

QUALITY TEST DATA

SWT40 -- *

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Terminology

	Definition
V_{in}	----- Input voltage
V_{out}	----- Output voltage
I_{in}	----- Input current
I_{out}	----- Output current
T_a	----- Ambient temperature

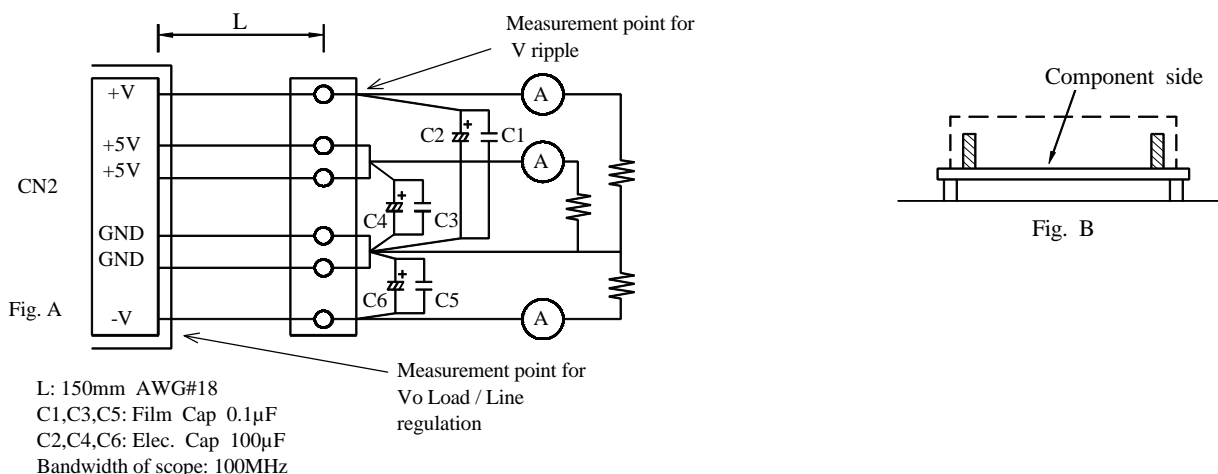
SWT40 SPECIFICATIONS

CA702-01-01E

ITEMS		MODEL	SWT40-522			SWT40-525			SWT40-5FF		
			CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
1	NOMINAL OUTPUT VOLTAGE	V	+5	+12	-12	+5	+12	-5	+5	+15	-15
2	MIN. OUTPUT CURRENT	A	0.2	0.3	0	0.2	0.3	0	0.2	0.3	0
3	MAX. OUTPUT CURRENT	A	3	2	0.3	3	2	0.3	3	1.5	0.3
4	PEAK OUTPUT CURRENT (*10)	A	4.5	3	-	4.5	3	-	4.5	2.4	-
5	MAX. OUTPUT POWER (PEAK)	W	42.6(54.6)			40.5(51.6)			42(51.6)		
6	EFFICIENCY (TYP) (* 1)	-	70%								
7	INPUT VOLTAGE RANGE (* 2)	-	AC85~265V (Continuously), 47 ~ 63Hz / 110~340VDC								
8	INPUT CURRENT (TYP) (* 1)	-	1.11A(Vin=100VAC) / 0.55A(Vin=200VAC)								
9	INRUSH CURRENT (TYP)	-	15A / 100VAC, 30A / 200VAC (cold start, Ta=25°C)								
10	OUTPUT VOLTAGE	-	CH1 +5V fixed, CH2,3 fixed Shipment condition: CH1: ±1%, CH2(+12V): ±3%, CH2(+15V): ±5%, CH3: ±5%								
11	MAX. RIPPLE & NOISE (* 3)	-	±5V: 120mV; ±12V: 150mV; ±15V: 150 mV								
12	MAX. LINE REGULATION (*3,4)	-	CH1:1% , CH2: 2% , CH3: 1%								
13	MAX. LOAD REGULATION (*3,5)	-	CH1: 2%, CH2: 4% , CH3: 2%								
14	MAX. TEMPERATURE DRIFT (*3,6)	-	0.04%/°C								
15	OVER CURRENT PROTECTION (* 7)	-	Automatic recovery, O.C.P point : 140% ~								
16	OVER VOLTAGE PROTECTION (* 8)	-	6V ~ (CH1 only)								
17	HOLD - UP TIME (TYP) (* 1)	-	17ms (Input 100 VAC)								
18	OPERATING TEMPERATURE (* 9)	-	Convection cooling 0~50°C: 100% load; 60°C: 70% load								
19	OPERATING HUMIDITY	-	30%~90%RH								
20	STORAGE TEMPERATURE	-	-20°C ~ +85°C								
21	STORAGE HUMIDITY	-	10%~95%RH								
22	COOLING	-	Convection cooling								
23	EMI	-	Conform to FCC-B, VCCI-2, EN55022B								
24	WITHSTAND VOLTAGE	-	I/P-O/P:3kVAC(20mA),I/P-FG:2.5kVAC(20mA),O/P-FG:500VAC(100mA) for 1min								
25	ISOLATION RESISTANCE	-	More than 100MΩ at Ta=25°C and 70%RH, Output - FG 500VDC								
26	VIBRATION	-	10 - 55Hz Amplitude (sweep 1min) Less than 19.6m/s ² X , Y , Z 1Hr each								
27	SHOCK	-	Less than 196.1m/s ²								
28	OUTPUT GROUNDING	-	All channels common ground (2 terminals)								
29	SAFETY	-	Conform to UL1950, CSA950, EN60950, DENTORI								
30	WEIGHT	-	280g								
31	SIZE (W*D*H)	m/m	76.2 x 127.0 x 35.6								
		inch	3.00 x 5.00 x 1.40 (2.55 x 4.55 mounting hole Φ 3.5mm)								

NOTES:

- *1. At 100VAC, 200VAC and MAX. OUTPUT POWER (Convection cooling), Ta=25°C.
- *2. For cases where conformance to various safety specs (UL,CSA, EN) are required to be described as 100~120VAC, 200~240VAC, 50/60 Hz on name plate.
- *3. Please refer to Fig A for measurement determination of line & load regulation and output ripple voltage.
(Measure with JEITA RC-9131 probe)
- *4. From 85~132VAC / 170~265VAC, constant load.
- *5. From Min. load - Full load (Maximum power), constant input voltage.
- *6. From 0°C ~ +50°C, constant input voltage and load.
- *7. Current limiting with automatic recovery. Avoid to operate over load or dead short for more than 30 seconds.
- *8. Over voltage clamping by zener diode.
- *9. At standard mounting method, Fig B.
- *10. Peak current operation is less than 10 sec. with duty factor less than 30%. In addition, it does not has to satisfy the total regulation specification.

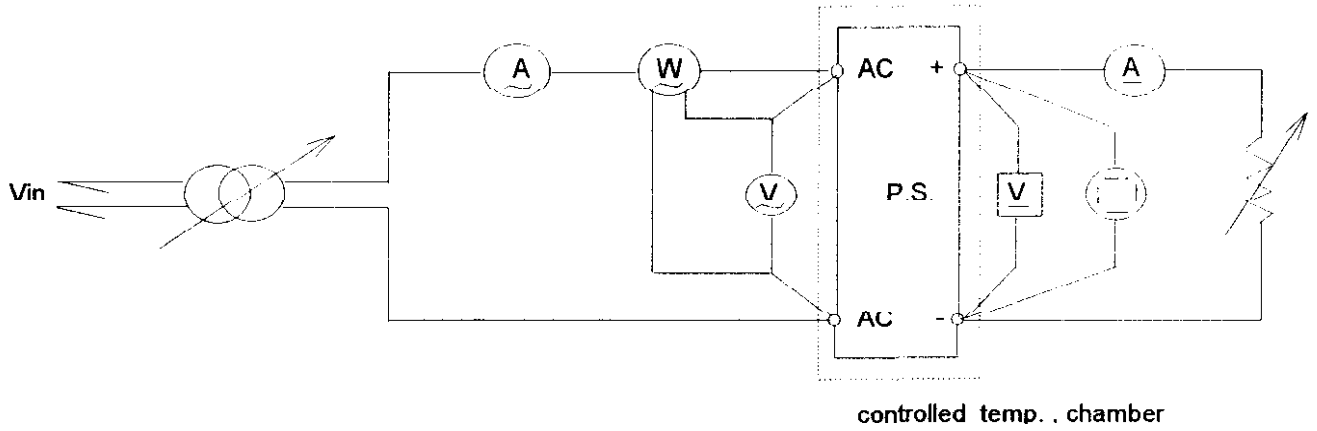


2. EVALUATION METHOD

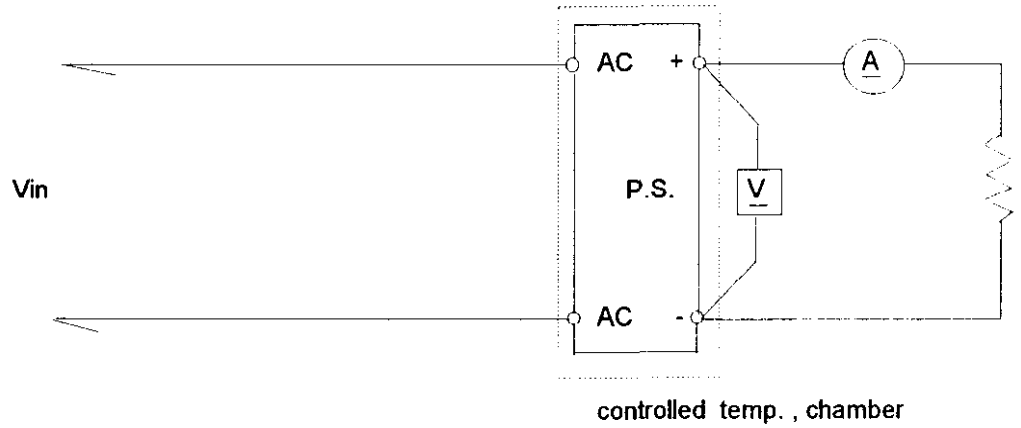
SWT40 - *

2-1 Circuits used for determination

(1) Steady state data

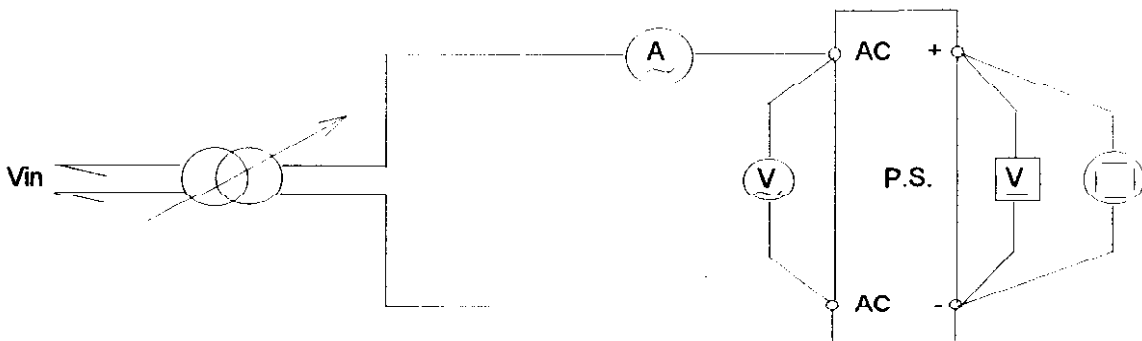


(2) Warm up voltage drift characteristics



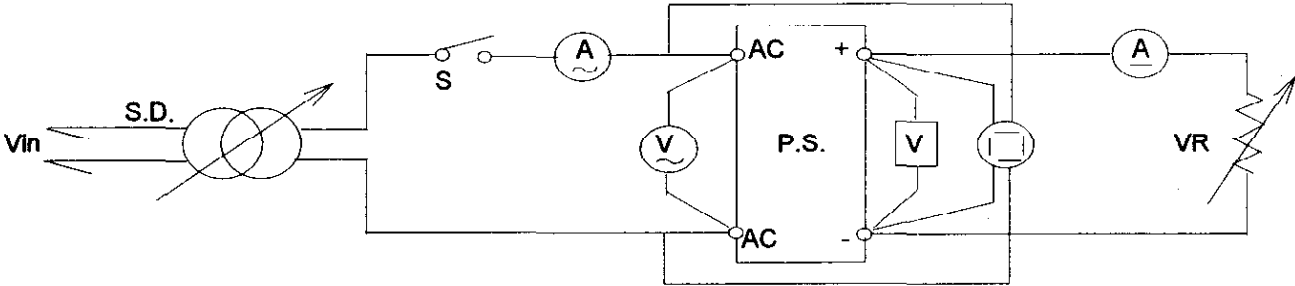
(3) Over current protection (OCP) characteristics Same as steady state data

(4) Over voltage protection (OVP) characteristics



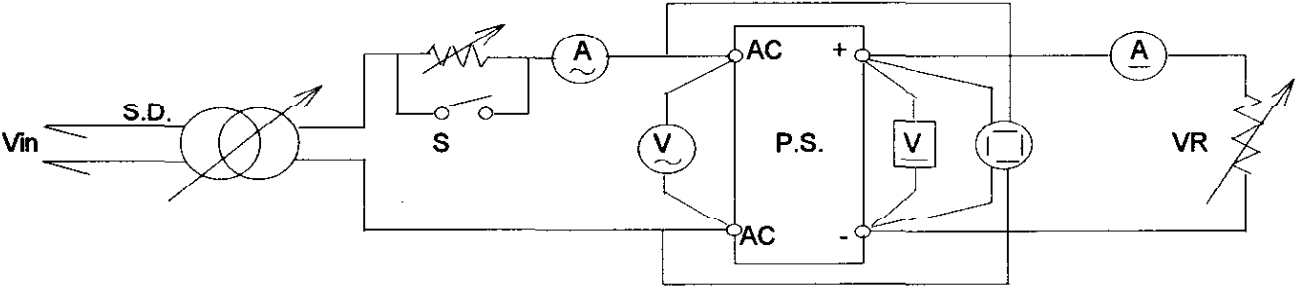
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(5) Output rise characteristics

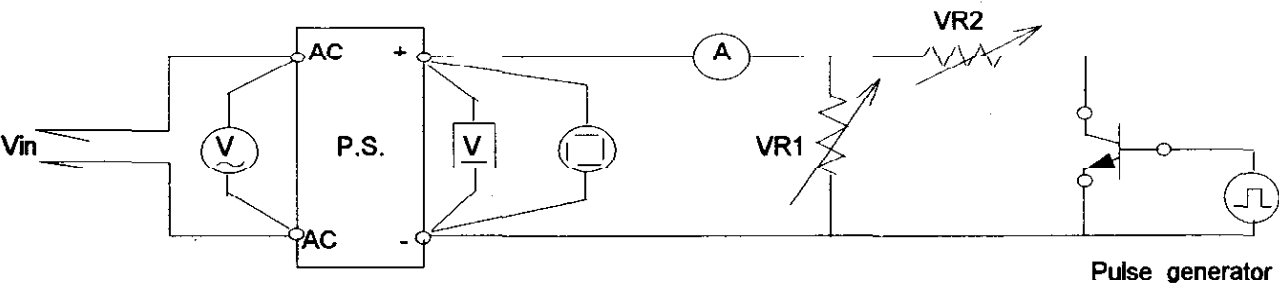


(6) Output fall characteristics same as output rise characteristics

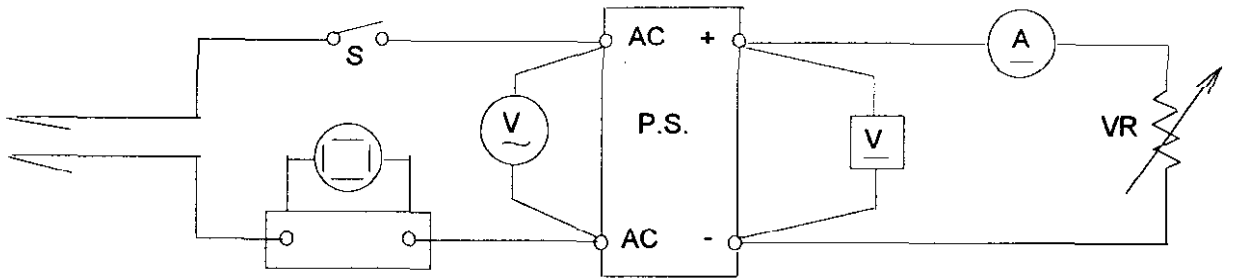
(7) Dynamic line response characteristics



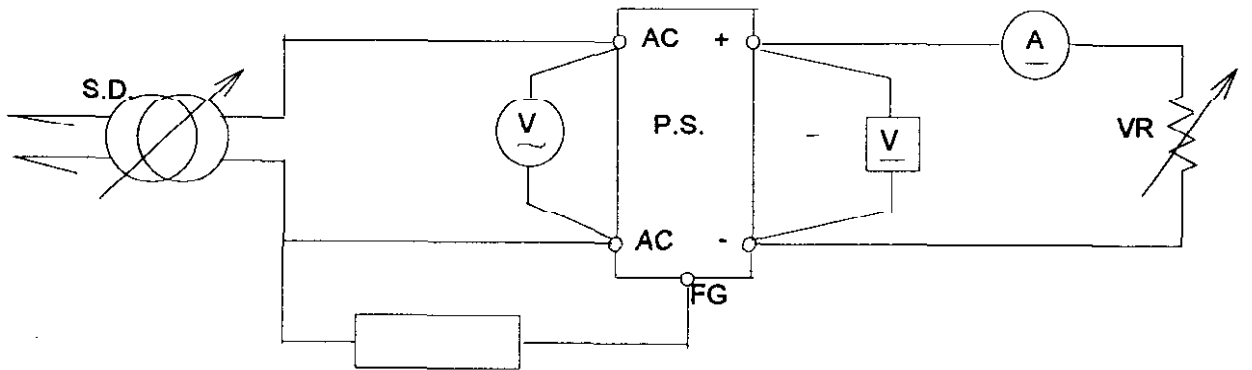
(8) Dynamic load response characteristics



(9) Inrush current characteristics



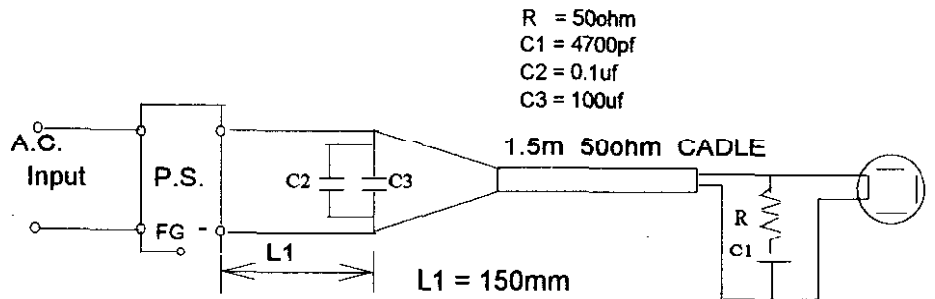
(10) Leakage current characteristics



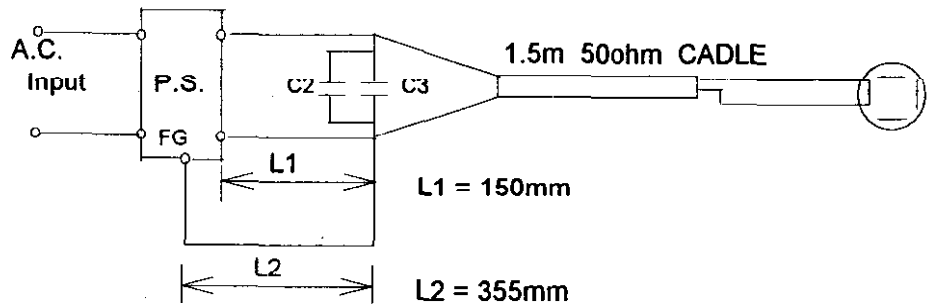
Leakage current meter

Note : Leakage current measured through a 1Kohm resistor
Range wed : AC + DC

(11) Output - ripple , noise
a) NORMAL MODE



b) NORMAL + COMMON MODE



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2 - 2 List of equipment

	EQUIPMENT USED	MANUFACTURER	MODEL NO.
1	Oscilloscope	HITACHI	V - 1050
2	Digital storage oscilloscope	TEKTRONIX	TDS - 540A
3	Digital multimeter	MASTECH	DM8145A
4	Digital watt/current/volt meter	HIOKI	3186
5	DC Ampere meter	YOKOGAWA	2051
6	Autotransformer	YUYAO	TDGC - 2
7	Variable resistive load	IWASHITA	D - 5
8	Electric load	KIKUSUI	PLZ72W, PLZ300W
9	Digirush currenter	TAKAMISAWA	PSA - 200
10	Current Probe/Amplifier	TEKTRONIX	A6303/AM503B
11	Controlled Temp. Chamber	HIFLEX	FXL400
12	Leakage current meter	YOKOGAWA	3226
13	AC Power Supply	KIKUSUI	PCR - 2000L

REGULATION - Line & Load,Temp. Drift**SWT40-522****CH1****1. Regulation - Line & Load**Conditions
CH2,CH3:Ta = 25°C
Iout = 100%

Iout / Vin	AC 85V	AC 100V	AC 132V	Line Regulation	
Min Load	5.073V	5.072V	5.071V	0.002V	0.04%
50%	5.052V	5.054V	5.055V	0.003V	0.06%
100%	5.027V	5.032V	5.037V	0.010V	0.20%
Load	0.046V	0.040V	0.034V		
Regulation	0.92%	0.80%	0.68%		

2.. Temperature Drift

Conditions

Vin = 100VAC
Iout = 100%

Ta(°C)	0	25	50	Temp. Stability	
Vout	5.034V	5.032V	5.019V	0.015V	0.30%

CH2**1. Regulation - Line & Load**Conditions
CH1,CH3:Ta = 25°C
Iout = 100%

Iout / Vin	AC 85V	AC 100V	AC 132V	Line Regulation	
Min Load	12.507V	12.471V	12.441V	0.066V	0.55%
50%	12.431V	12.381V	12.326V	0.105V	0.88%
100%	12.381V	12.334V	12.282V	0.099V	0.83%
Load	0.126V	0.137V	0.159V		
Regulation	1.05%	1.14%	1.33%		

2.. Temperature Drift

Conditions

Vin = 100VAC
Iout = 100%

Ta(°C)	0	25	50	Temp. Stability	
Vout	12.346V	12.334V	12.313V	0.033V	0.28%

CH3**1. Regulation - Line & Load**Conditions
CH1,CH2:Ta = 25°C
Iout = 100%

Iout / Vin	AC 85V	AC 100V	AC 132V	Line Regulation	
Min Load	-12.017V	-12.015V	-12.014V	0.003V	0.03%
50%	-11.999V	-11.996V	-11.996V	0.003V	0.03%
100%	-11.956V	-11.955V	-11.956V	0.001V	0.01%
Load	0.061V	0.060V	0.058V		
Regulation	0.51%	0.50%	0.48%		

2.. Temperature Drift

Conditions

Vin = 100VAC
Iout = 100%

Ta(°C)	0	25	50	Temp. Stability	
Vout	-12.011V	-11.955V	-11.889V	0.122V	1.02%

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REGULATION - Line & Load,Temp. Drift

SWT40-522

CH1**1. Regulation - Line & Load**

Conditions

Ta = 25°C

CH2,CH3:

Iout = 100%

Iout / Vin	AC 170V	AC 200V	AC 265V	Line Regulation	
Min Load	5.070V	5.070V	5.069V	0.001V	0.02%
50%	5.056V	5.057V	5.058V	0.002V	0.04%
100%	5.040V	5.042V	5.044V	0.004V	0.08%
Load	0.030V	0.028V	0.025V		
Regulation	0.60%	0.56%	0.50%		

2.. Temperature Drift

Conditions

Vin = 200VAC

Iout = 100%

Ta(°C)	0	25	50	Temp. Stability	
Vout	5.046V	5.042V	5.030V	0.016V	0.32%

CH2**1. Regulation - Line & Load**

Conditions

Ta = 25°C

CH1,CH3:

Iout = 100%

Iout / Vin	AC 170V	AC 200V	AC 265V	Line Regulation	
Min Load	12.430V	12.431V	12.436V	0.006V	0.05%
50%	12.298V	12.287V	12.278V	0.020V	0.17%
100%	12.253V	12.240V	12.223V	0.030V	0.25%
Load	0.177V	0.191V	0.213V		
Regulation	1.48%	1.59%	1.78%		

2.. Temperature Drift

Conditions

Vin = 200VAC

Iout = 100%

Ta(°C)	0	25	50	Temp. Stability	
Vout	12.245V	12.240V	12.218V	0.027V	0.23%

CH3**1. Regulation - Line & Load**

Conditions

Ta = 25°C

CH1,CH2:

Iout = 100%

Iout / Vin	AC 170V	AC 200V	AC 265V	Line Regulation	
Min Load	-12.011V	-12.007V	-12.002V	0.009V	0.08%
50%	-11.997V	-11.996V	-11.995V	0.002V	0.02%
100%	-11.956V	-11.957V	-11.957V	0.001V	0.01%
Load	0.055V	0.050V	0.045V		
Regulation	0.46%	0.42%	0.38%		

