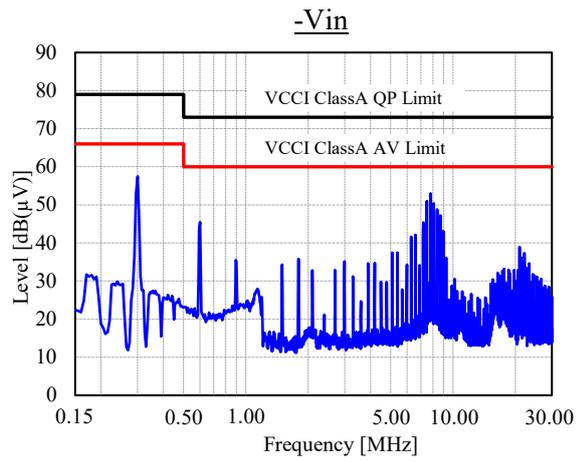
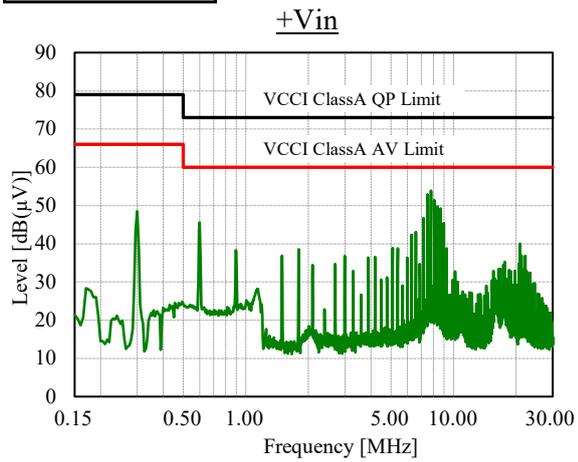
Io : 100%

Tbp : 25°C

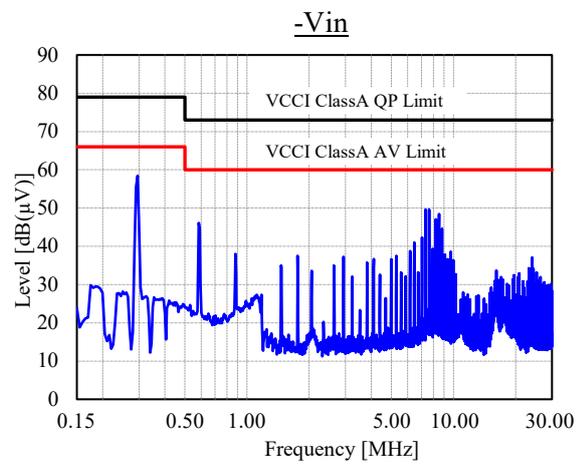
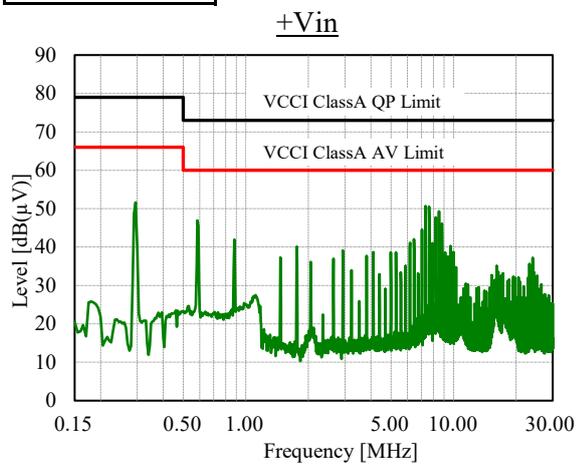
5V



12V



15V



2.10 EMI特性

Electro-Magnetic Interference characteristics

(a) 雑音端子電圧 (帰還ノイズ)

Conducted Emission Noise

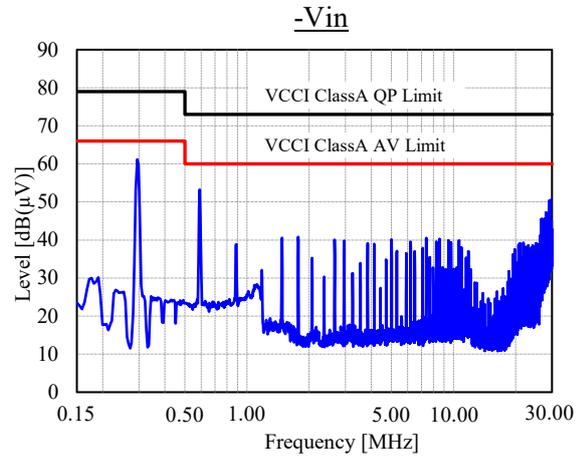
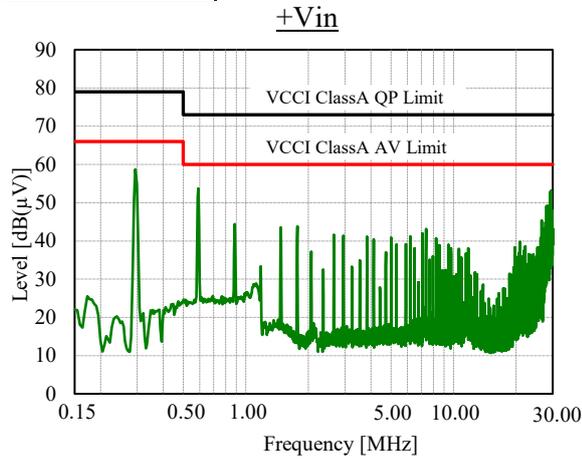
Conditions