2.. Temperature Drift

Conditions

Vin = 200VAC

Iout = 100%

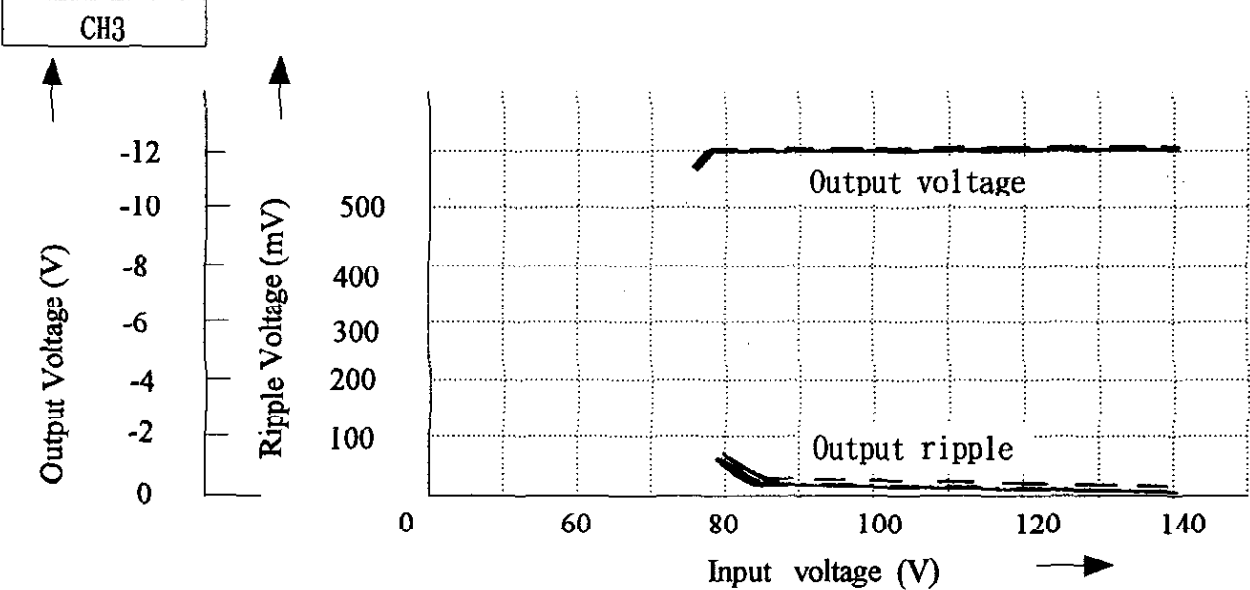
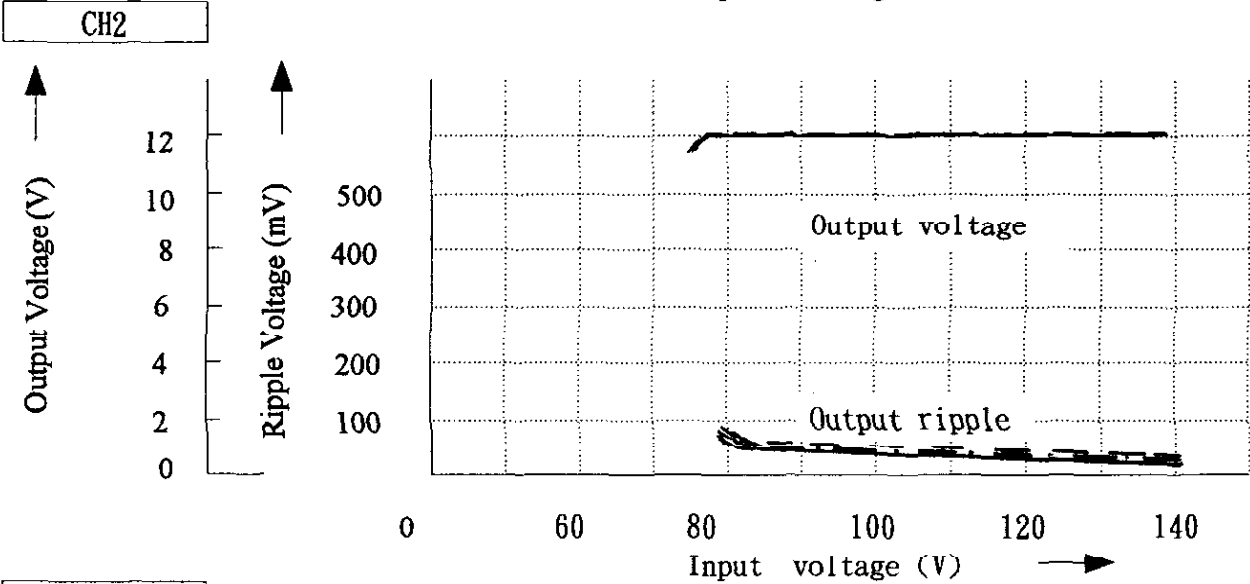
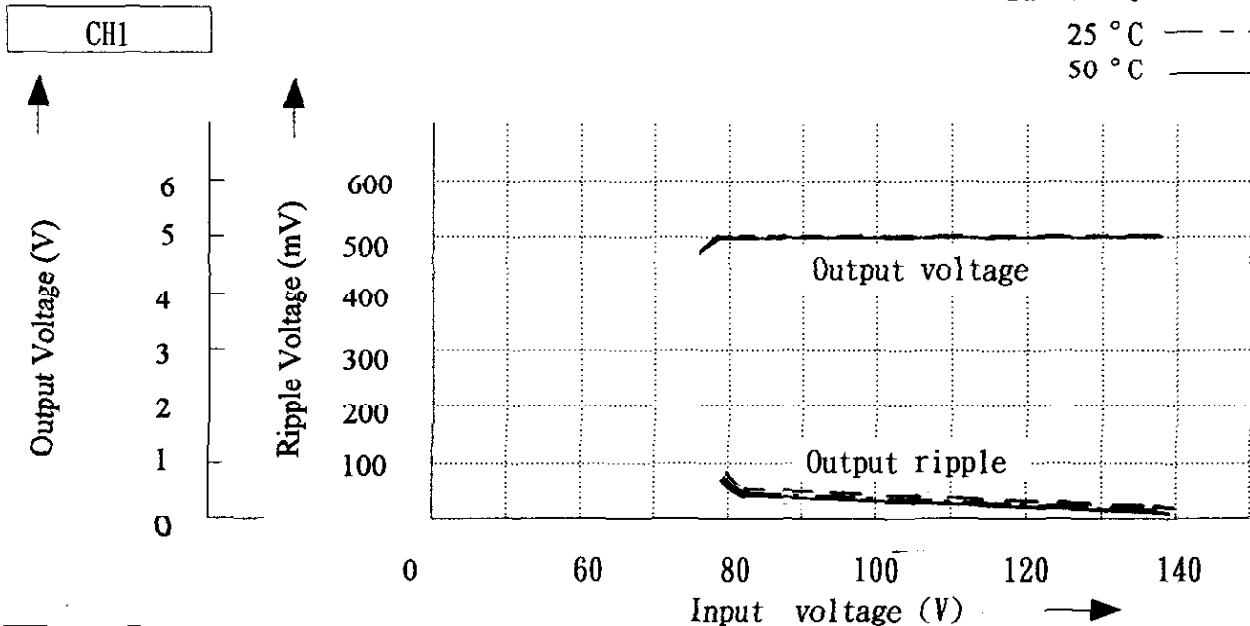
Ta(°C)	0	25	50	Temp. Stability	
Vout	-12.012V	-11.957V	-11.890V	0.122V	1.02%

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OUTPUT VOLTAGE AND RIPPLE v.s INPUT VOLTAGE

SWT40 - 522

Conditions $I_{out} = 100\%$
 $T_a: 0\text{ }^{\circ}\text{C}$ — — —
 $25\text{ }^{\circ}\text{C}$ - - - -
 $50\text{ }^{\circ}\text{C}$ ————

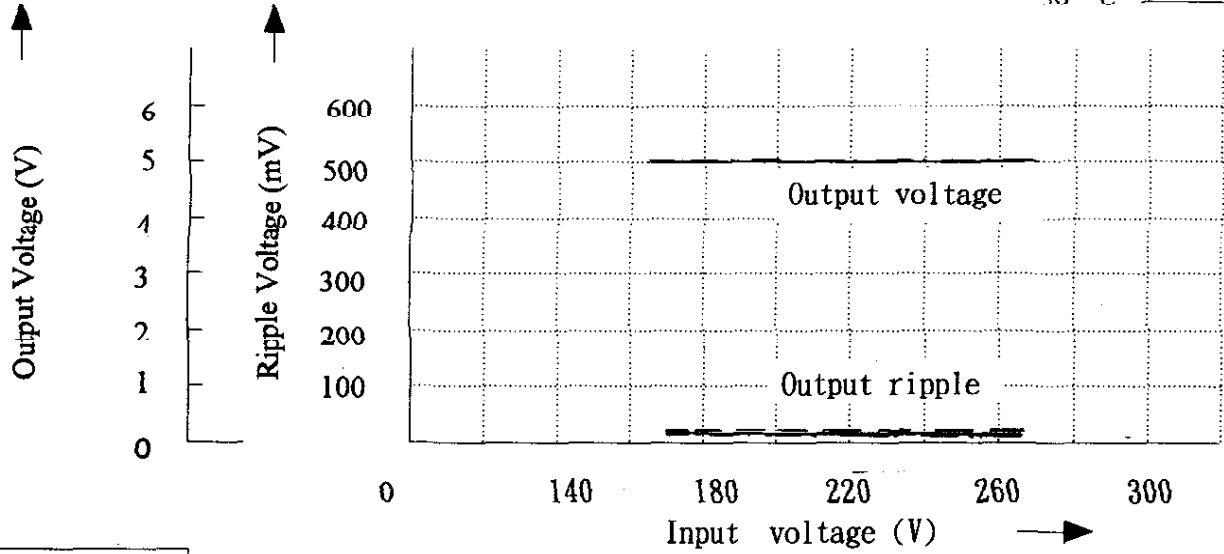


OUTPUT VOLTAGE AND RIPPLE v.s INPUT VOLTAGE

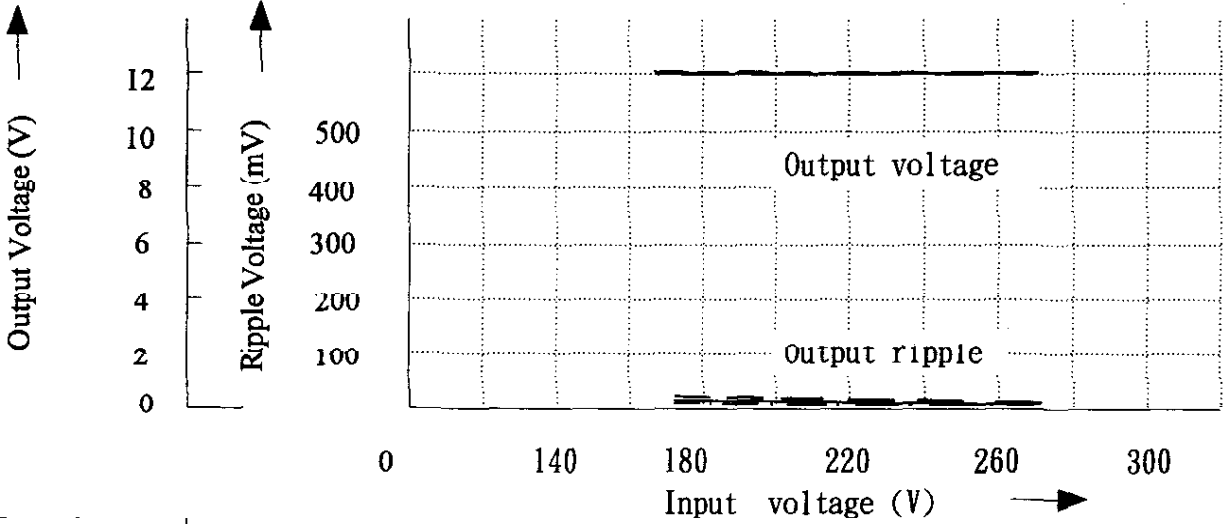
SWT40 - 522

Conditions $I_{out} = 100\%$
 $T_a: 0^\circ\text{C}$ — — —
 25°C - - - -
 50°C — — —

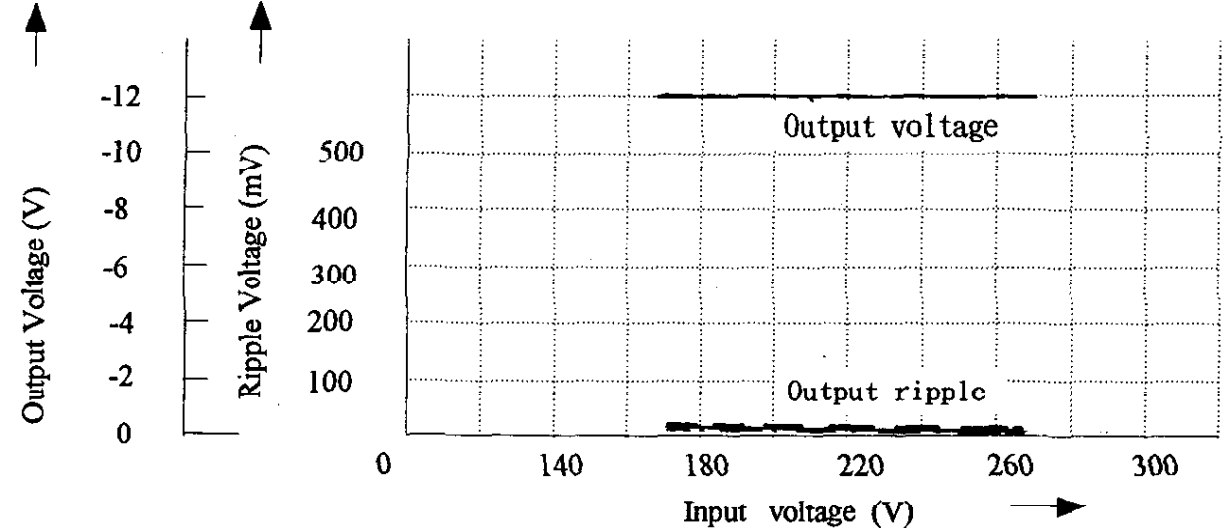
CH1



CH2



CH3



EFFICIENCY AND INPUT CURRENT v.s

SWT40 - *

OUTPUT CURRENT

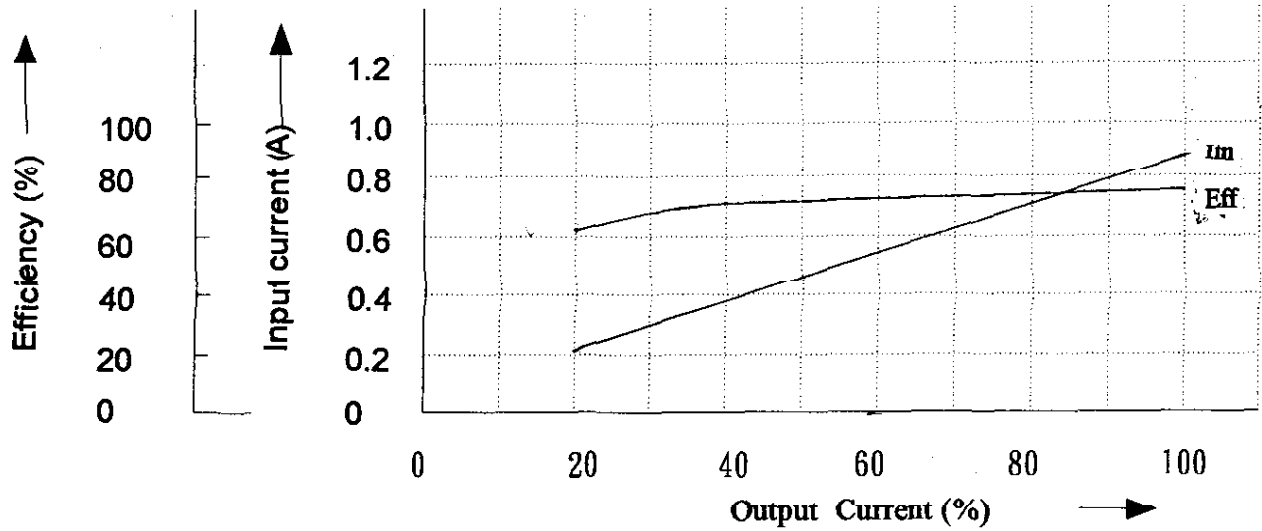
Conditions

$V_{ina} = 100VAC$

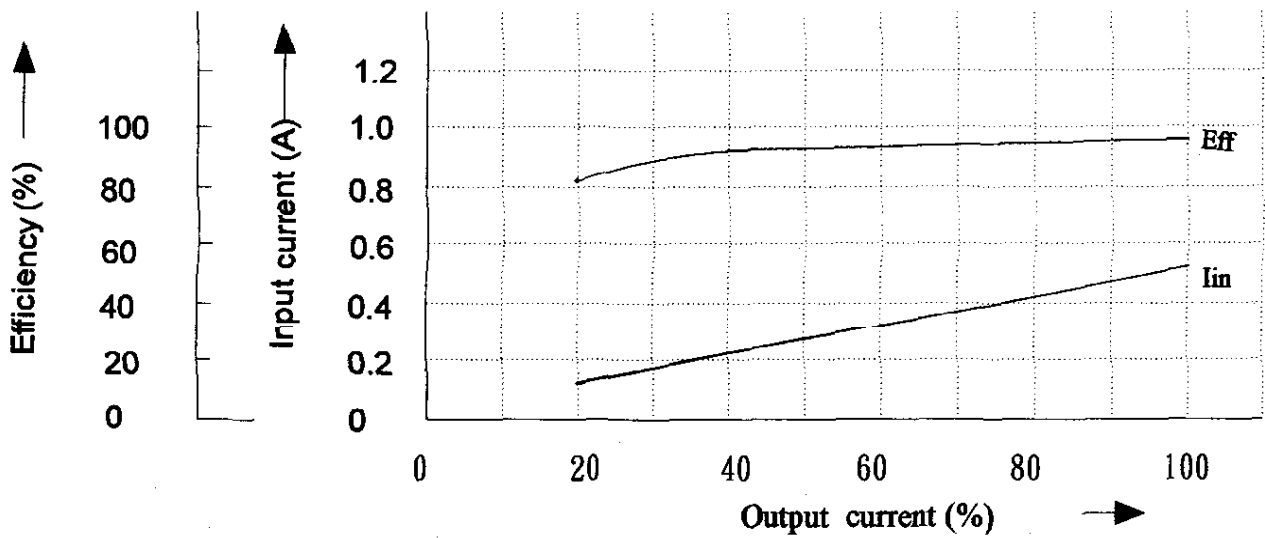
$V_{imb} = 200VAC$

$T_a = 25^\circ C$

A: 100VAC



B: 200VAC



WARM UP DRIFT

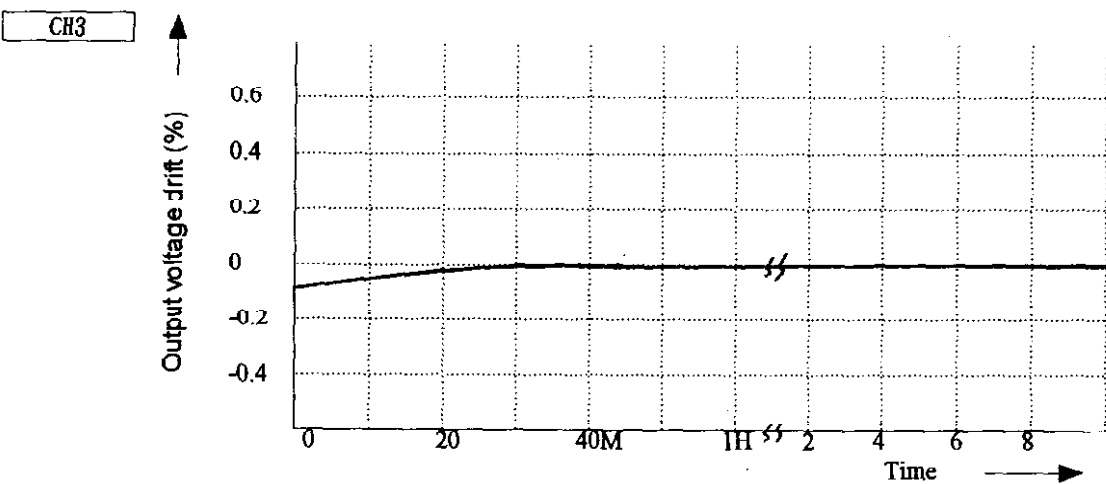
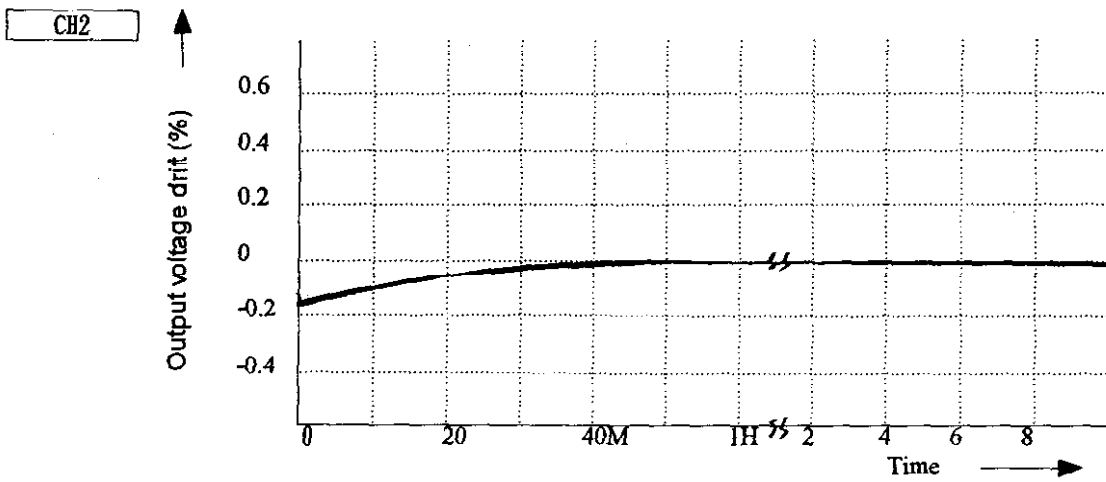
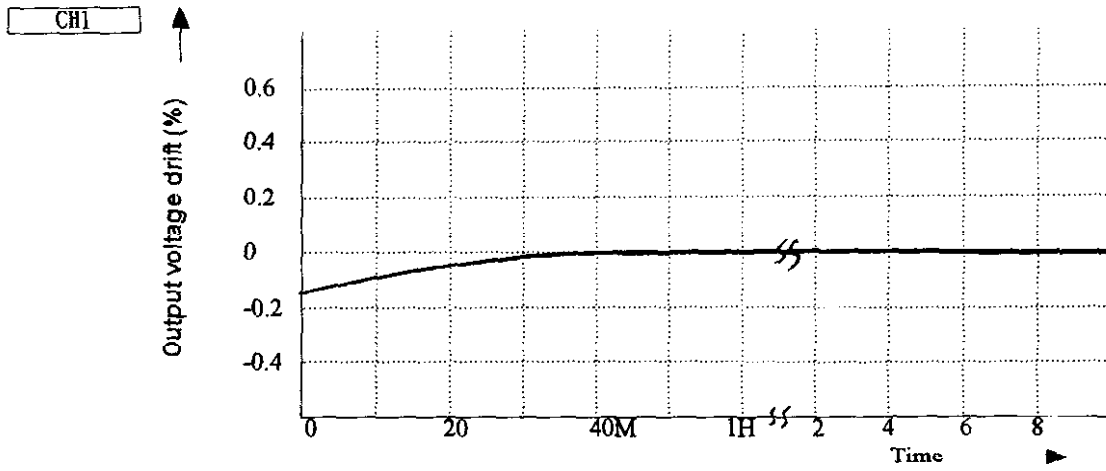
SWT40 - 522

Conditions

$V_{in} = 100VAC$

$I_{out} = 100\%$

$T_a = 25\text{ }^\circ C$



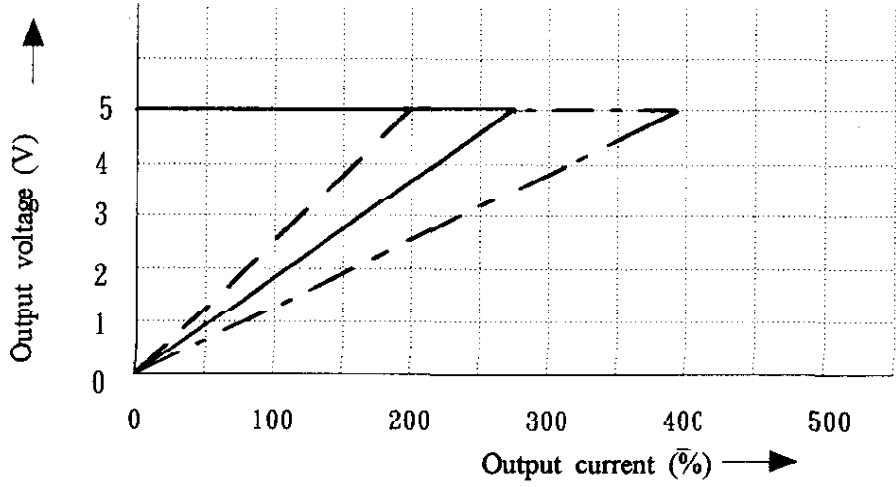
OCP CHARACTERISTICS v.s INPUT VOLTAGE

SWT40 - 522

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} : 85\text{VAC}$ — — —
 100VAC — — —
 132VAC - - -

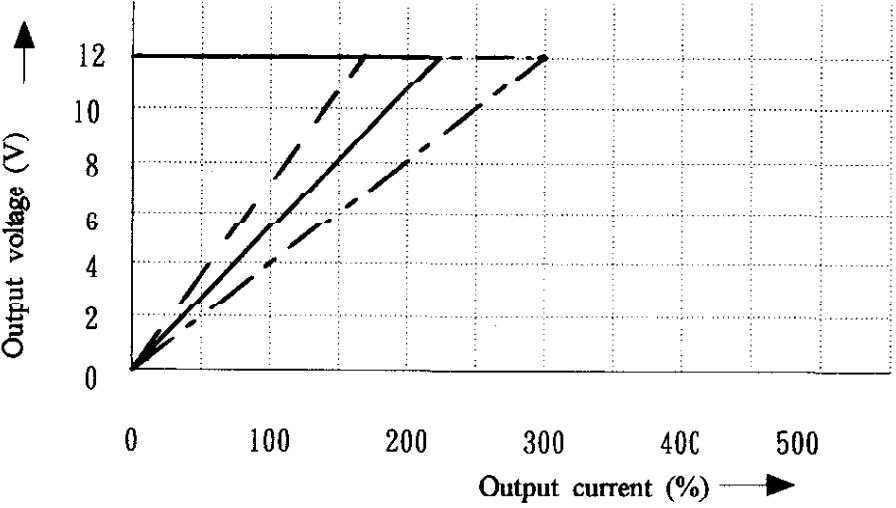
CH1

I_{out} :
CH2,3:100%



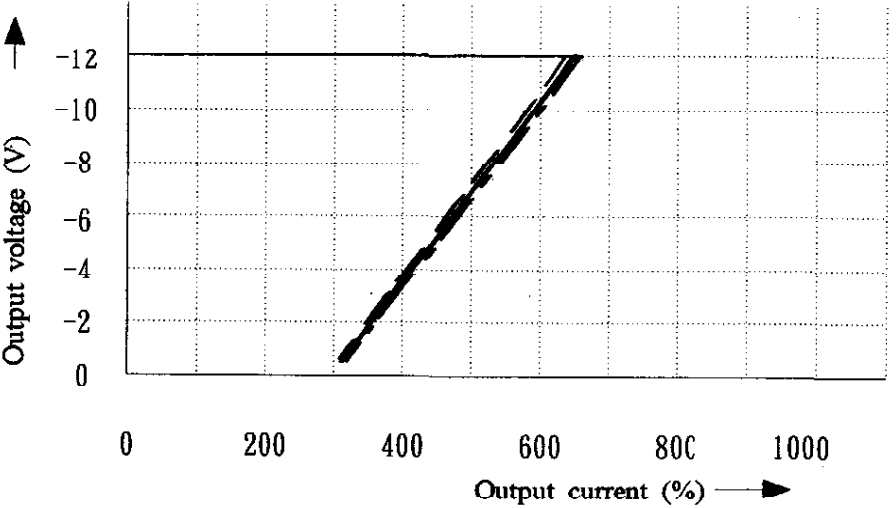
CH2

I_{out} :
CH1,3:100%



CH3

I_{out} :
CH1,2:100%

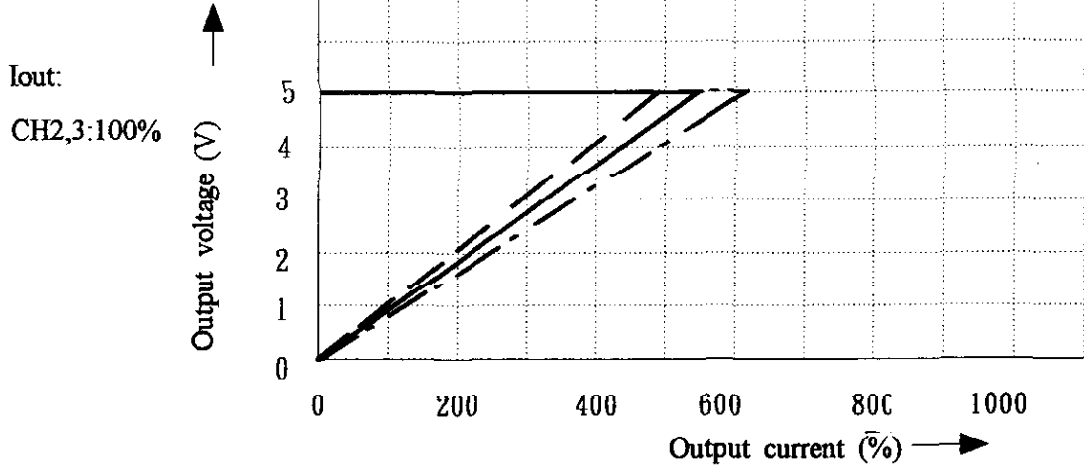


OCP CHARACTERISTICS v.s INPUT VOLTAGE

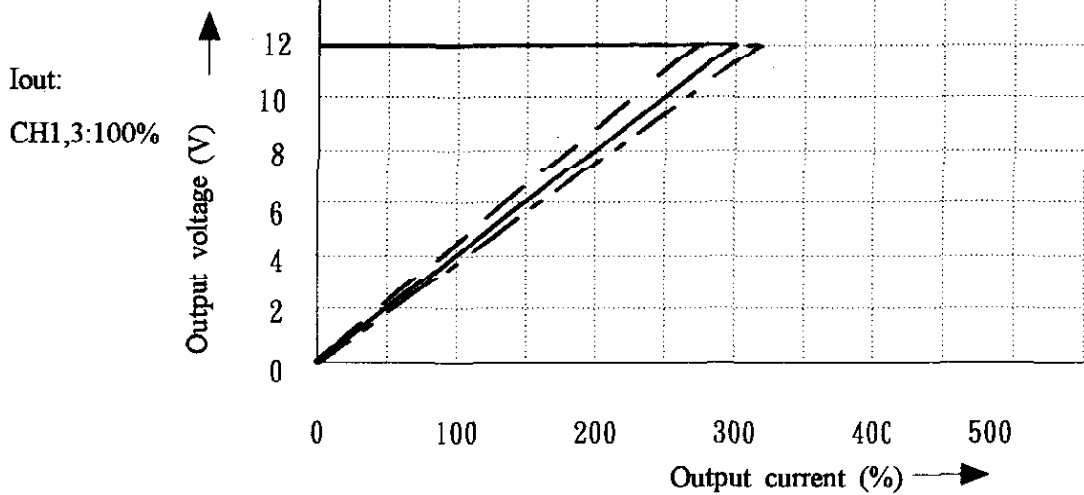
SWT40 - 522

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} : 170\text{VAC}$ — — —
 200VAC — — —
 265VAC - - - -

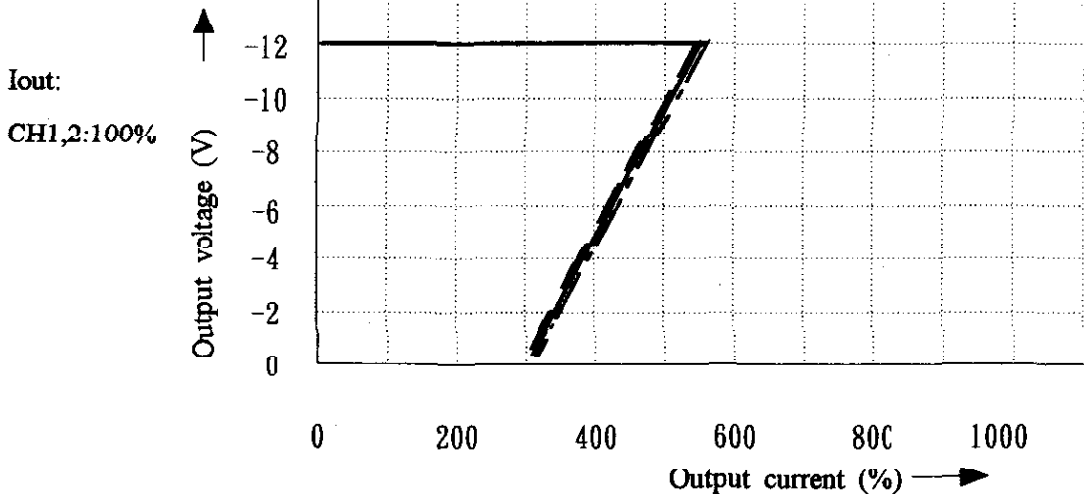
CH1



CH2



CH3



OCV CHARACTERISTICS v.s TEMP.

SWT40 - 522

Conditions

$V_{in} = 100VAC$

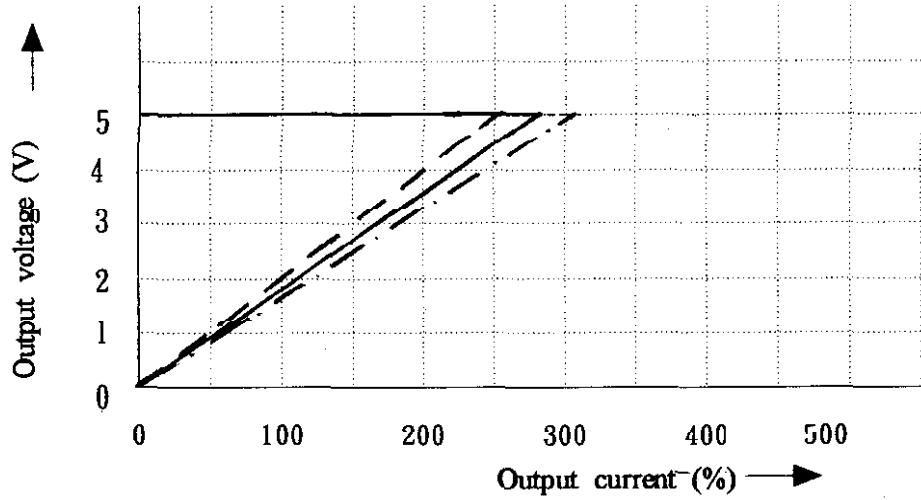
$T_a : 0\text{ }^{\circ}C$ — — —

25 $^{\circ}C$ — — —

50 $^{\circ}C$ - - - -

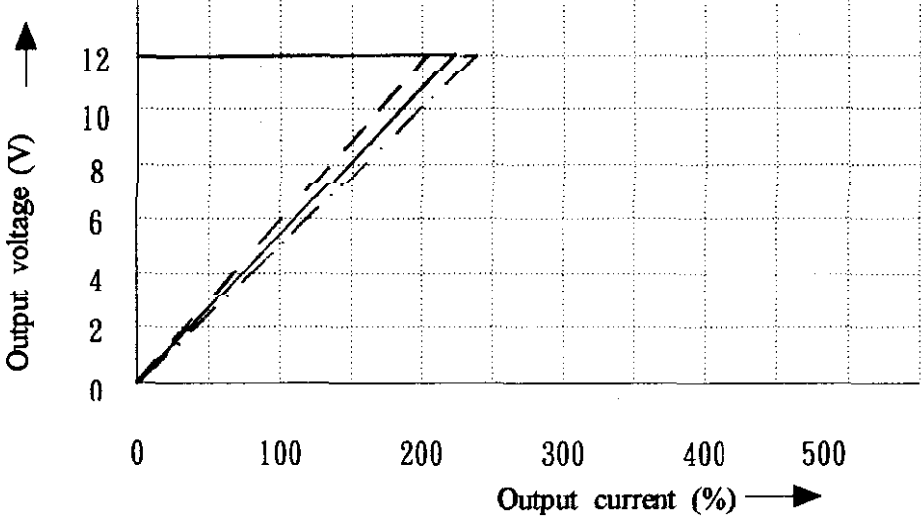
CH1

I_{out} :
CH2,3:100%



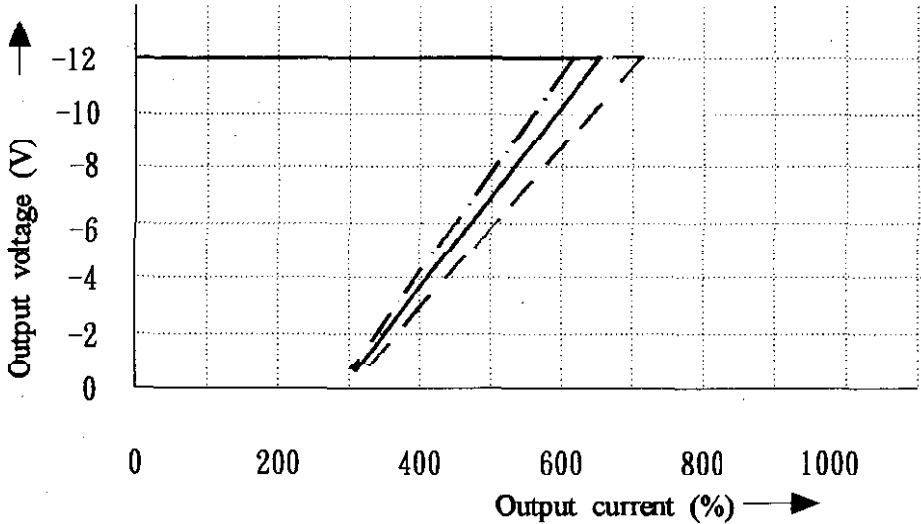
CH2

I_{out} :
CH1,3:100%



CH3

I_{out} :
CH1,2:100%



O.V.P CHARACTERISTICS

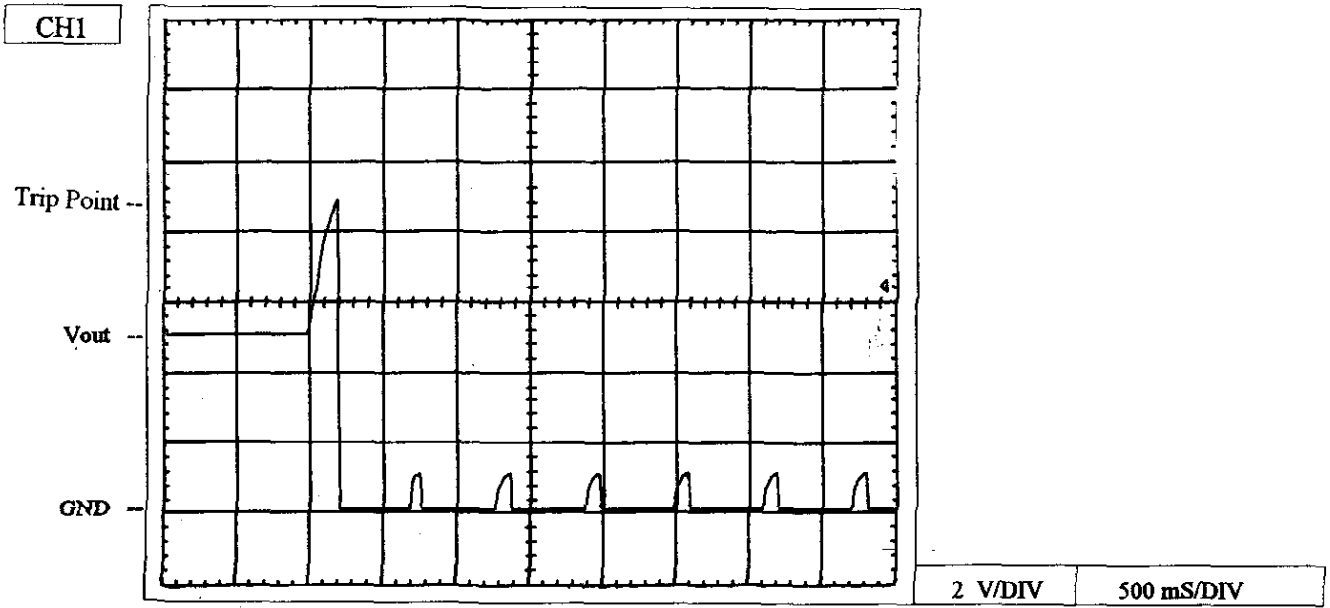
SWT40 - *

Conditions

$V_{in} = 100VAC$

$I_{out} = \text{Min Load}$

$T_a = 25^\circ C$

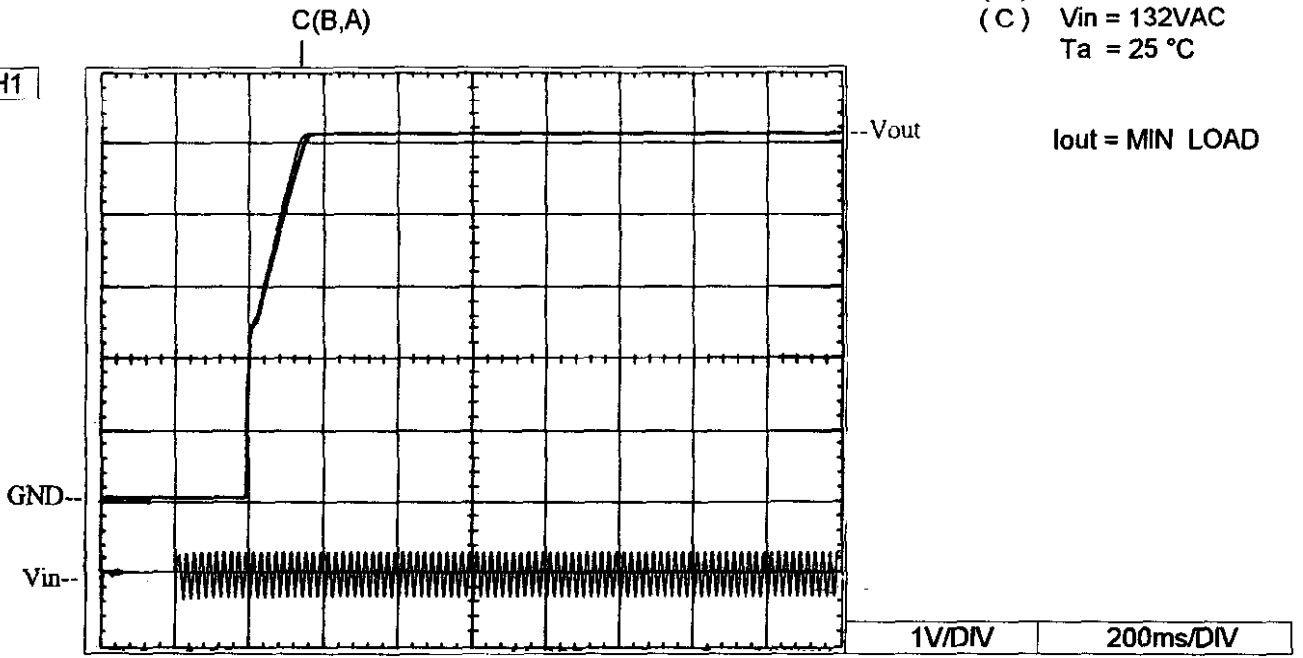


OUTPUT RISE TIME

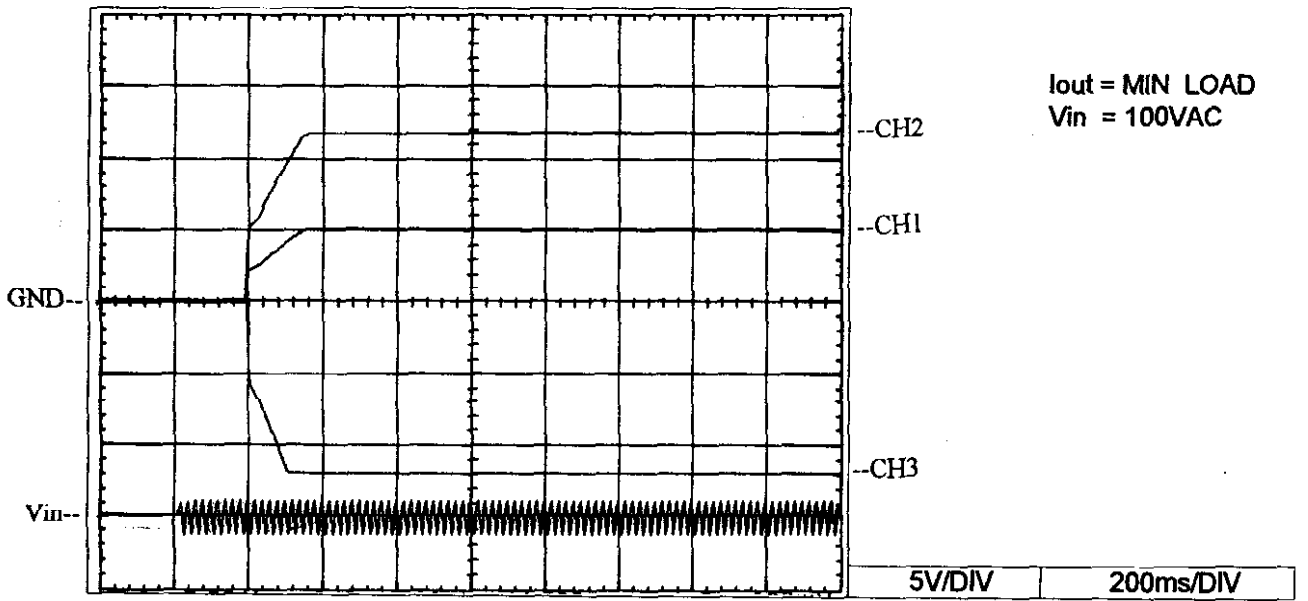
Conditions

- (A) $V_{in} = 85VAC$
- (B) $V_{in} = 100VAC$
- (C) $V_{in} = 132VAC$
- $T_a = 25^\circ C$

CH1



$I_{out} = MIN\ LOAD$



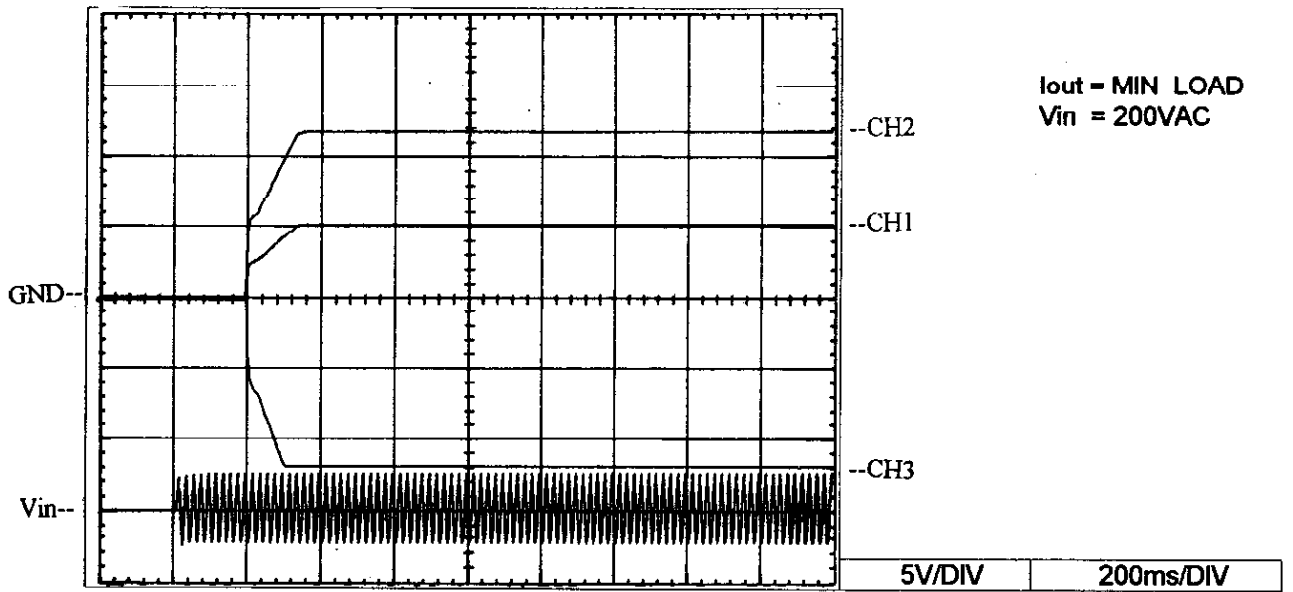
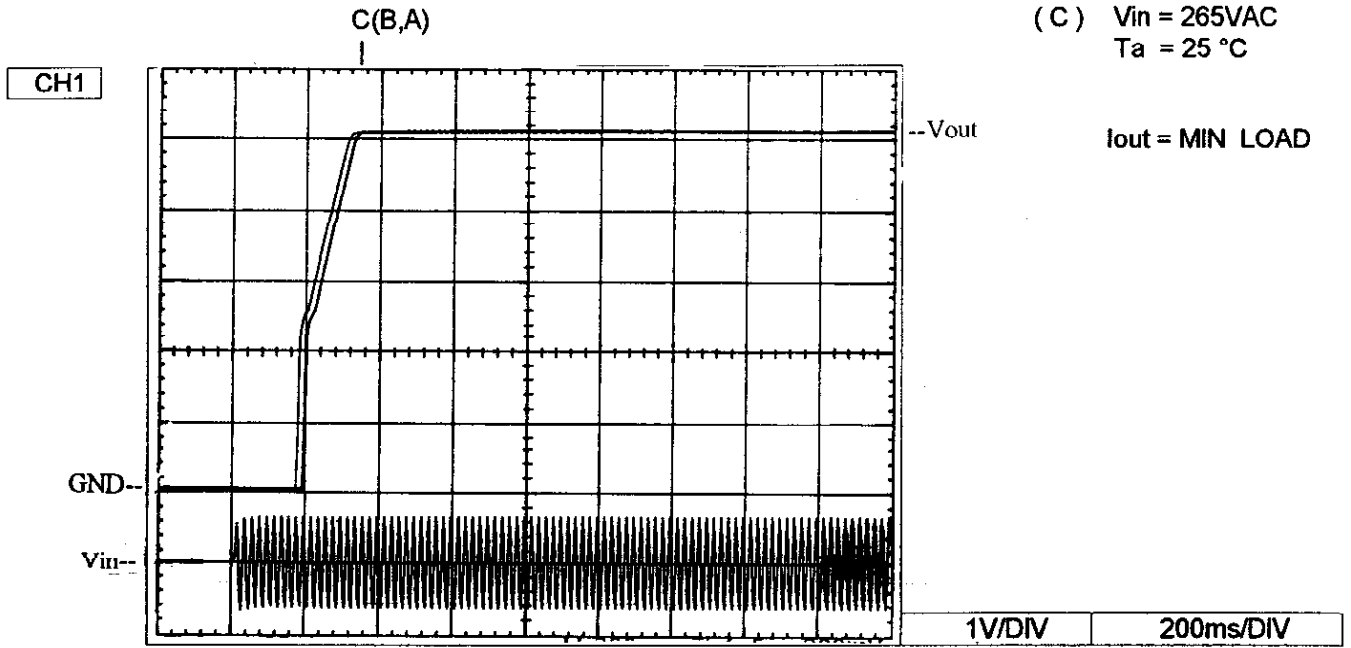
$I_{out} = MIN\ LOAD$
 $V_{in} = 100VAC$

OUTPUT RISE TIME

Conditions

- (A) $V_{in} = 170VAC$
- (B) $V_{in} = 200VAC$
- (C) $V_{in} = 265VAC$
- $T_a = 25^\circ C$