Vin : 110VDC

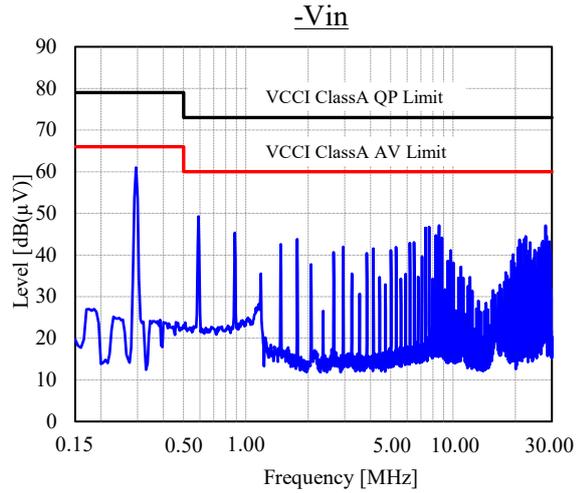
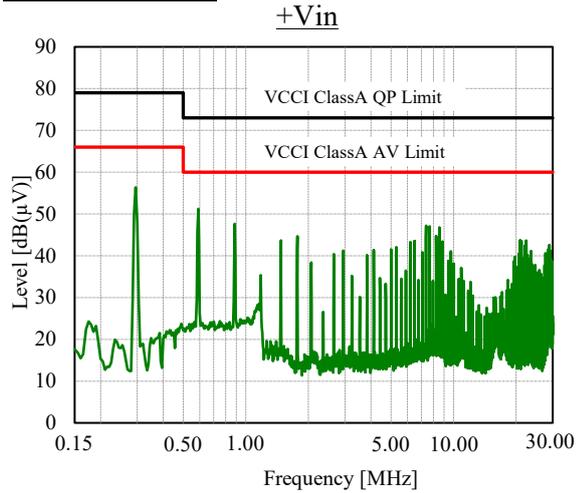
Io : 100%

Tbp : 25°C

24V



48V



2.10 EMI特性

Electro-Magnetic Interference characteristics

(b) 雑音電界強度 (輻射ノイズ)