$I_{out} = MIN\ LOAD$

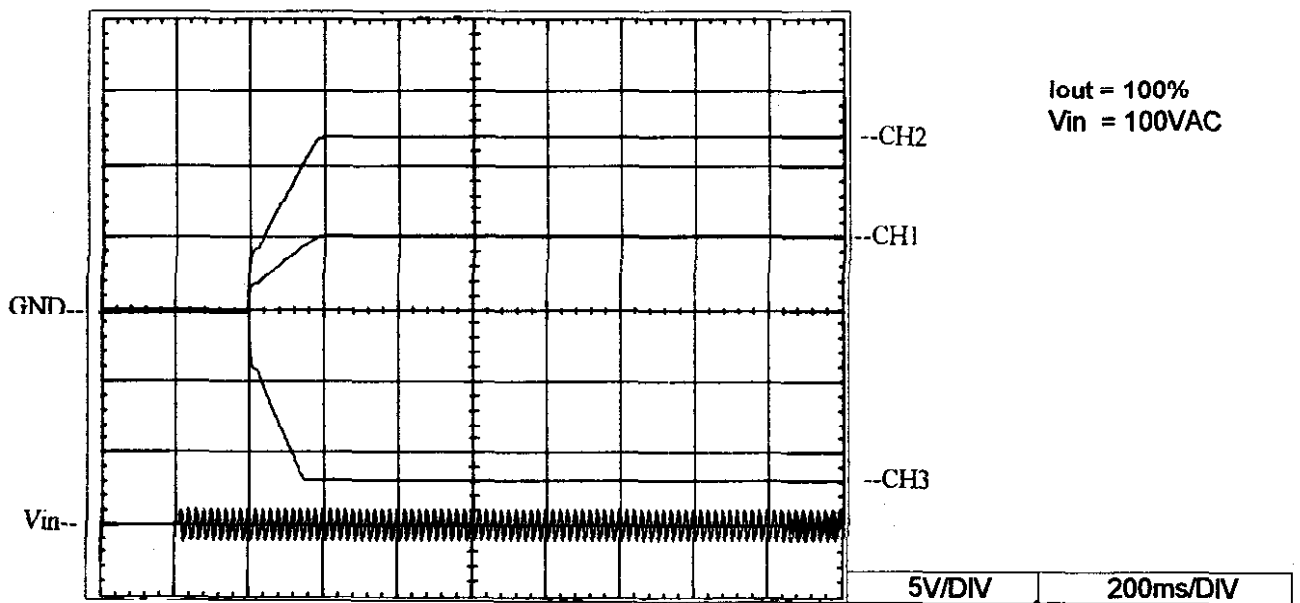
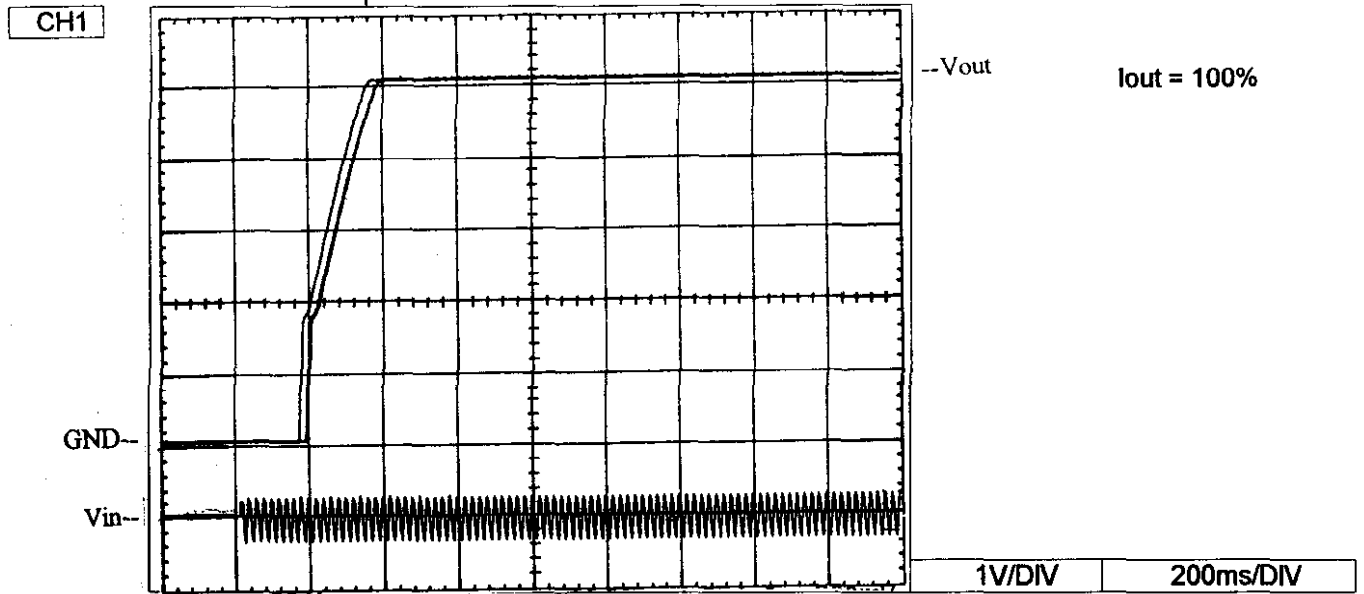


OUTPUT RISE TIME

Conditions

- (A) $V_{in} = 85VAC$
- (B) $V_{in} = 100VAC$
- (C) $V_{in} = 132VAC$
- $T_a = 25^\circ C$

$I_{out} = 100\%$

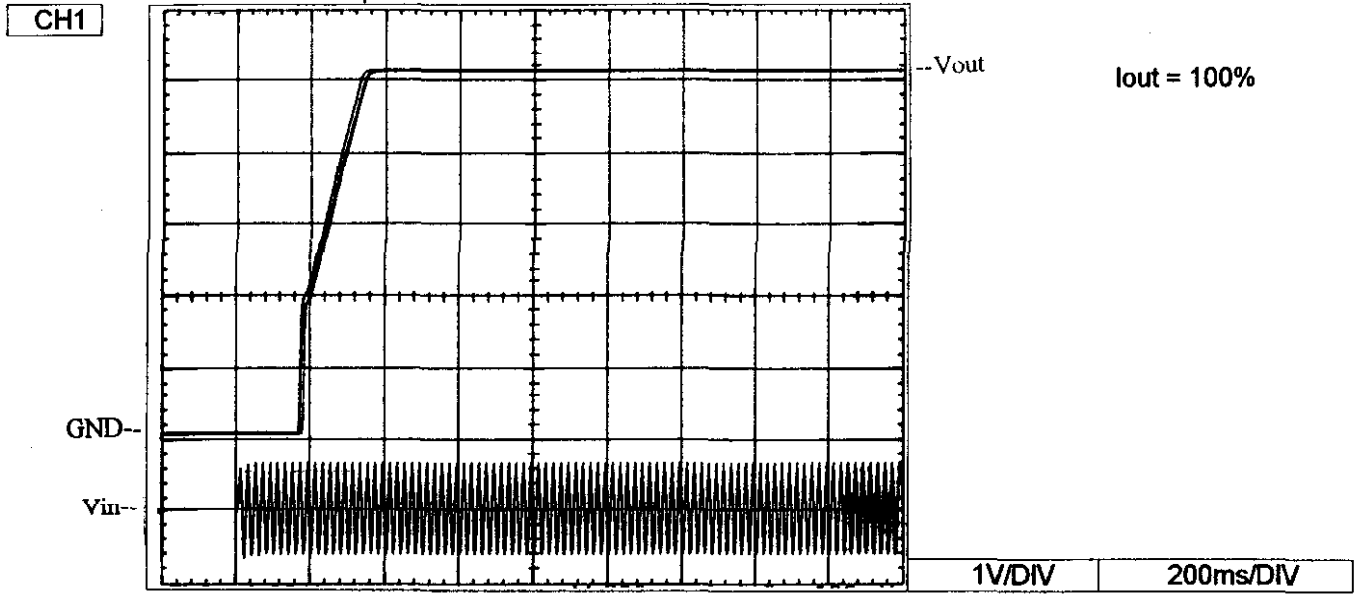


$I_{out} = 100\%$
 $V_{in} = 100VAC$

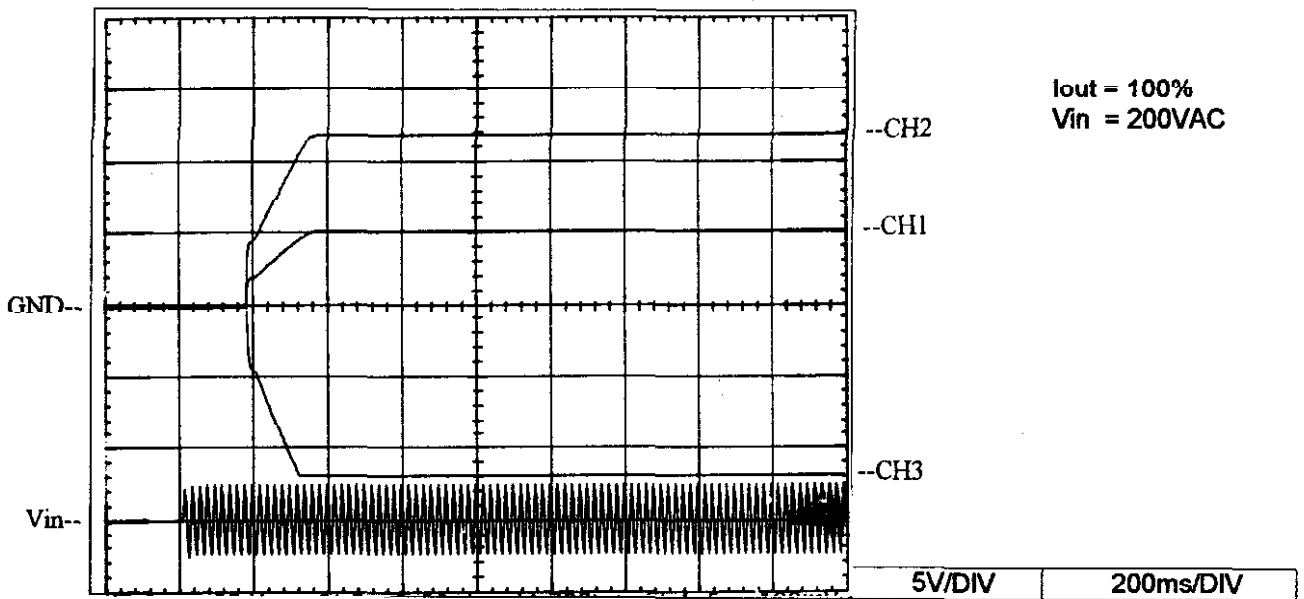
OUTPUT RISE TIME

Conditions

- (A) $V_{in} = 170VAC$
- (B) $V_{in} = 200VAC$
- (C) $V_{in} = 265VAC$
- $T_a = 25^\circ C$



$I_{out} = 100\%$

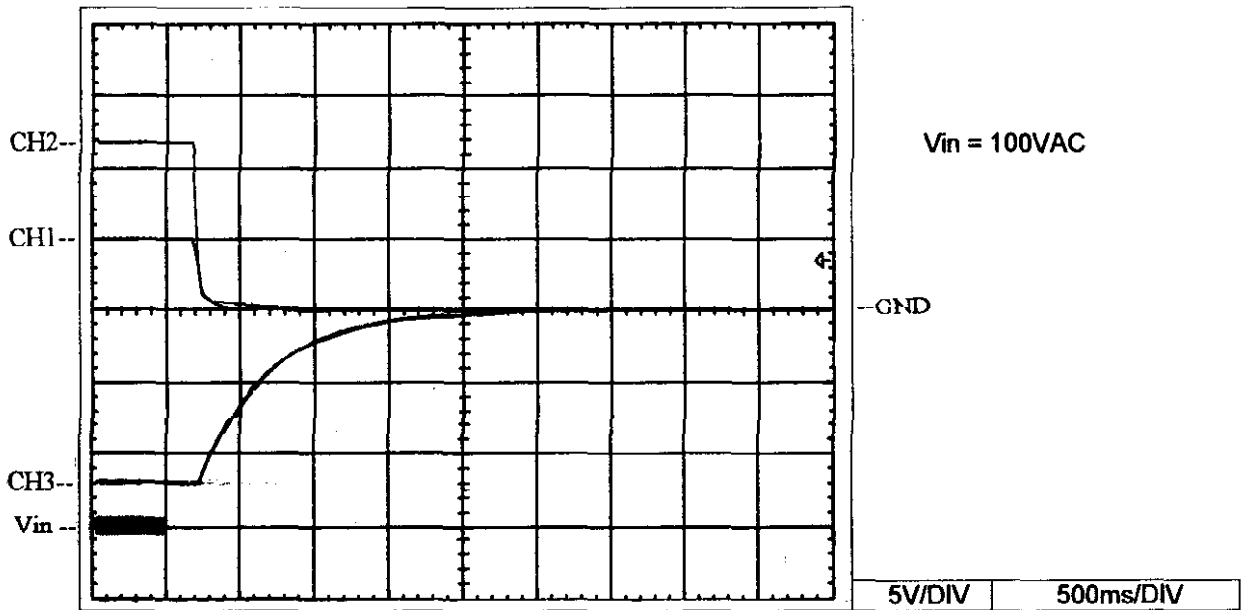
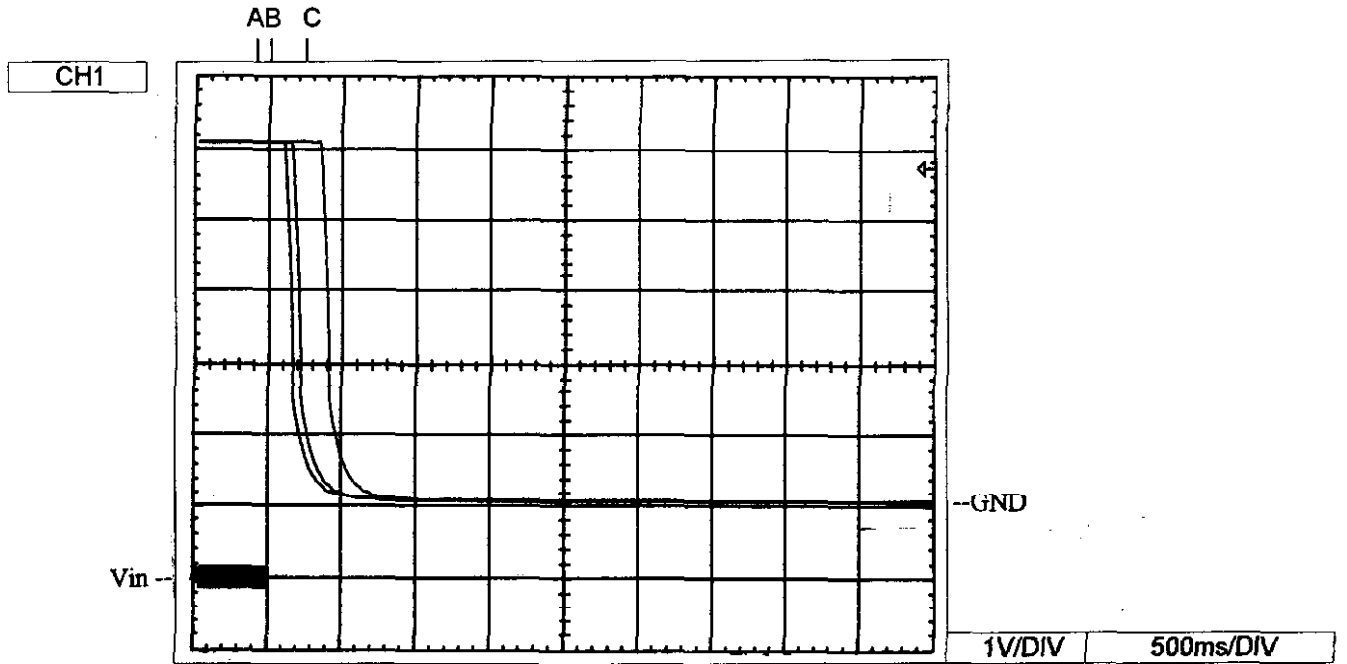


$I_{out} = 100\%$
 $V_{in} = 200VAC$

OUTPUT FALL TIME

Conditions

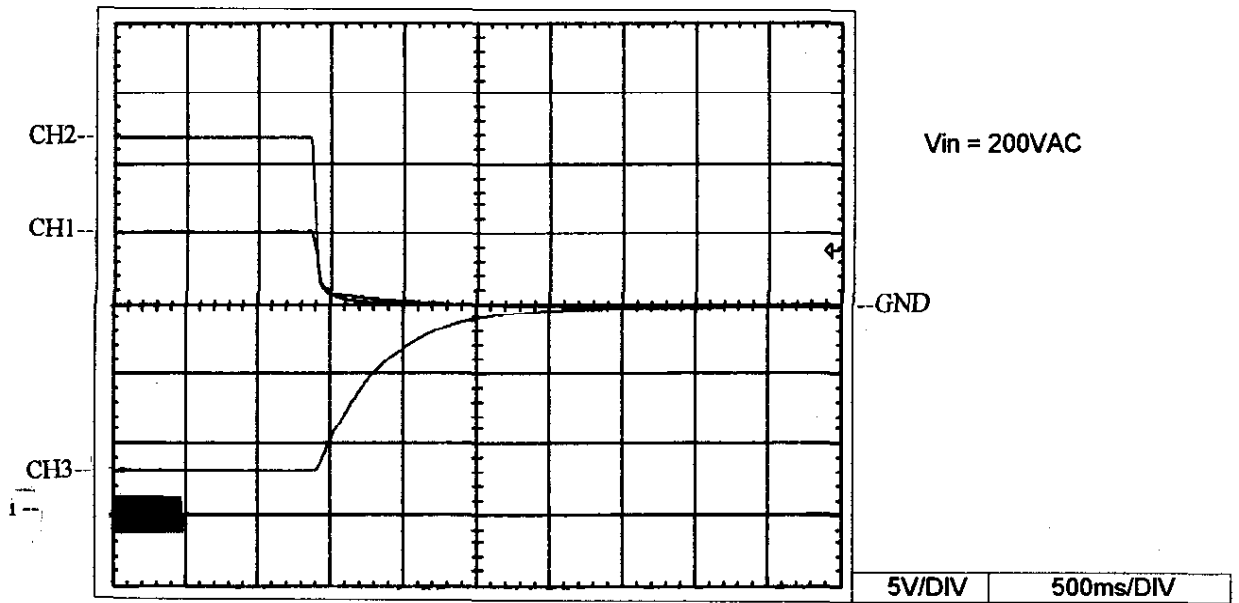
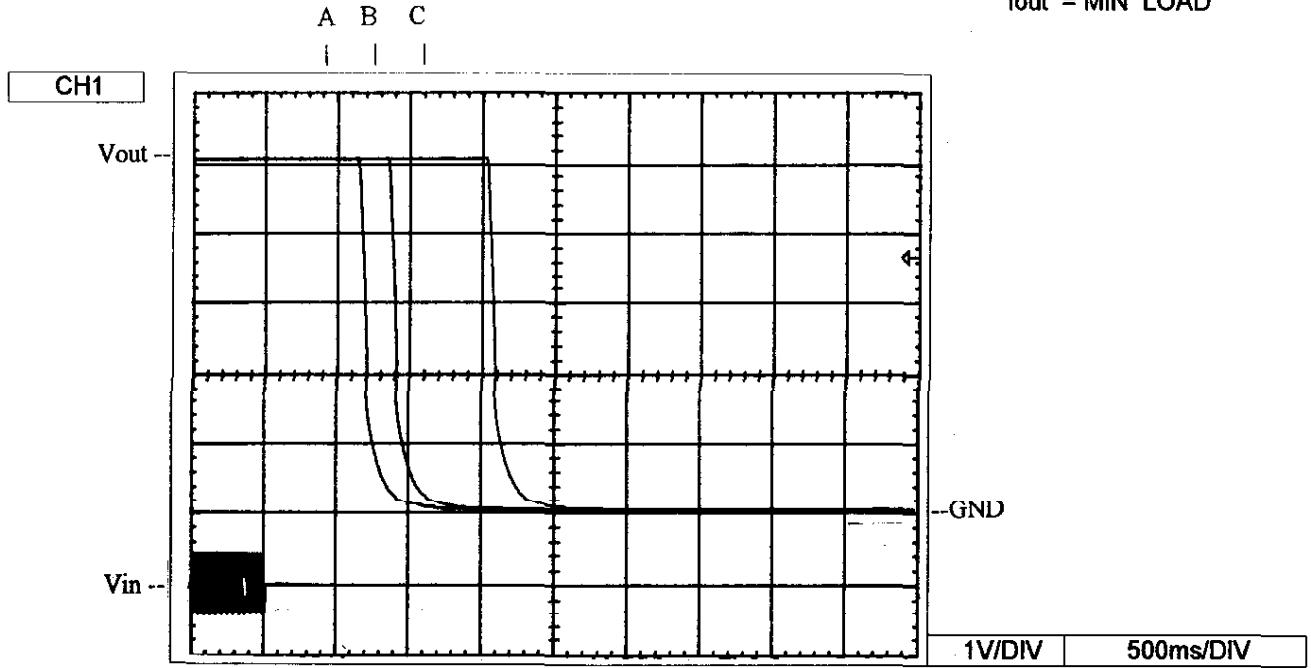
- (A) $V_{in} = 85VAC$
- (B) $V_{in} = 100VAC$
- (C) $V_{in} = 132VAC$
- $T_a = 25^{\circ}C$
- $I_{out} = MIN\ LOAD$



OUTPUT FALL TIME

Conditions

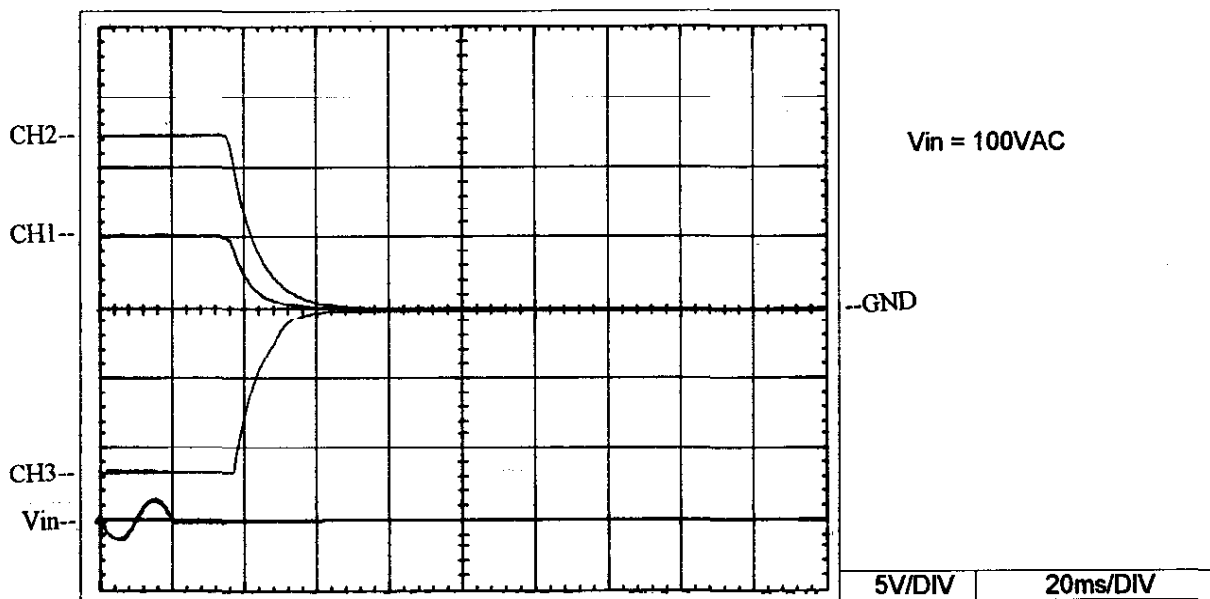
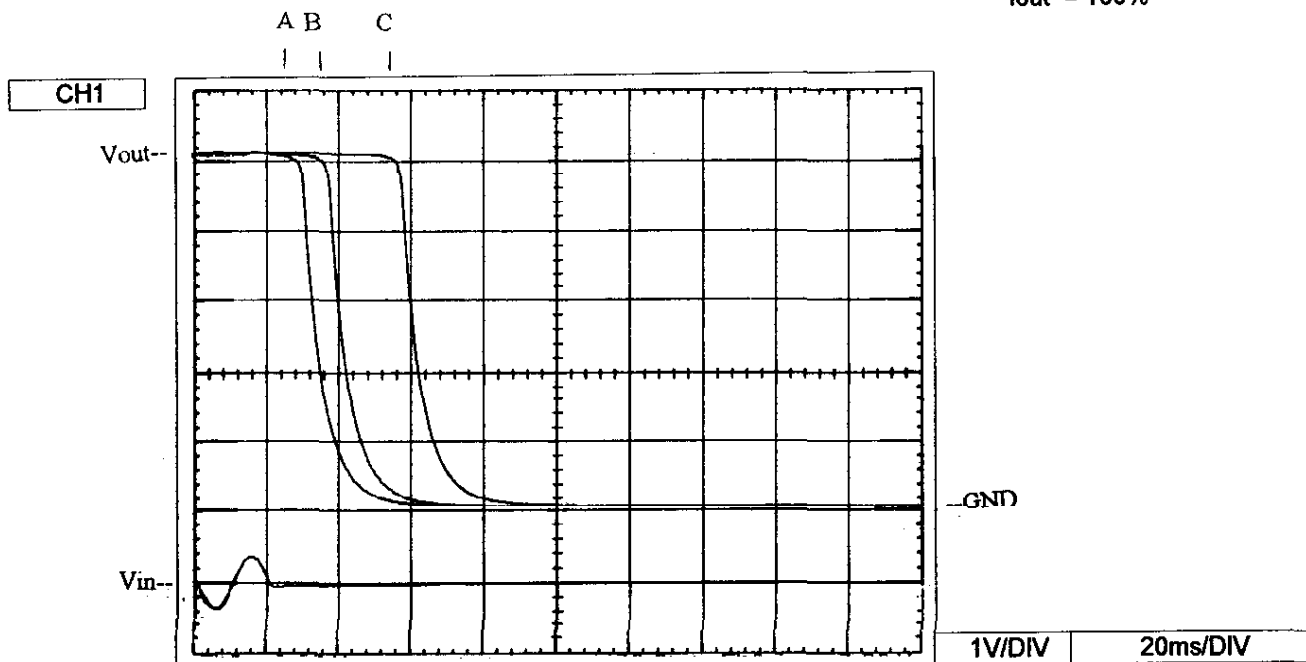
- (A) $V_{in} = 170VAC$
- (B) $V_{in} = 200VAC$
- (C) $V_{in} = 265VAC$
- $T_a = 25^{\circ}C$
- $I_{out} = MIN\ LOAD$



OUTPUT FALL TIME

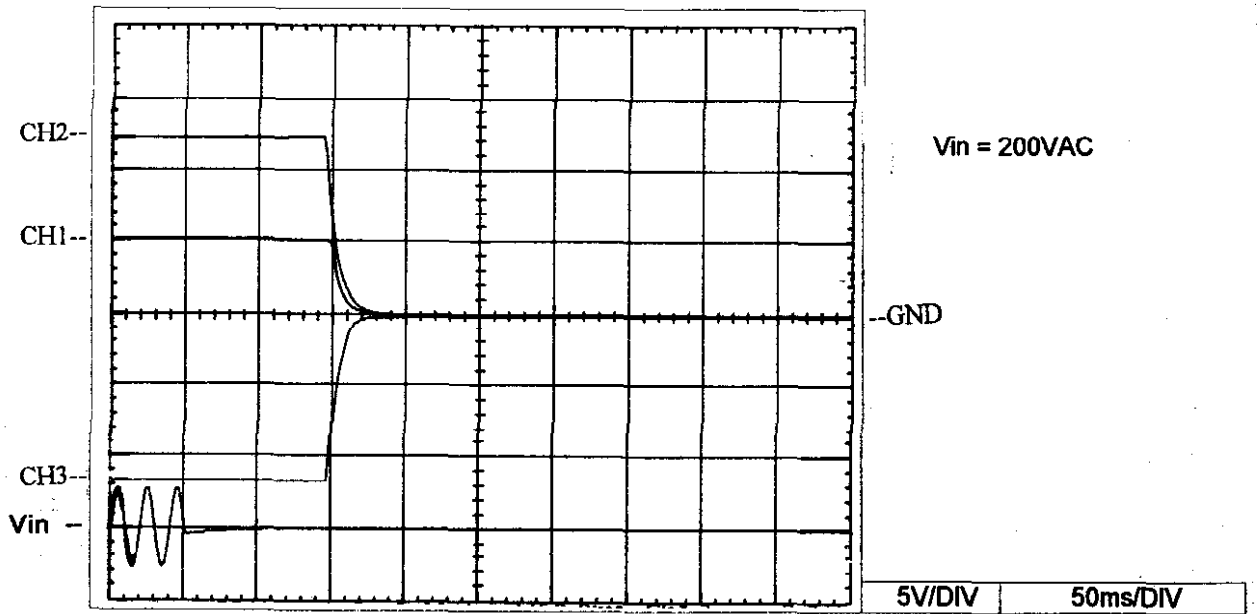
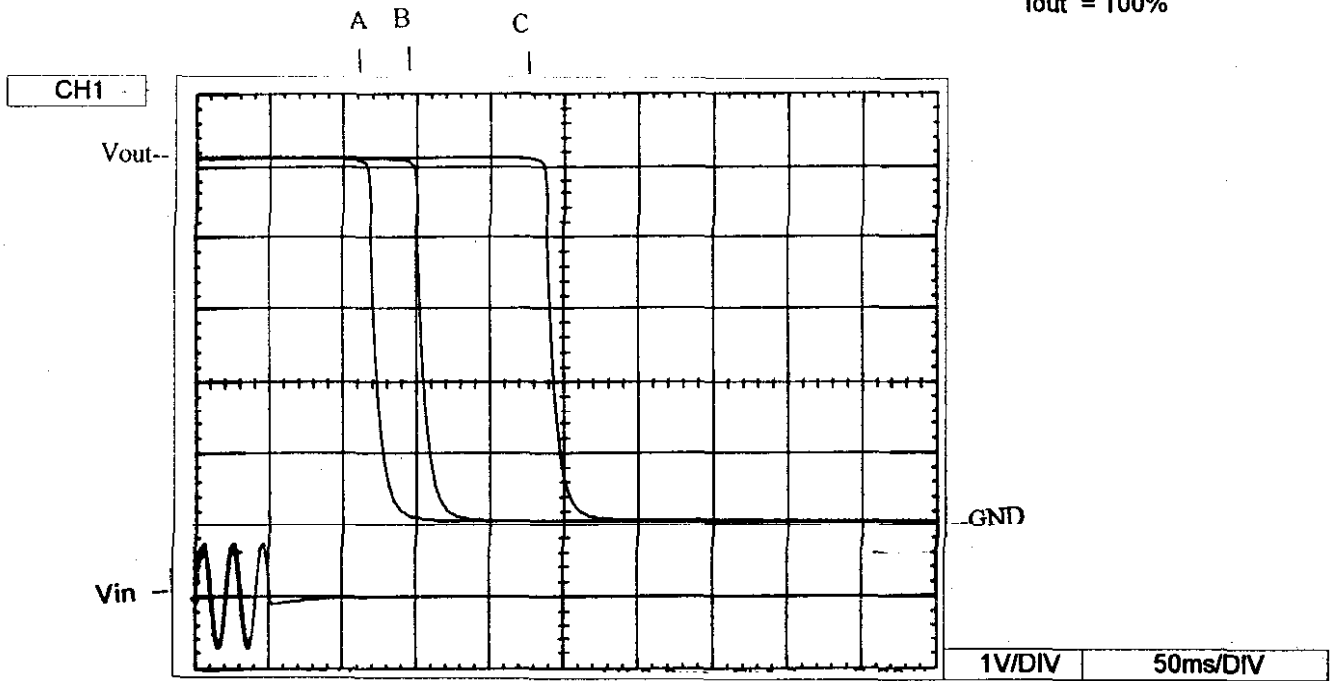
Conditions

- (A) $V_{in} = 85VAC$
- (B) $V_{in} = 100VAC$
- (C) $V_{in} = 132VAC$
- $T_a = 25^{\circ}C$
- $I_{out} = 100\%$



OUTPUT FALL TIME

Conditions
 (A) $V_{in} = 170VAC$
 (B) $V_{in} = 200VAC$
 (C) $V_{in} = 265VAC$
 $T_a = 25^{\circ}C$
 $I_{out} = 100\%$

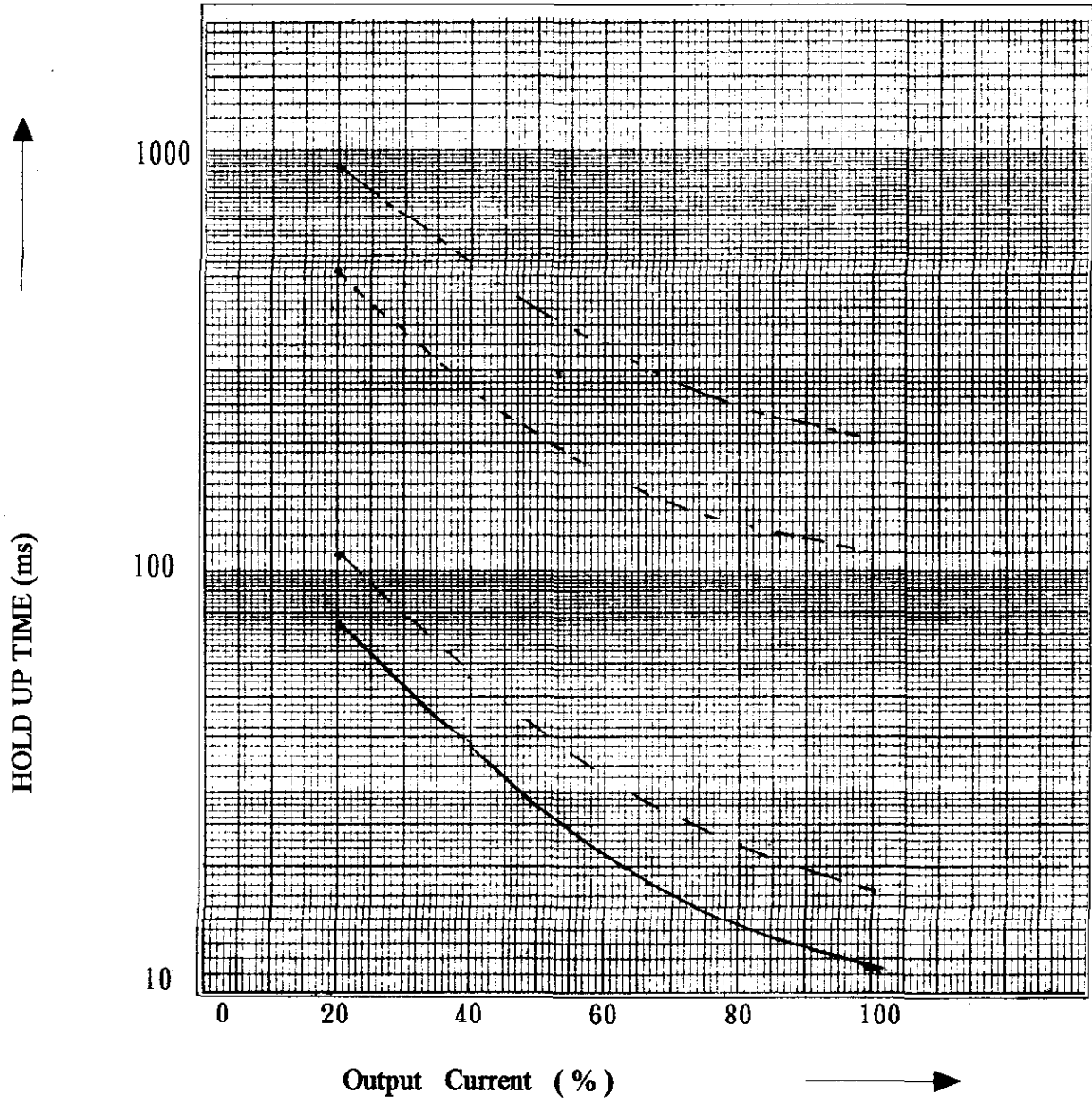


SHANGHAI NEMIC - LAMBDA

HOLD UP TIME

Conditions

$V_{in} = 85VAC$ ———
100VAC - - - -
200VAC - - - -
265VAC - - - -
 $T_a = 25^\circ C$



SHANGHAI NEMIC-LAMBDA

DYNAMIC LINE RESPONSE

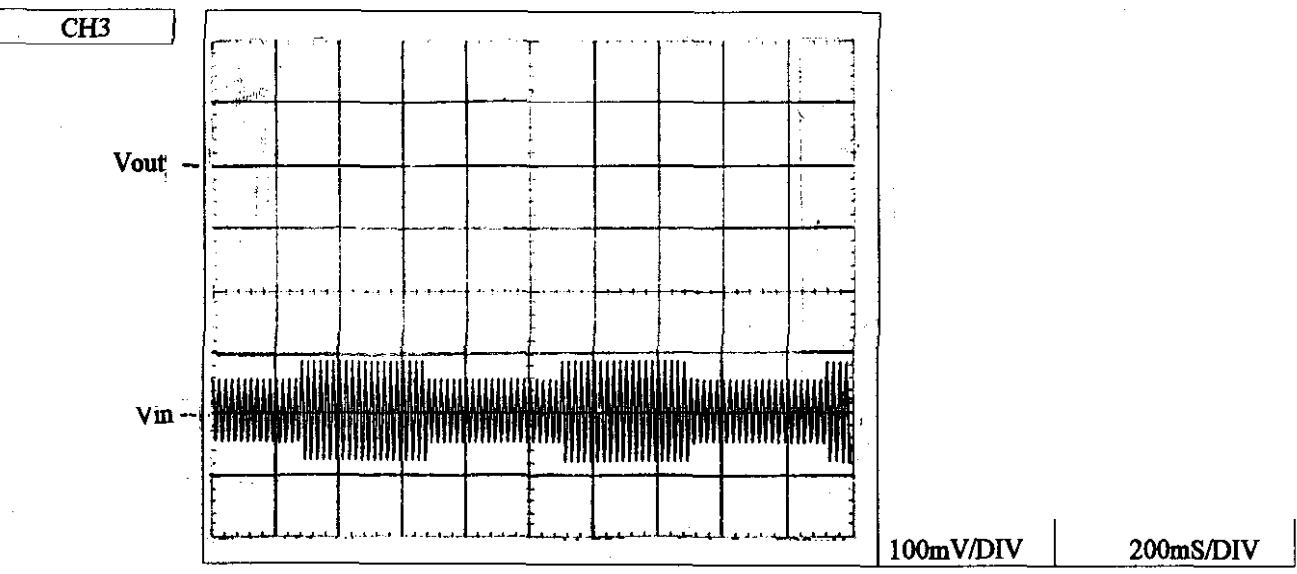
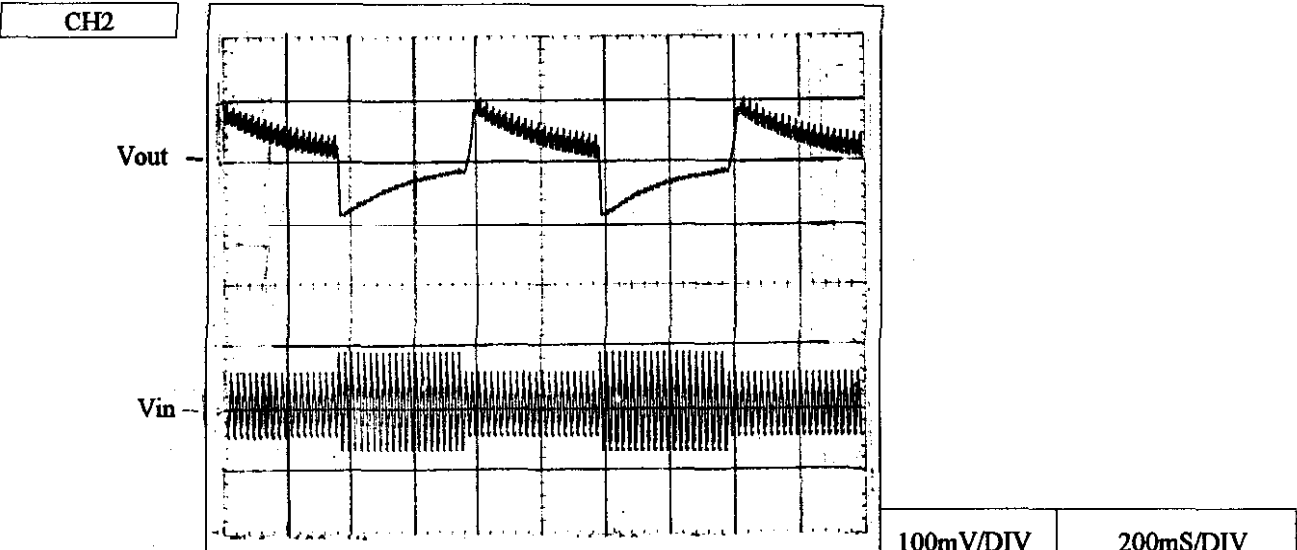
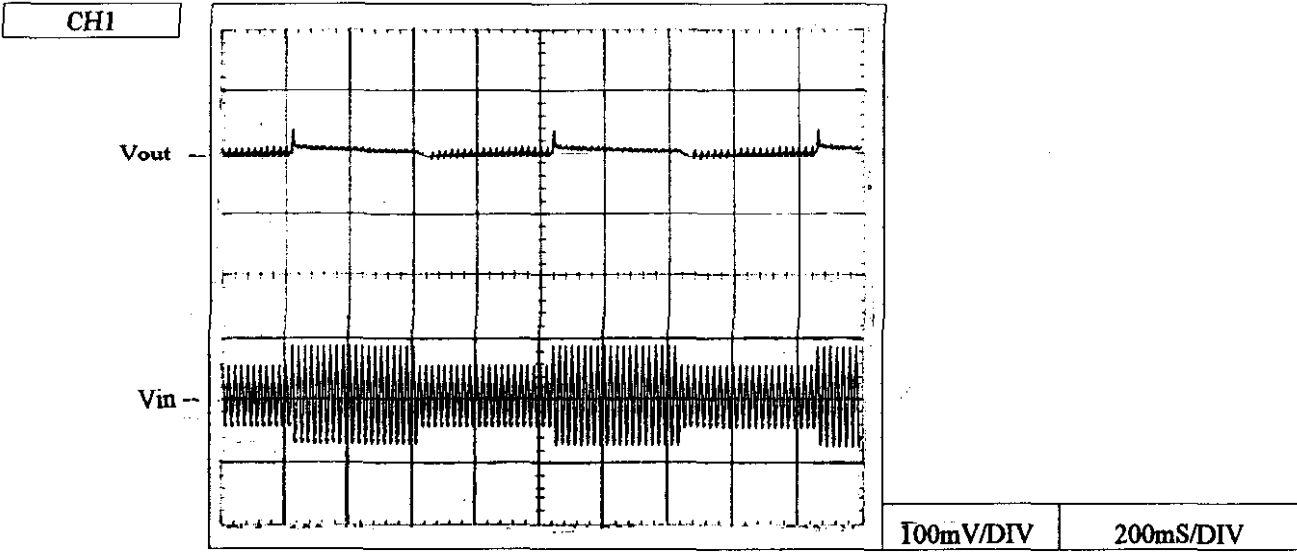
SWT40-522

Conditions

$I_{out} = 100\%$

$T_a = 25^\circ\text{C}$

$V_{in} : 85\text{VAC} \longleftrightarrow 132\text{VAC}$



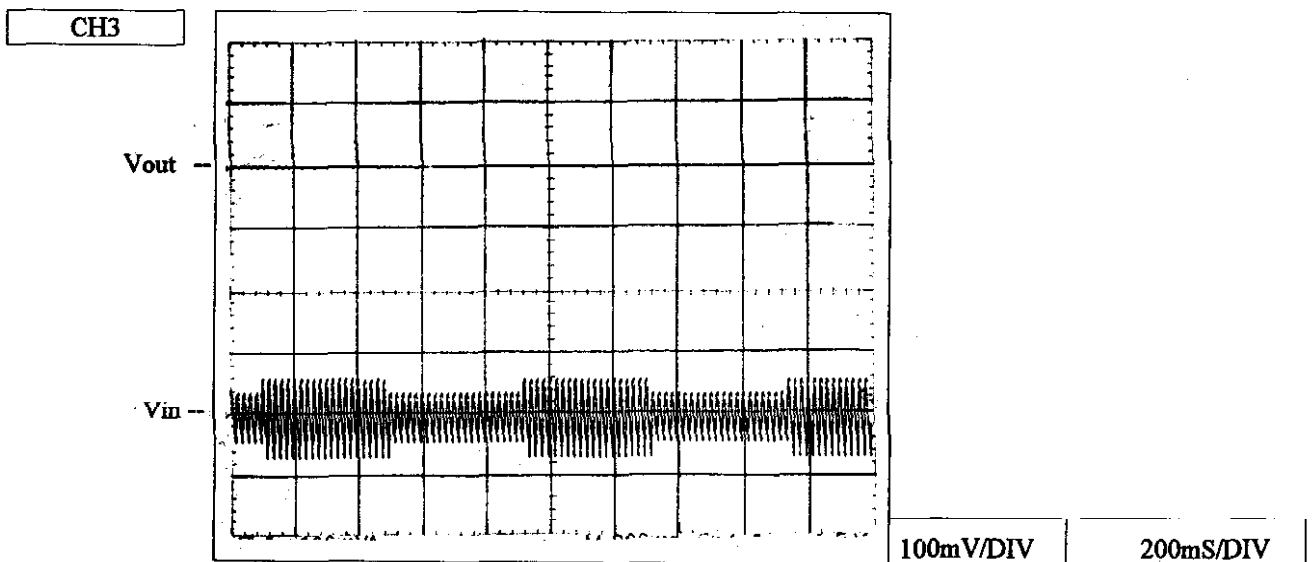
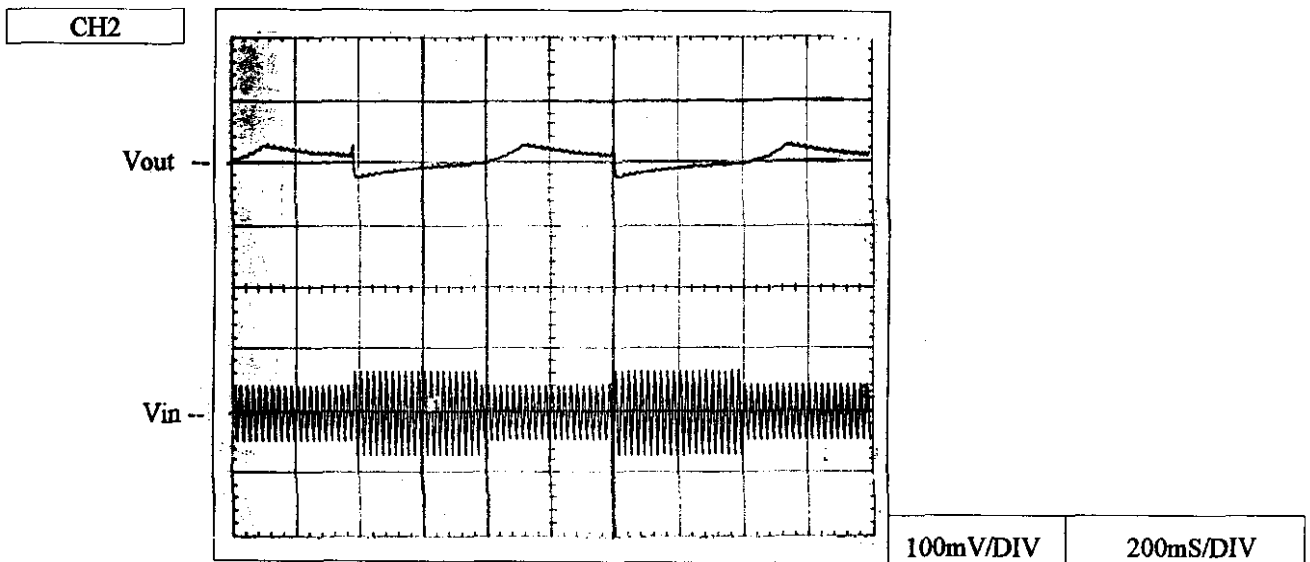
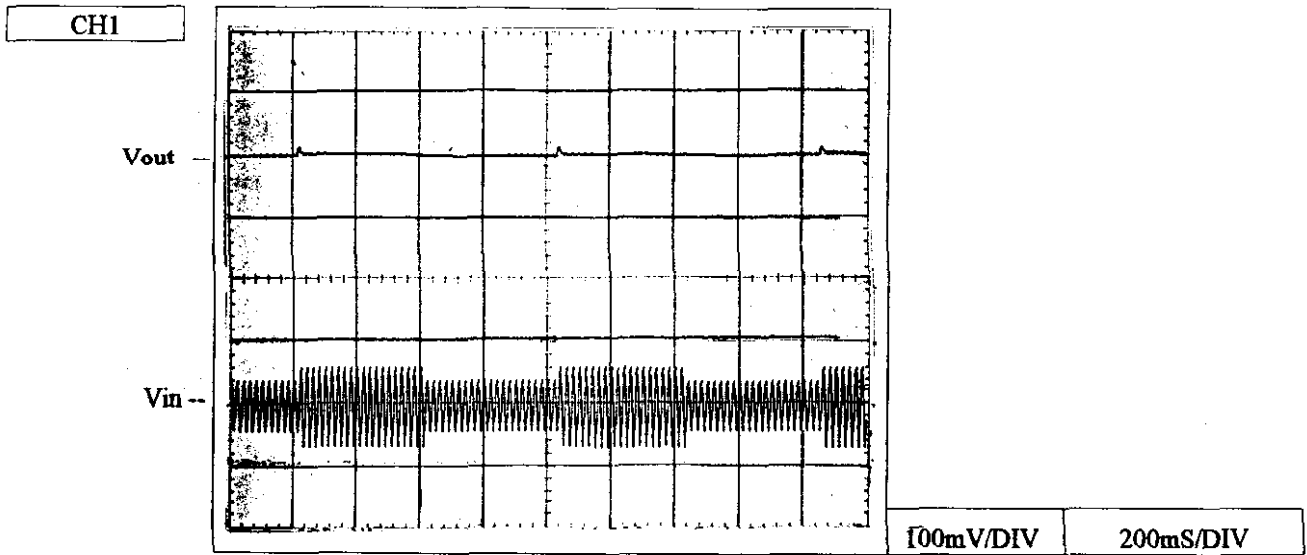
DYNAMIC LINE RESPONSE

SWT40-522

Conditions

$I_{out} = 100\%$
 $T_a = 25^\circ\text{C}$

$V_{in} : 170\text{VAC} \longleftrightarrow 265\text{VAC}$



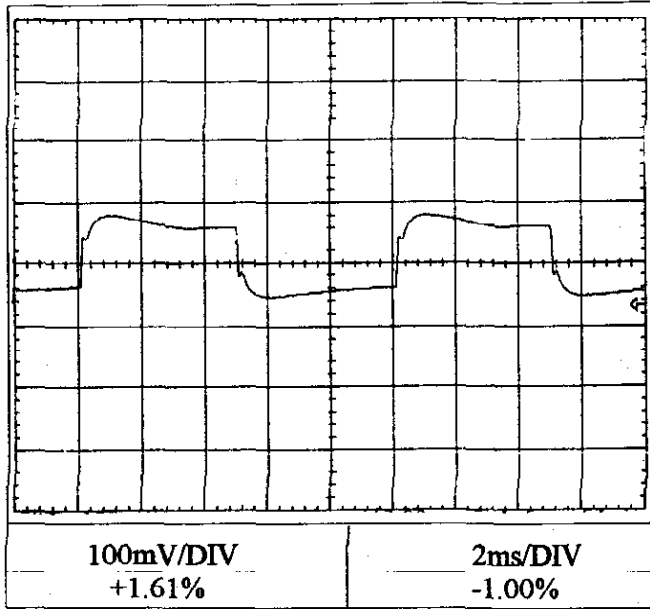
DYNAMIC LOAD RESPONSE

SWT40-522

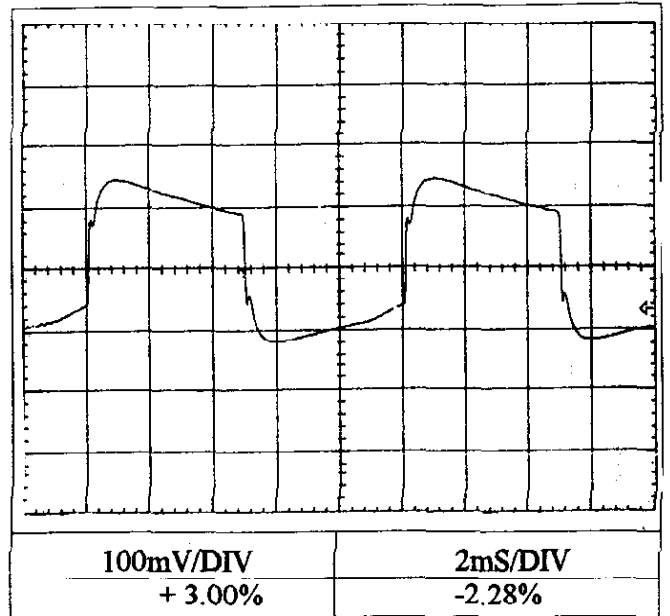
CH1

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 100\text{VAC}$
CH2,CH3: $I_{out} = 100\%$