Radiated Emission Noise

Conditions

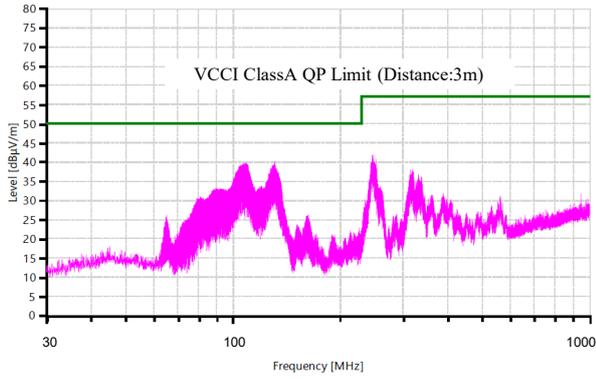
Vin : 110VDC

Io : 100%

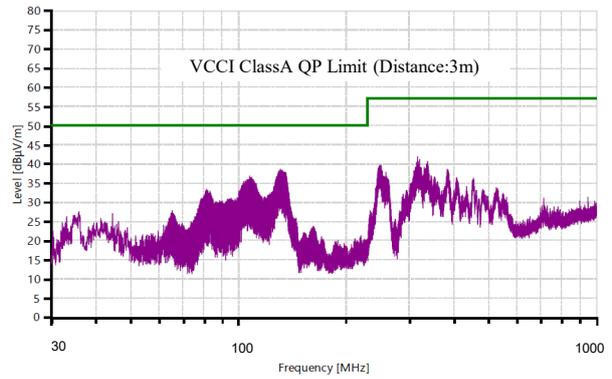
Tbp : 25°C

5V

HORIZONTAL

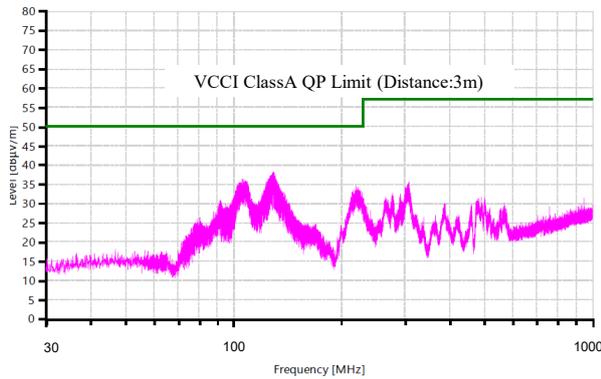


VERTICAL

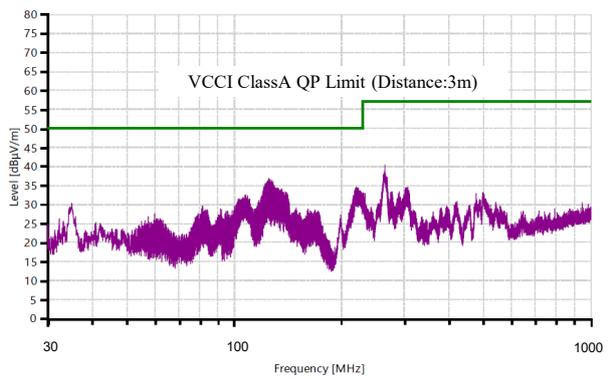


12V

HORIZONTAL

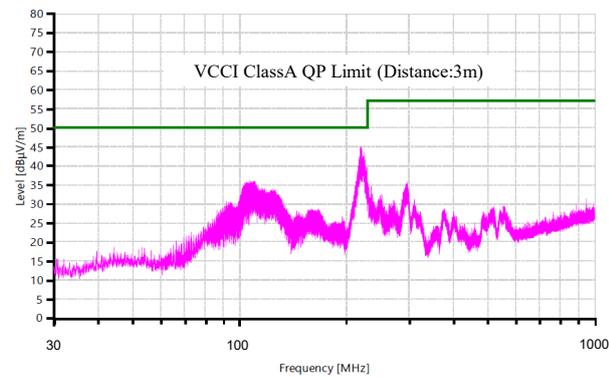


VERTICAL

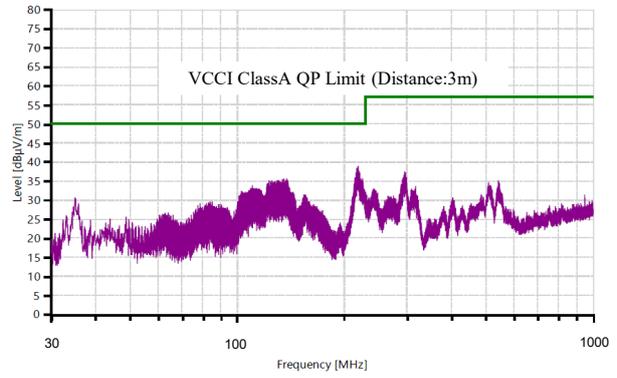


15V

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 Noise

Conditions

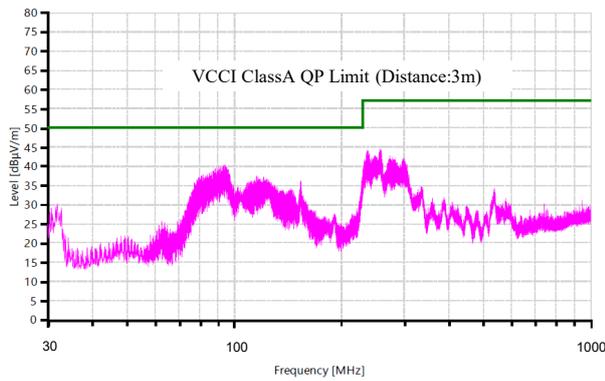
Vin : 110VDC

Io : 100%

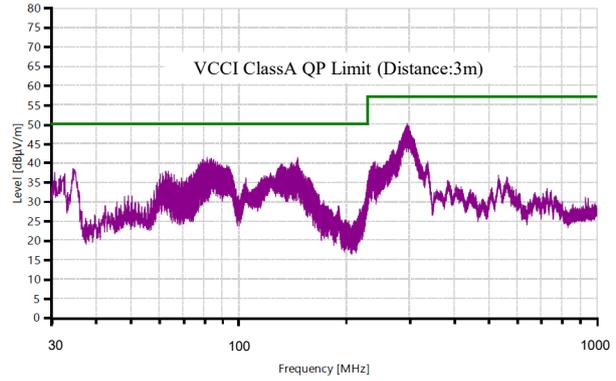
Tbp : 25°C

24V

HORIZONTAL

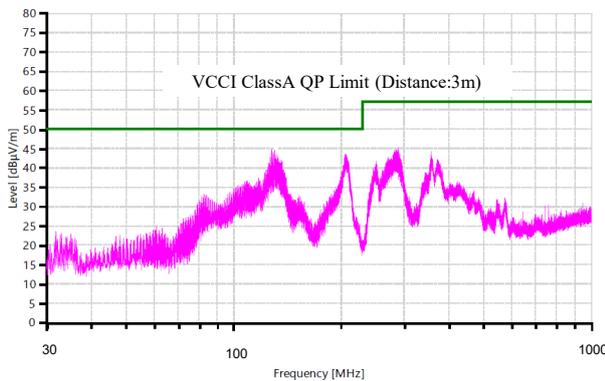


VERTICAL



48V

HORIZONTAL



VERTICAL