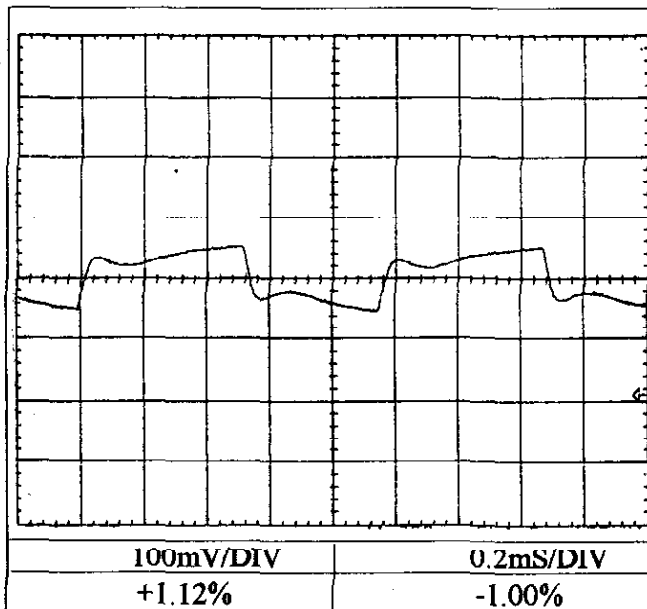
$I_{out} 50\%$ ← → $100\% f = 100\text{Hz}$



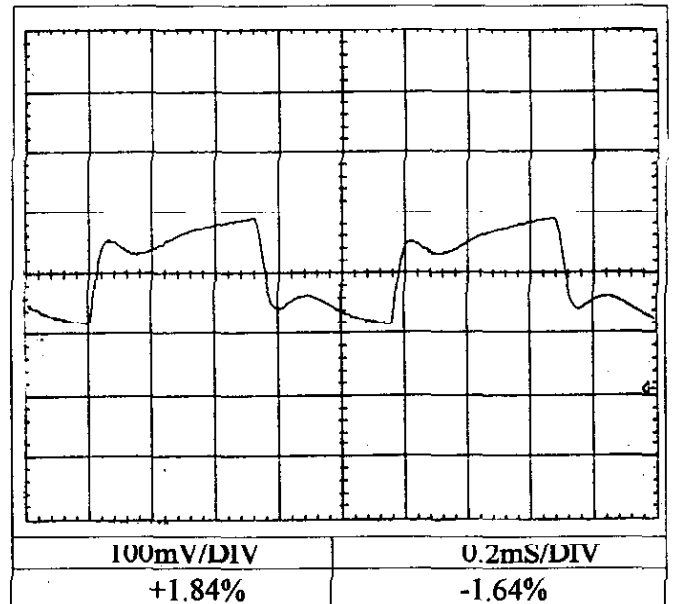
$I_{out} \text{Min}$ ← → $100\% f=100\text{Hz}$



$I_{out} 50\%$ ← → $100\% f = 1\text{kHz}$



$I_{out} \text{Min}$ ← → $100\% f=1\text{kHz}$



SHANGHAI NEMIC-LAMBDA

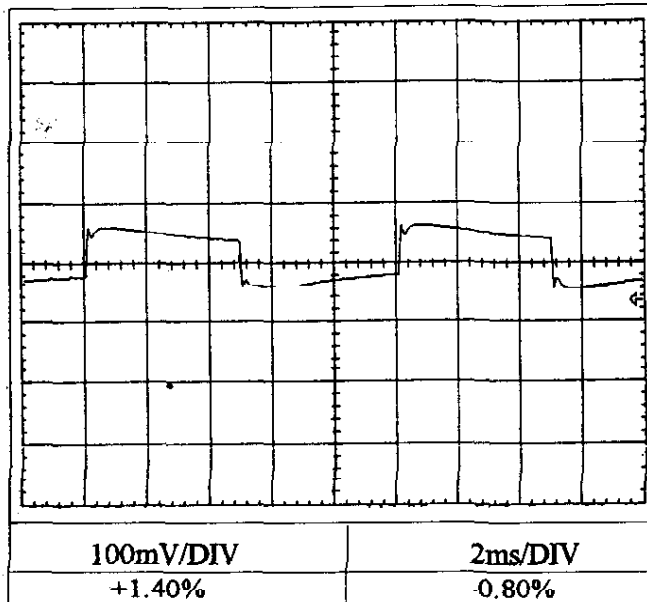
DYNAMIC LOAD RESPONSE

SWT40-522

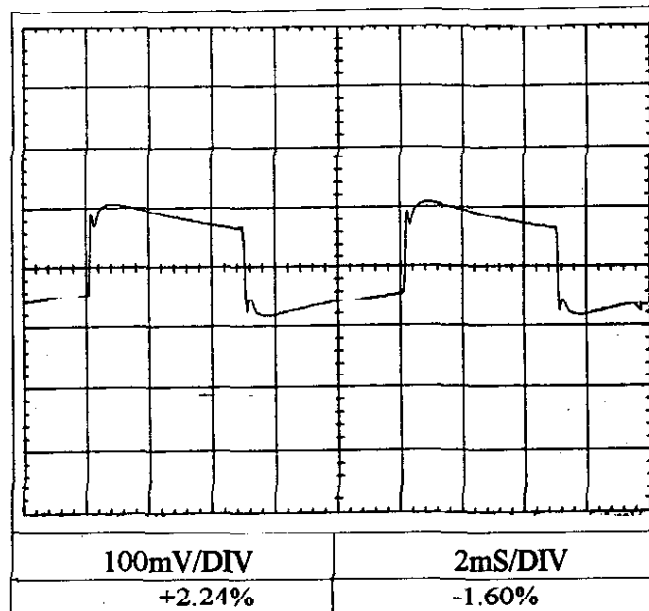
CH1

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 200\text{VAC}$
CH2,CH3: $I_{out} = 100\%$

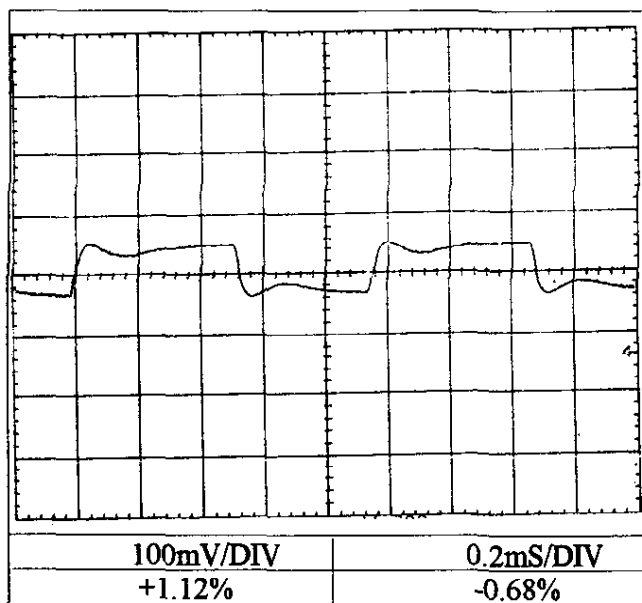
$I_{out} 50\%$ \longleftrightarrow $100\% f = 100\text{Hz}$



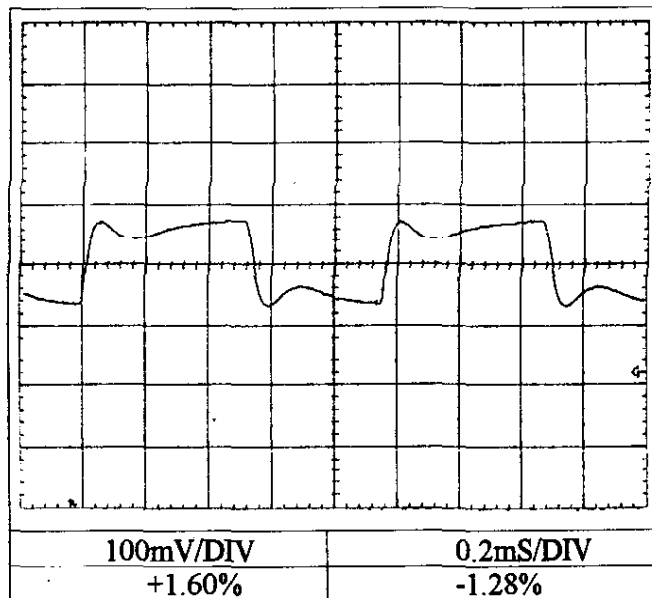
$I_{out} \text{Min}$ \longleftrightarrow $100\% f = 100\text{Hz}$



$I_{out} 50\%$ \longleftrightarrow $100\% f = 1\text{kHz}$



$I_{out} \text{Min}$ \longleftrightarrow $100\% f = 1\text{kHz}$



SHANGHAI NEMIC-LAMBDA

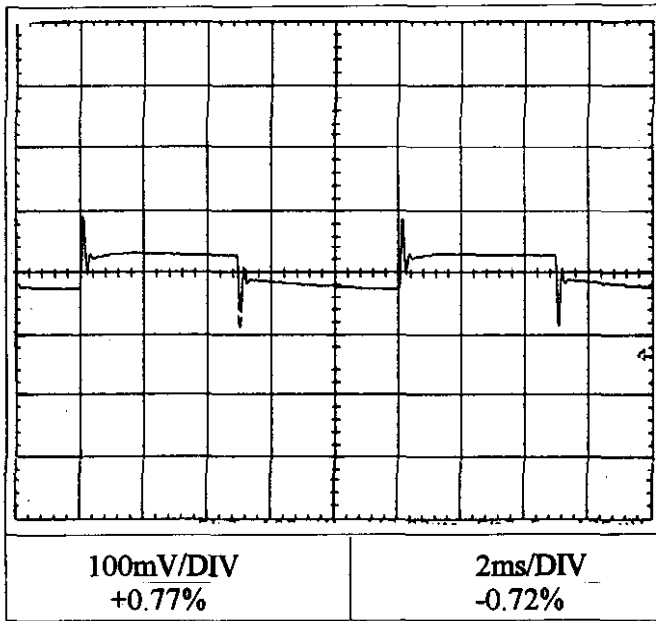
DYNAMIC LOAD RESPONSE

SWT40-522

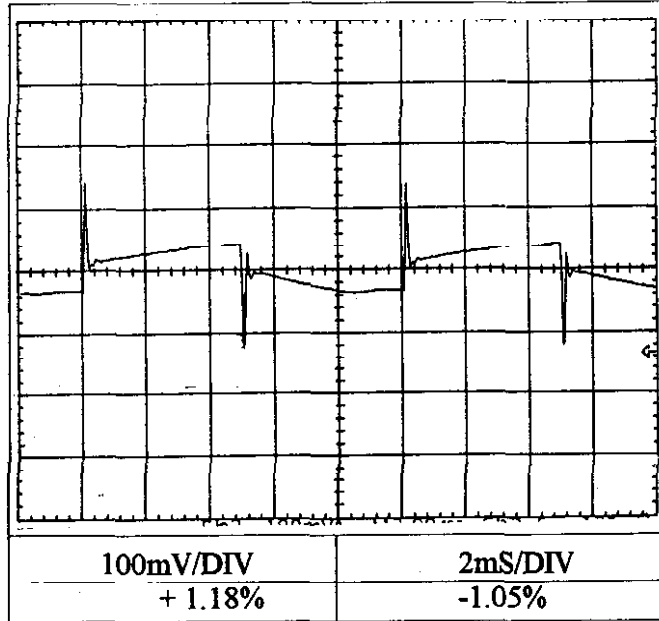
CH2

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 100\text{VAC}$
CH1,CH3: $I_{out} = 100\%$

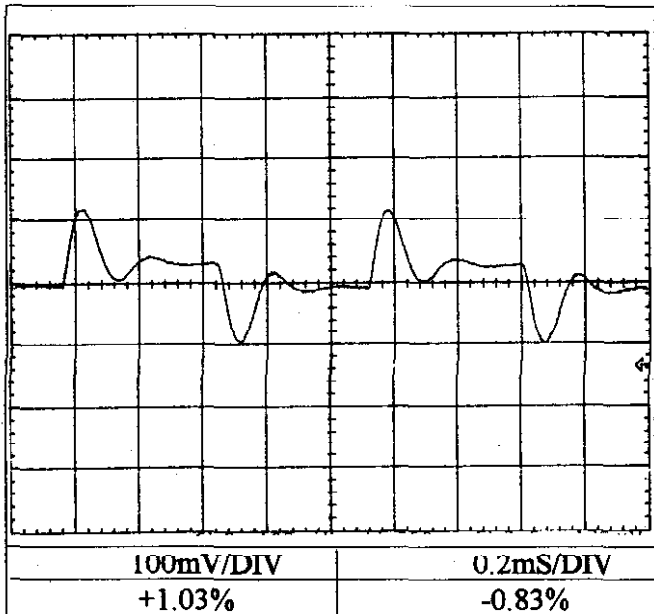
$I_{out} 50\%$ ← → $100\% f = 100\text{Hz}$



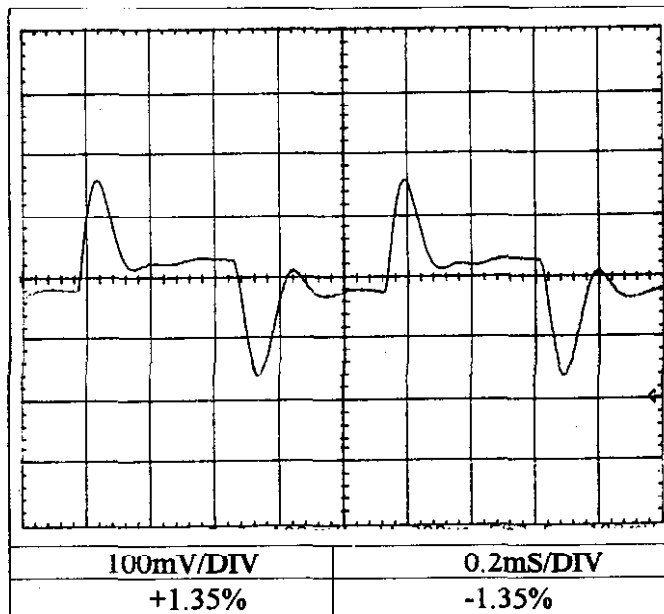
$I_{out} \text{Min}$ ← → $100\% f = 100\text{Hz}$



$I_{out} 50\%$ ← → $100\% f = 1\text{kHz}$



$I_{out} \text{Min}$ ← → $100\% f = 1\text{kHz}$



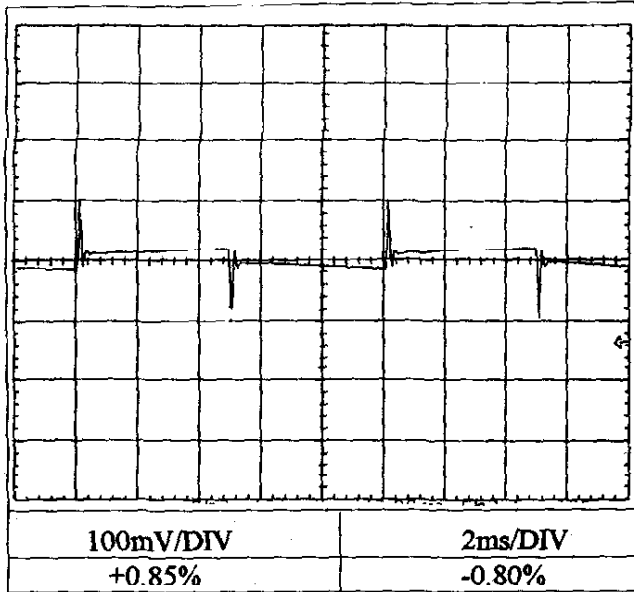
DYNAMIC LOAD RESPONSE

SWT40-522

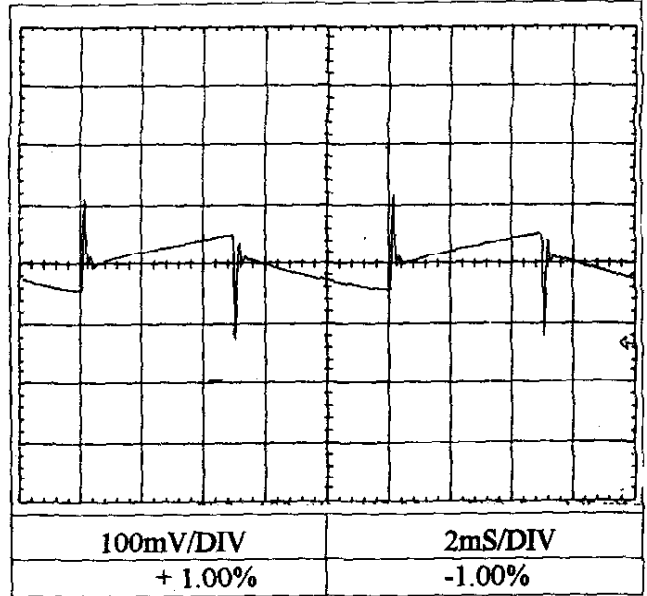
CH2

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 200\text{VAC}$
CH1,CH3: $I_{out} = 100\%$

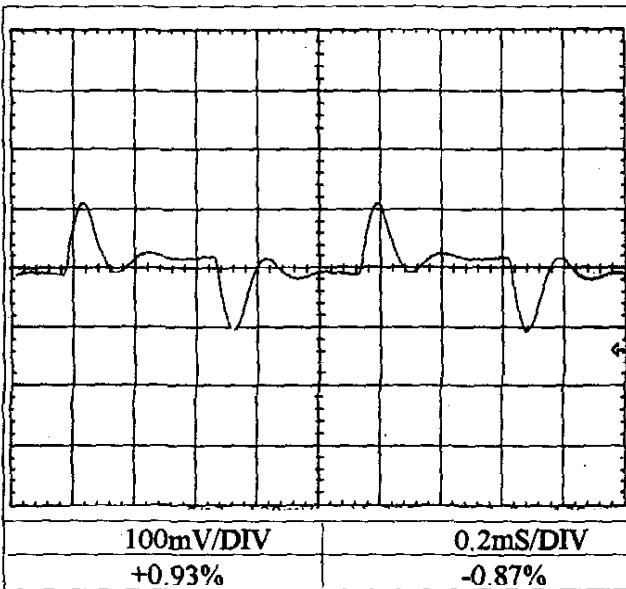
$I_{out} 50\%$ \longleftrightarrow $100\% f = 100\text{Hz}$



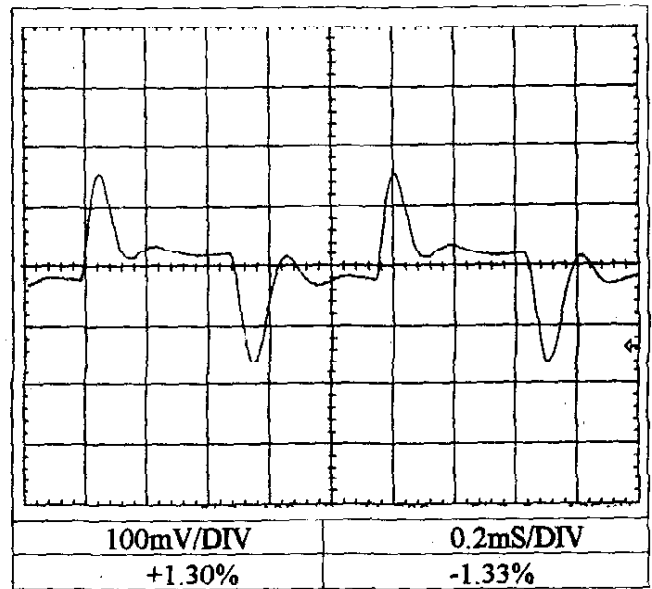
$I_{out} \text{ Min}$ \longleftrightarrow $100\% f = 100\text{Hz}$



$I_{out} 50\%$ \longleftrightarrow $100\% f = 1\text{kHz}$



$I_{out} \text{ Min}$ \longleftrightarrow $100\% f = 1\text{kHz}$



SHANGHAI NEMIC-LAMBDA

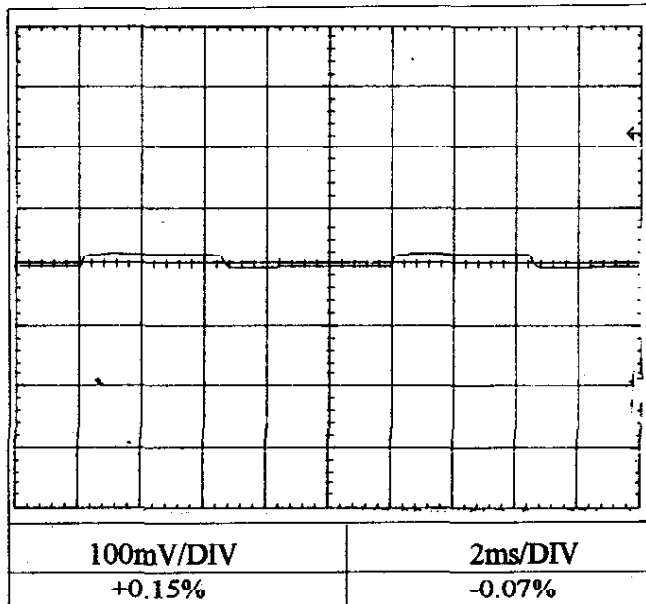
DYNAMIC LOAD RESPONSE

SWT40-522

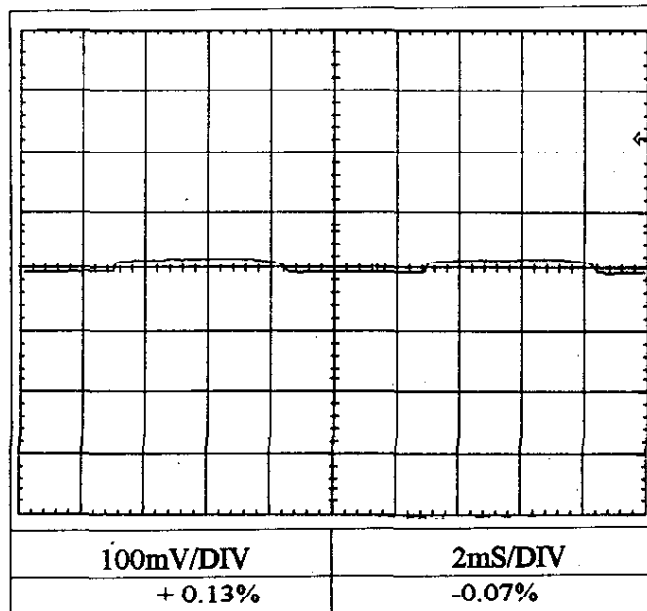
CH3

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 100\text{VAC}$
 CH1,CH2: $I_{out} = 100\%$

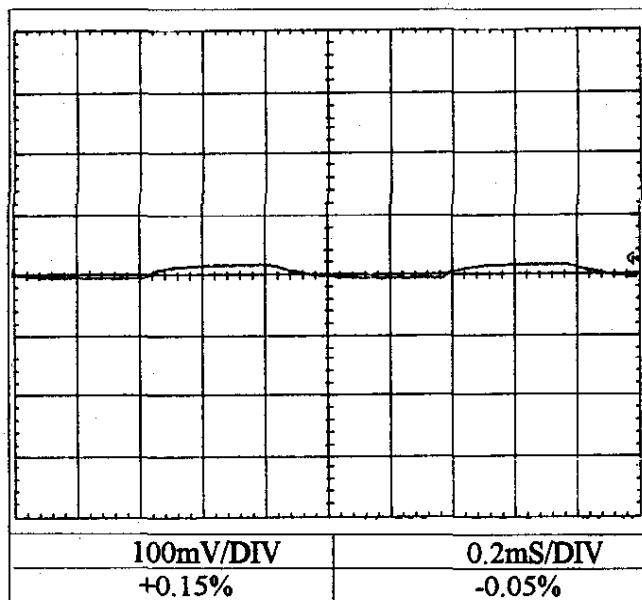
$I_{out} 50\%$ \longleftrightarrow $100\% f = 100\text{Hz}$



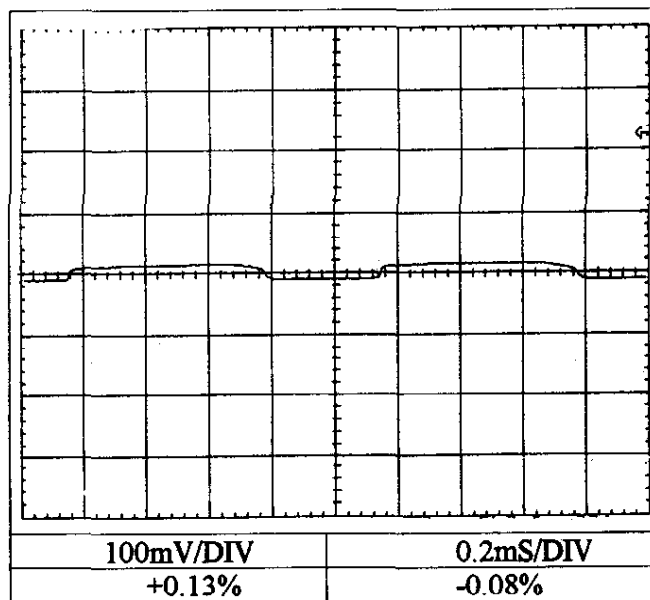
$I_{out} \text{ Min}$ \longleftrightarrow $100\% f=100\text{Hz}$



$I_{out} 50\%$ \longleftrightarrow $100\% f = 1\text{kHz}$



$I_{out} \text{ Min}$ \longleftrightarrow $100\% f=1\text{kHz}$



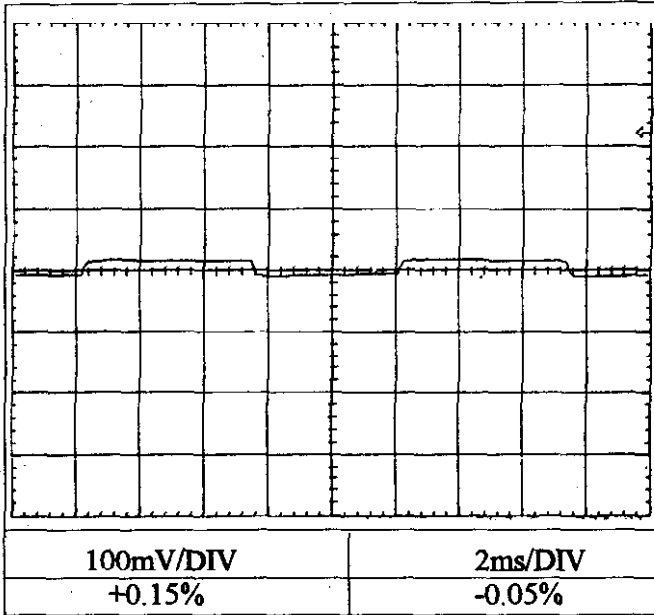
DYNAMIC LOAD RESPONSE

SWT40-522

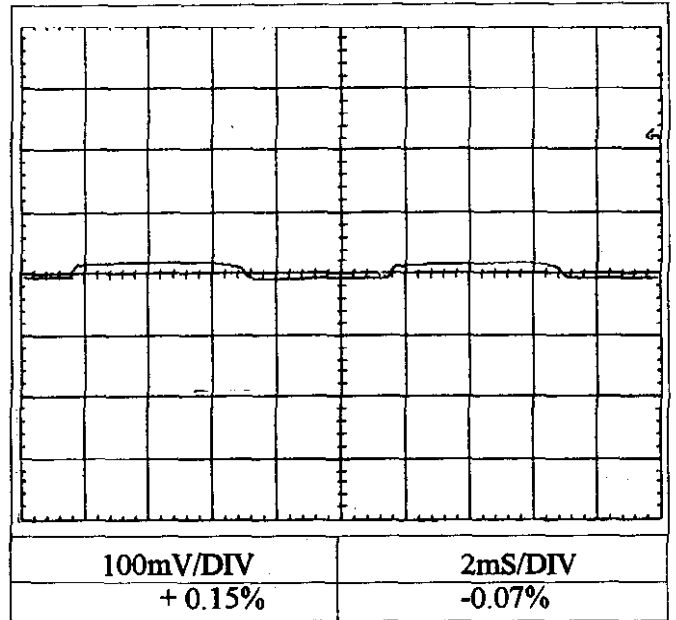
CH3

Conditions $T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 200\text{VAC}$
 CH1,CH2: $I_{out} = 100\%$

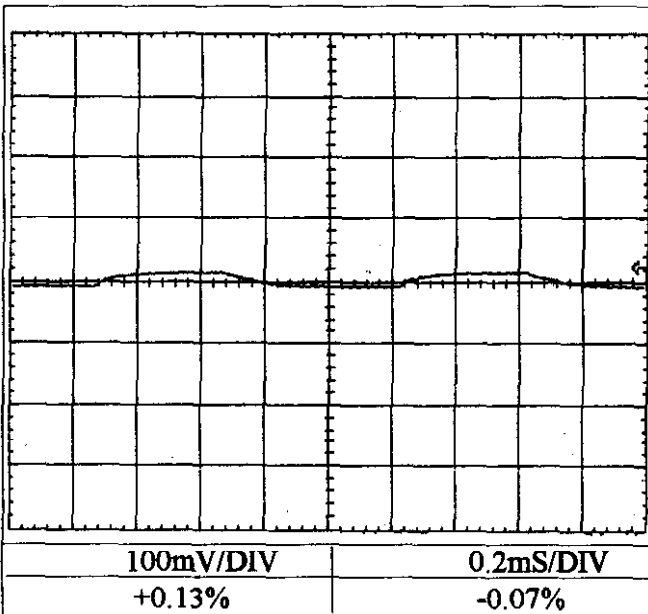
$I_{out} 50\%$ \longleftrightarrow $100\% f = 100\text{Hz}$



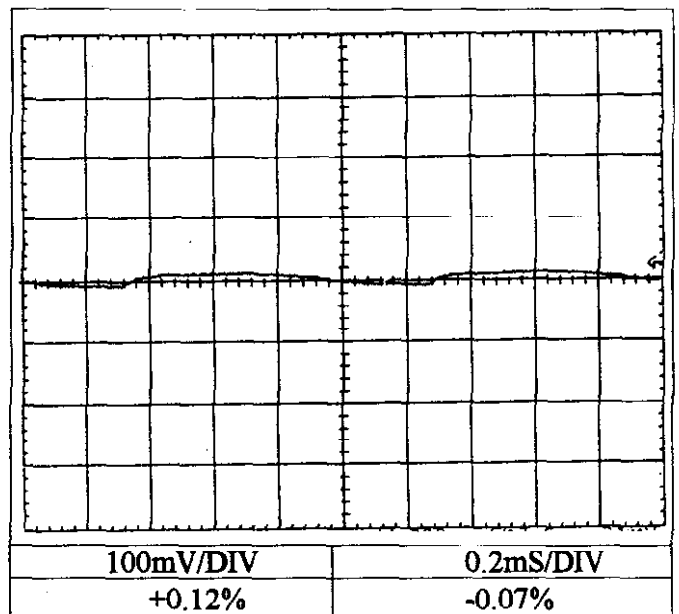
$I_{out} \text{Min}$ \longleftrightarrow $100\% f = 100\text{Hz}$



$I_{out} 50\%$ \longleftrightarrow $100\% f = 1\text{kHz}$



$I_{out} \text{Min}$ \longleftrightarrow $100\% f = 1\text{kHz}$

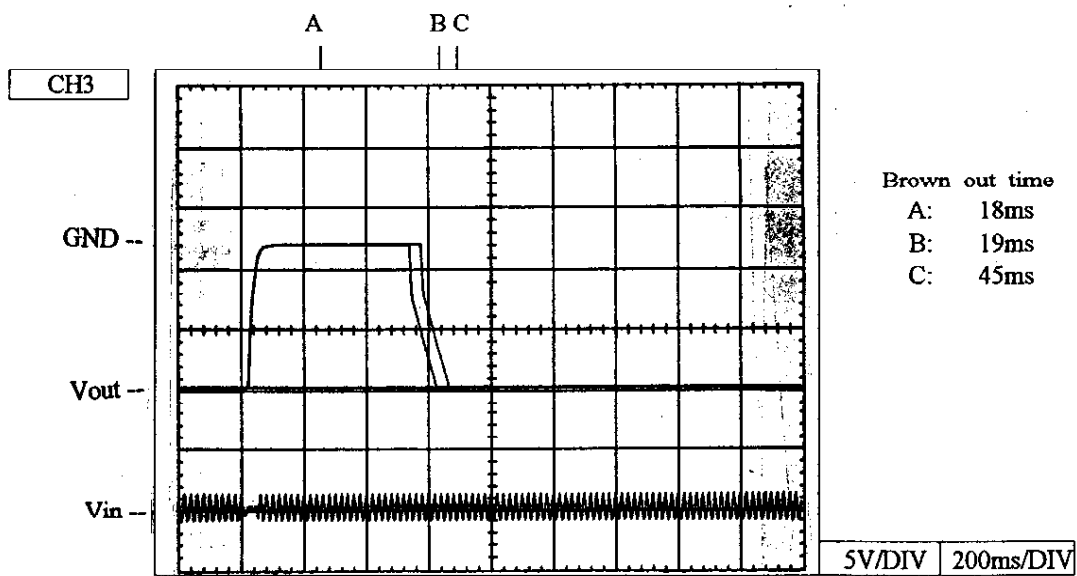
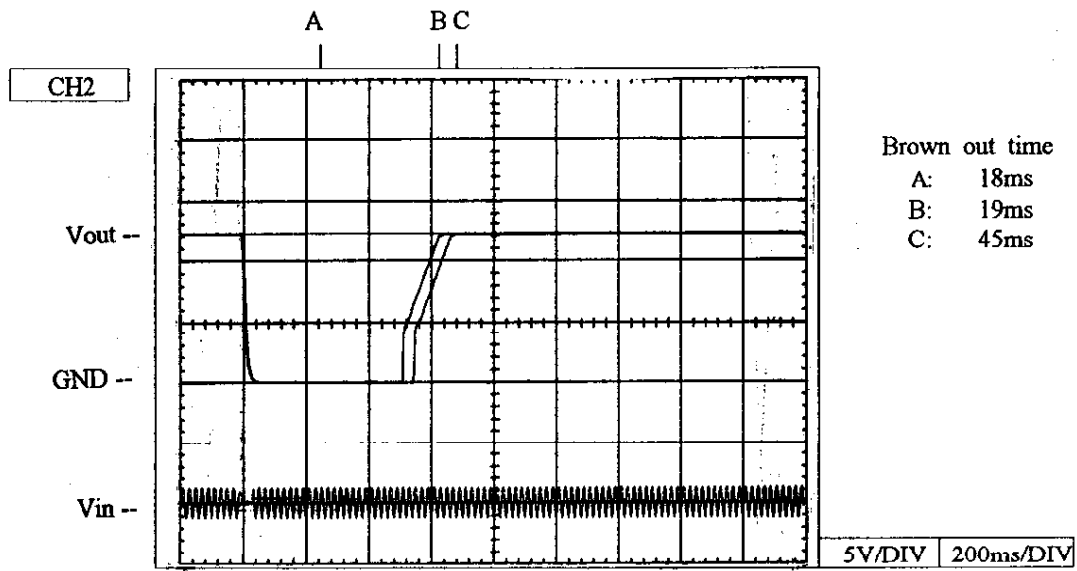
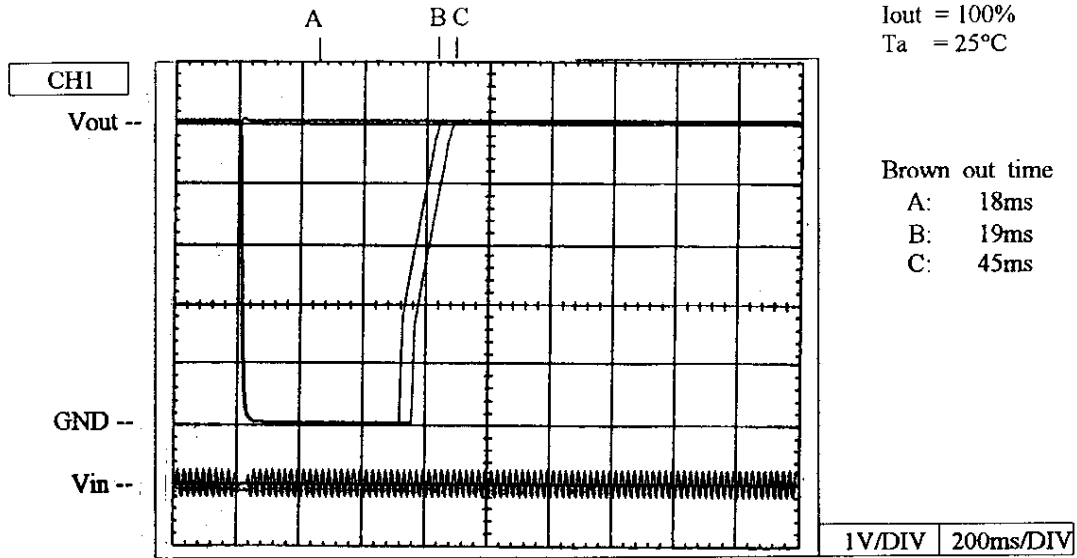


SHANGHAI NEMIC-LAMBDA

RESPONSE TO BROWN OUT

Conditions

Vin = 100VAC
Iout = 100%
Ta = 25°C

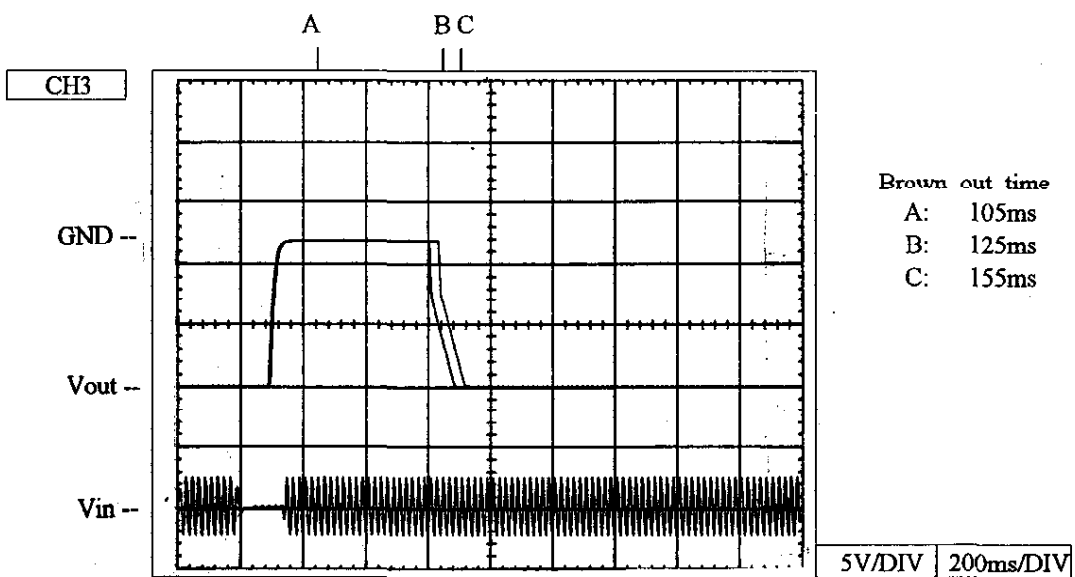
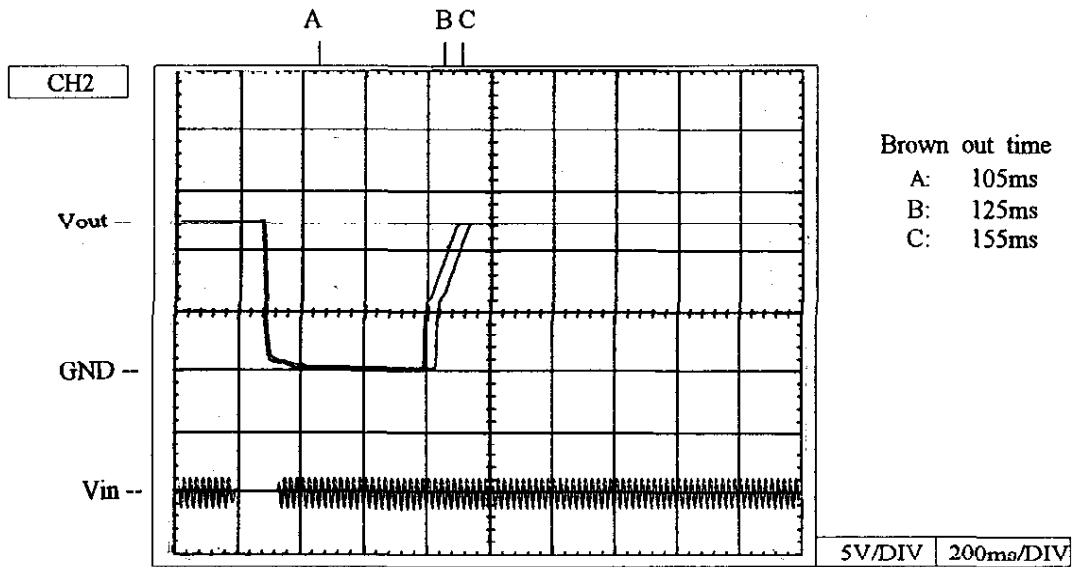
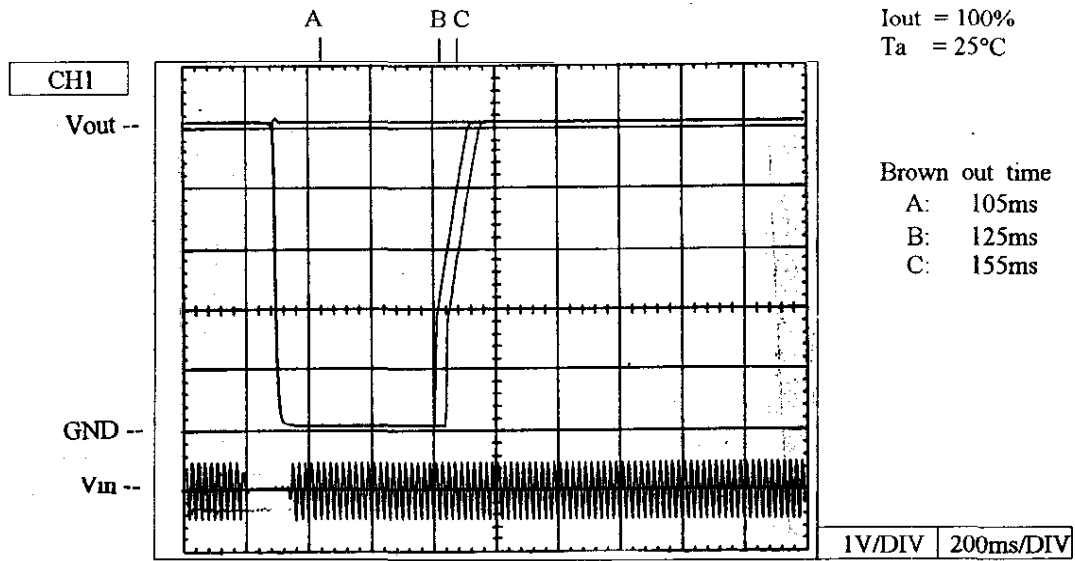


SIANGHAI NEMIC - LAMBDA

RESPONSE TO BROWN OUT

Conditions

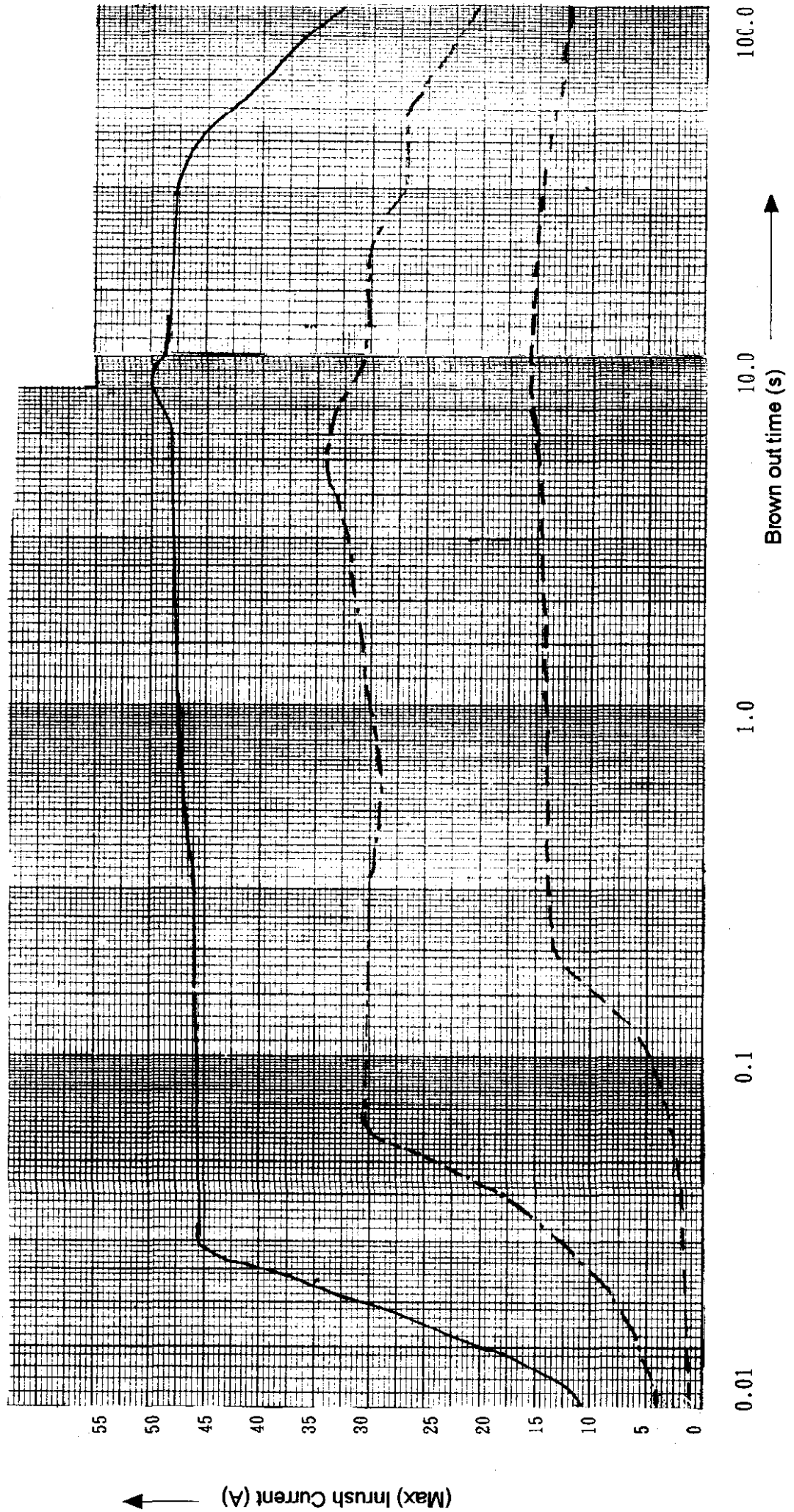
$V_{in} = 200VAC$
 $I_{out} = 100\%$
 $T_a = 25^{\circ}C$



INRUSH v.s BROWN OUT TIME

SWT40 - *

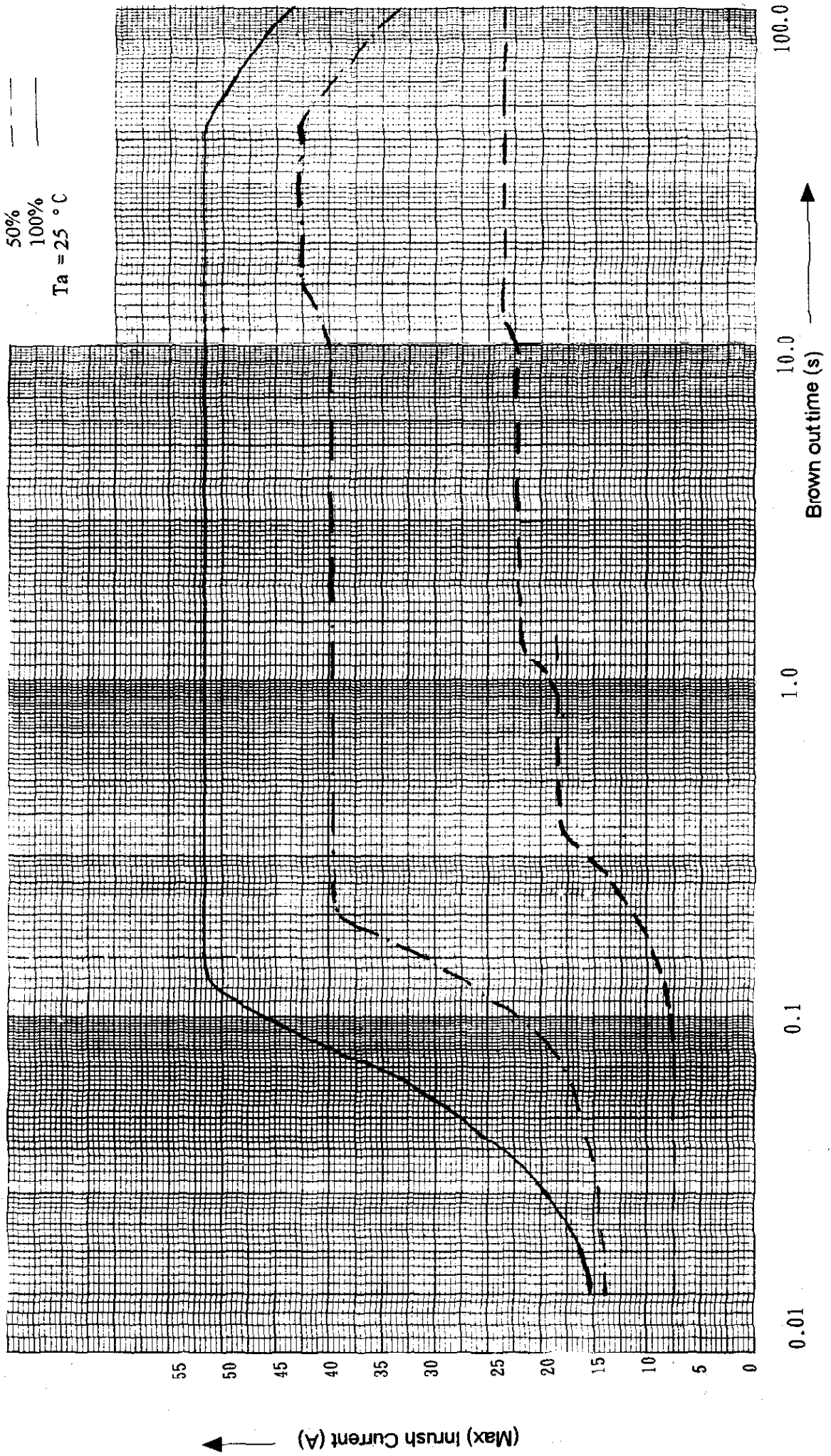
Conditions
 Vin = 100VAC
 Iout : Min Load
 50%
 100%
 Ta = 25 °C



INRUSH v.s BROWN OUT TIME

SWT40 - *

Conditions
 Vin = 220VAC
 Iout : Min Load
 50%
 100%
 Ta = 25 °C



INRUSH CURRENT WAVEFORM

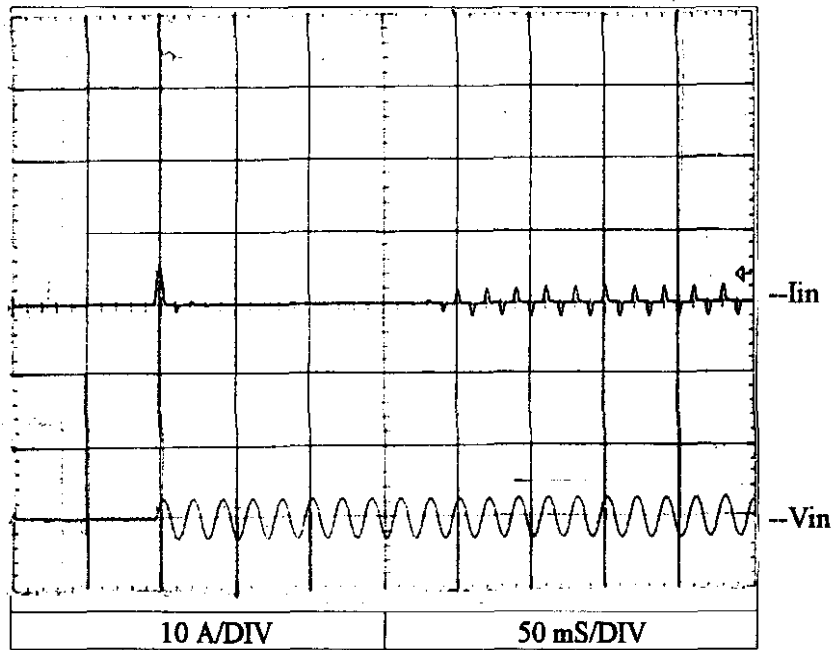
SWT40 - *

Conditions

$T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 100\text{VAC}$
 $I_{out} = 100\%$

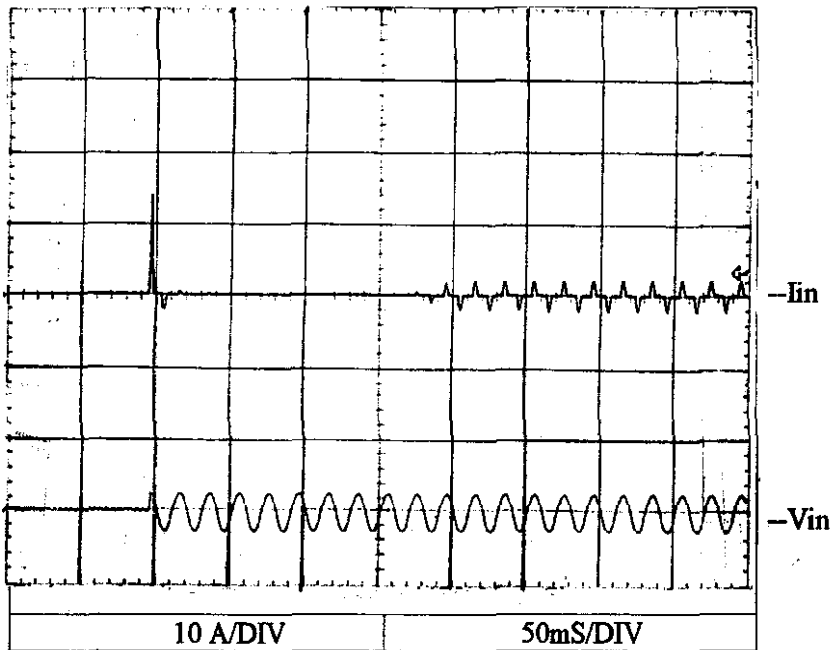
Switch on phase angle
of input AC voltage

$$\phi = 0^\circ$$



Switch on phase angle
of input AC voltage

$$\phi = 90^\circ$$



INRUSH CURRENT WAVEFORM

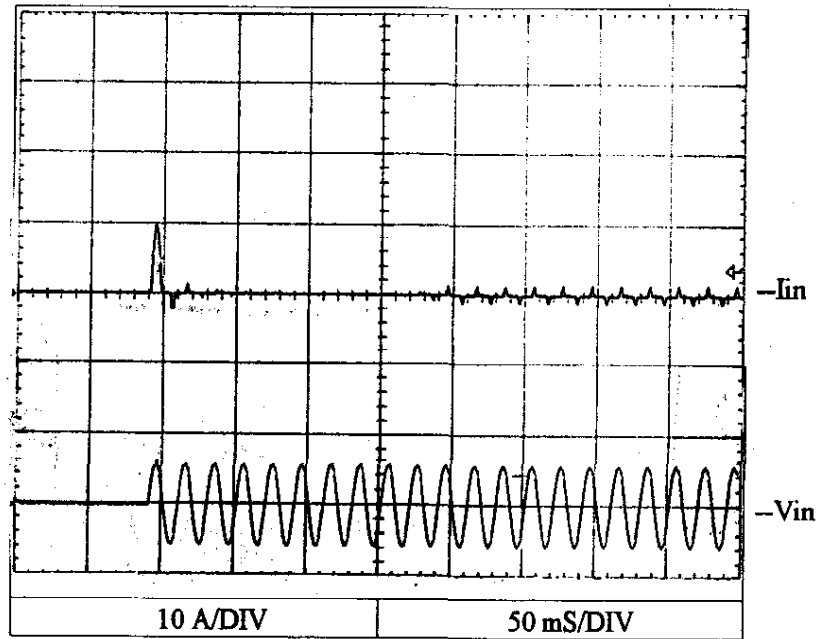
SWT40 - *

Conditions

$T_a = 25\text{ }^\circ\text{C}$
 $V_{in} = 220\text{VAC}$
 $I_{out} = 100\%$

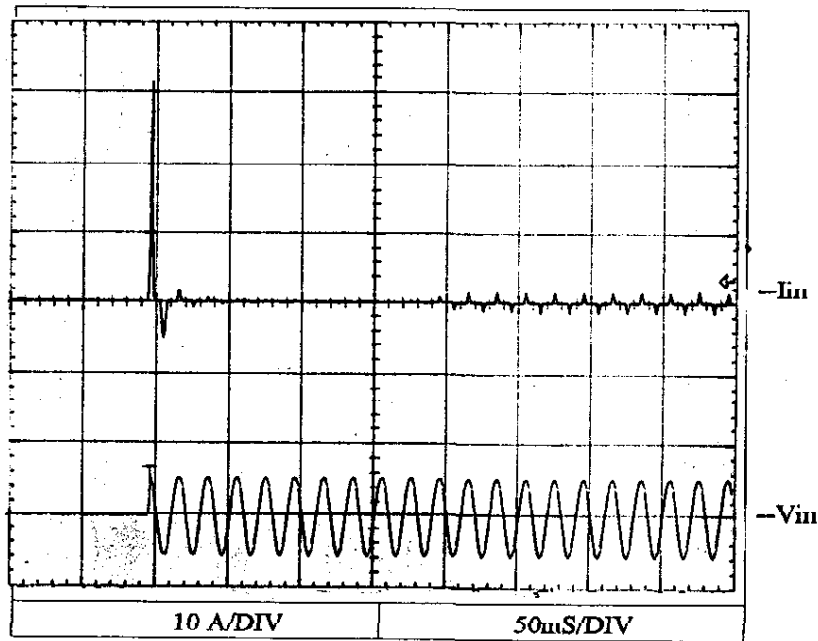
Switch on phase angle
of input AC voltage

$$\phi = 0^\circ$$



Switch on phase angle
of input AC voltage

$$\phi = 90^\circ$$



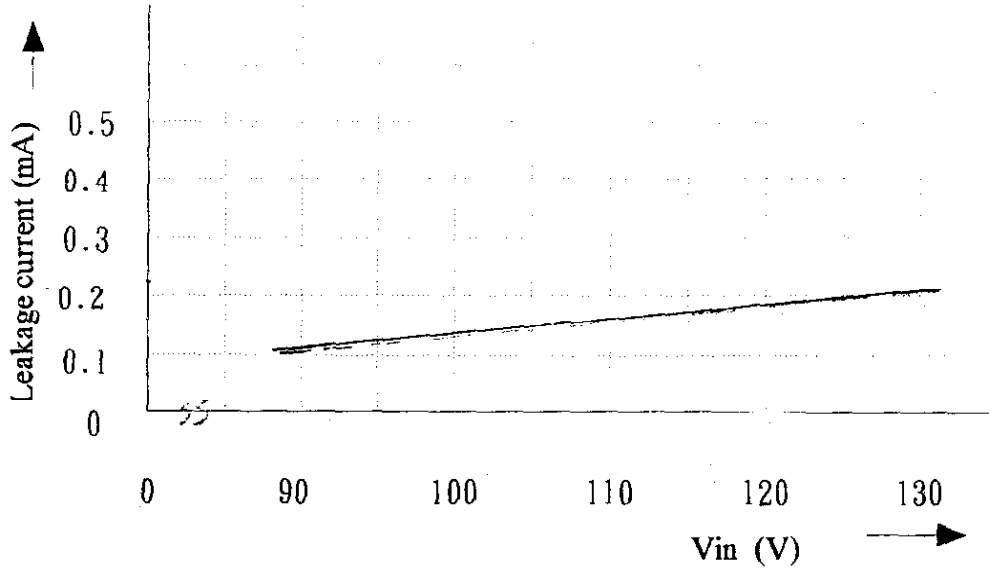
SHANGHAI NEMIC-LAMBDA

LEAKAGE CURRENT

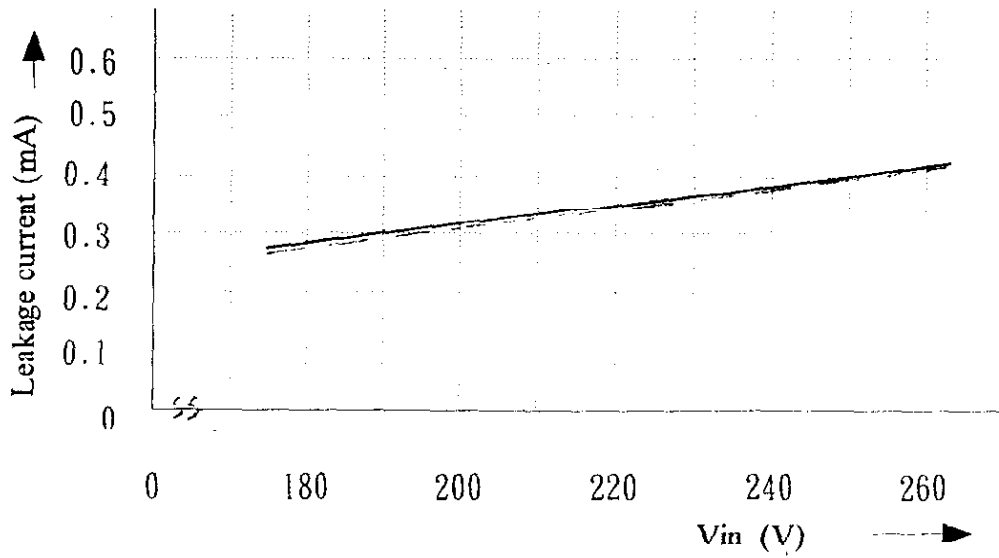
SWT40 - 522

Conditions $T_a = 25\text{ }^\circ\text{C}$
 I_{out} : MIN LOAD — — — —
 100% —————
 f : 50Hz

AC100V



AC200V

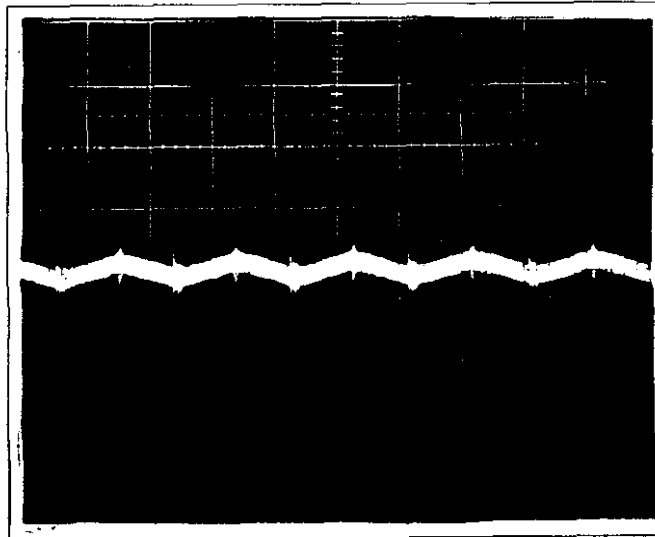


OUTPUT-RIPPLE, NOISE

SWT40 - 522
Conditions $V_{in} = 100VAC$
 $I_{out} = 100\%$
 $T_a = 25\text{ }^{\circ}C$

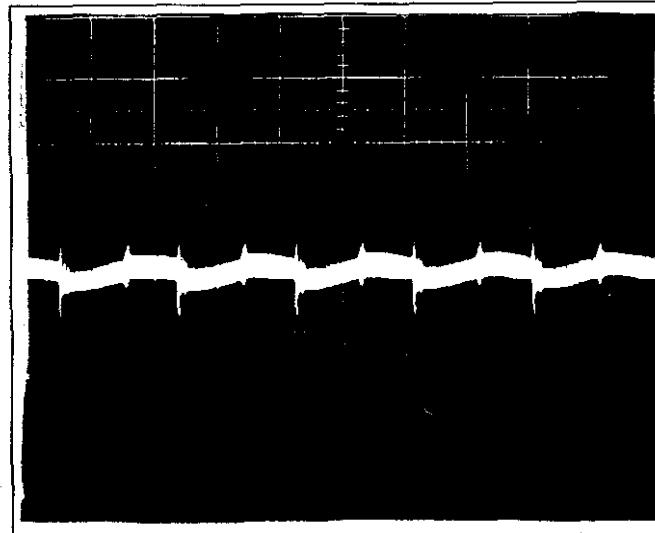
NORMAL MODE

CH1



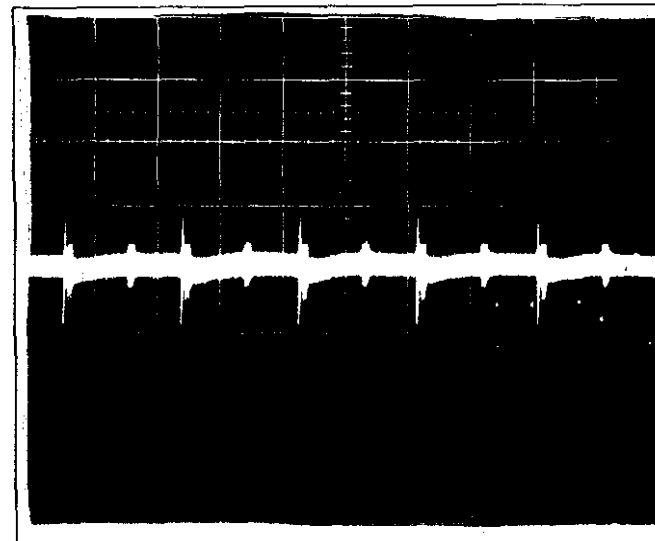
20mV/DIV 5us/DIV

CH2



20mV/DIV 5us/DIV

CH3



20mV/DIV 5us/DIV

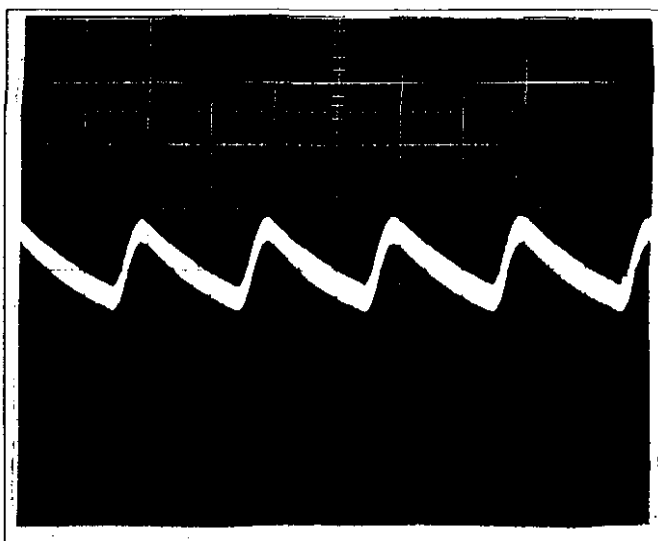
OUTPUT-RIPPLE, NOISE

SWT40 - 522

Conditions $V_{in} = 100VAC$
 $I_{out} = 100\%$
 $T_a = 25\text{ }^\circ C$

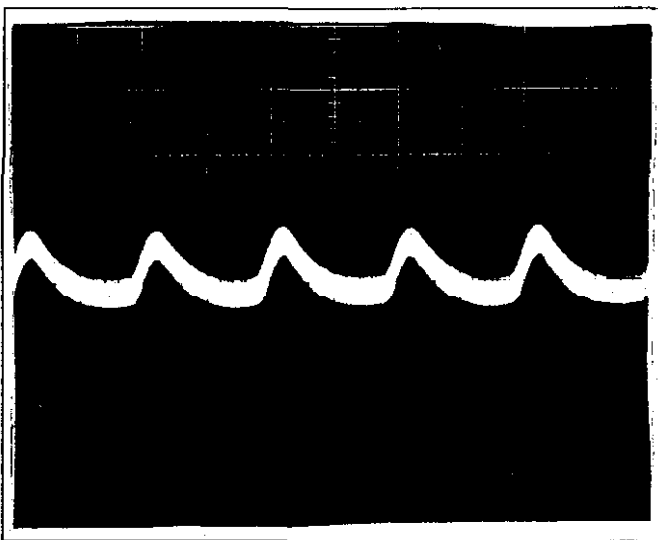
NORMAL MODE

CH1



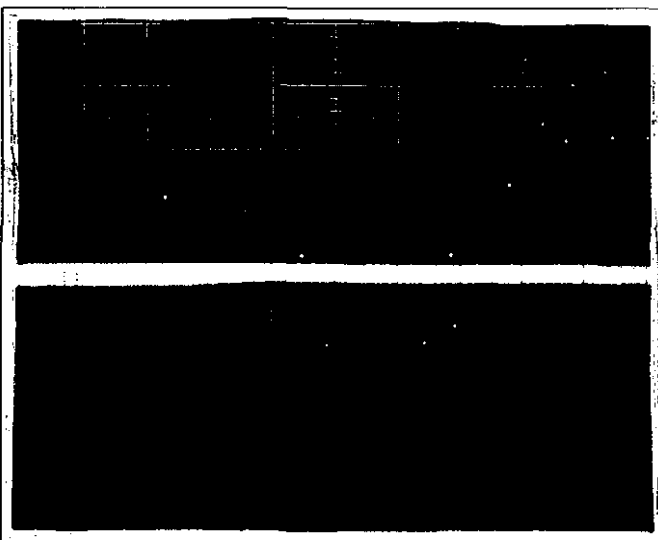
20mV/DIV 5ms/DIV

CH2



20mV/DIV 5ms/DIV

CH3



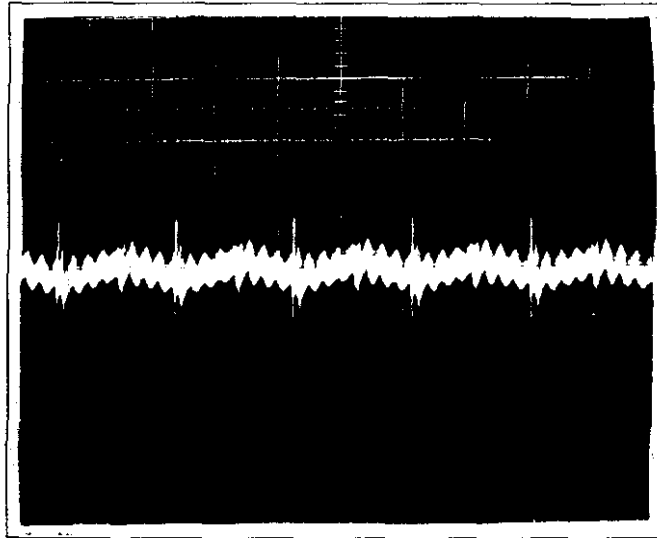
20mV/DIV 5ms/DIV

OUTPUT-RIPPLE, NOISE

SWT40 - 522
Conditions $V_{in} = 100VAC$
 $I_{out} = 100\%$
 $T_a = 25\text{ }^{\circ}C$

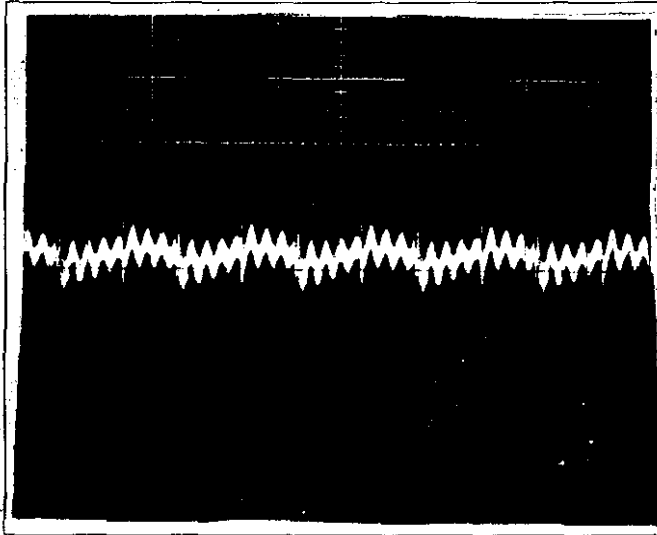
COMMON + NORMAL MODE

CH1



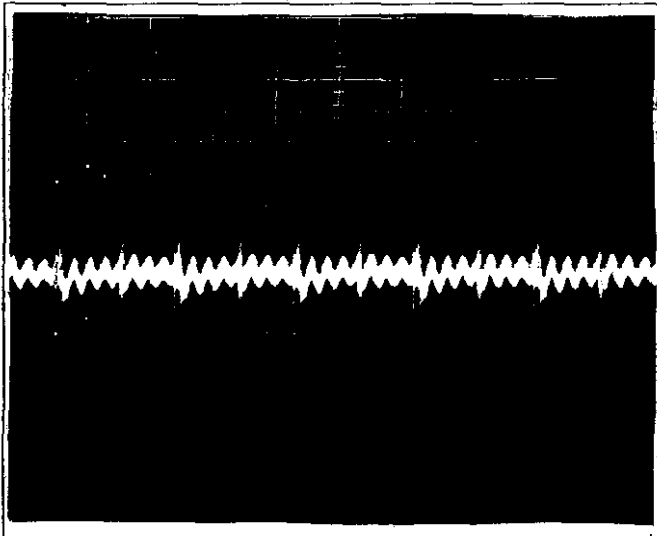
20mV/DIV 5us/DIV

CH2



20mV/DIV 5us/DIV

CH3



20mV/DIV 5us/DIV

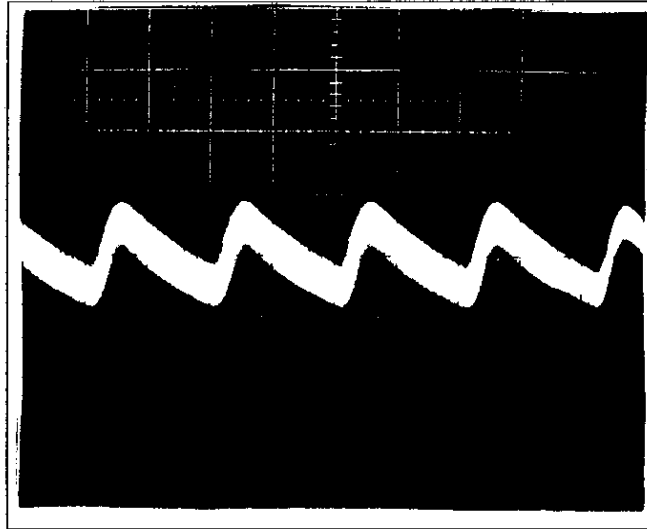
OUTPUT-RIPPLE, NOISE

SWT40 - 522

Conditions $V_{in} = 100VAC$
 $I_{out} = 100\%$
 $T_a = 25\text{ }^\circ C$

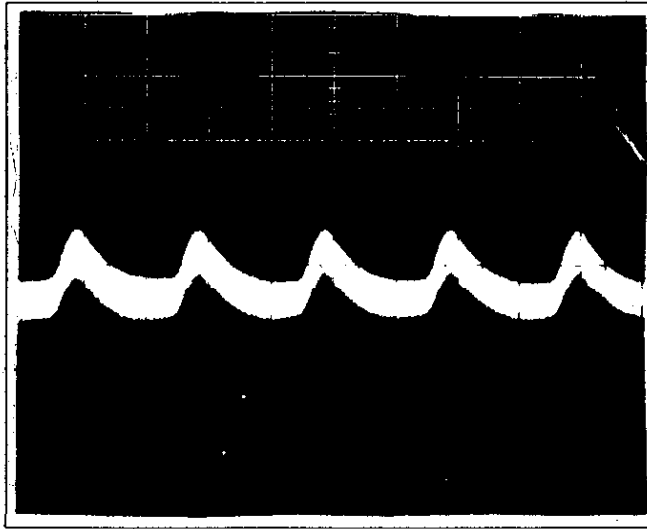
COMMON + NORMAL MODE

CH1



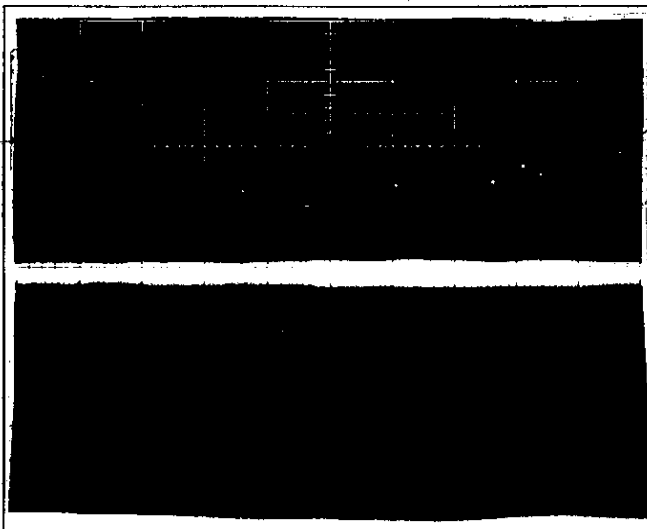
20mV/DIV 5ms/DIV

CH2



20mV/DIV 5ms/DIV

CH3



20mV/DIV 5ms/DIV