RT-2 TEST DATA

QUALITY

INDEX

DRAWING No.	1102—4—200	
DRAWN BY	CHECKED BY	APPROVED BY
甲野 59.1.7	布川 59.1.7	T.Arai 59.1.12

NEMIC·LAMBDA

RT－2 SPECIFICATIONS

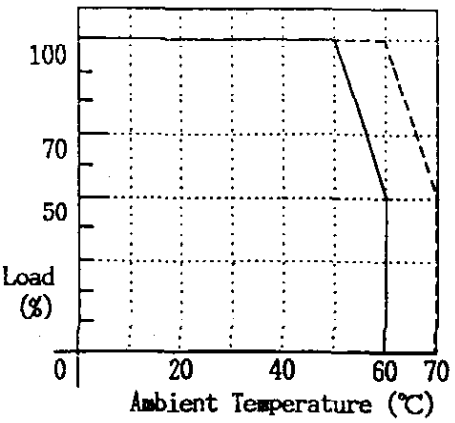
1102-4-150A

	Items		Model	RT－2－522			RT－2－5FF			RT－2－525		
				CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
1	Nominal Output Voltage		V	+ 5	+ 12	- 12	+ 5	+ 15	- 15	+ 5	+ 12	- 5
2	Maximum Output Current		A	2.0	0.3	0.2	2.0	0.3	0.2	2.0	0.3	0.2
3	Maximum Output Power/CH		W	10.0	3.6	2.4	10.0	4.5	3.0	10.0	3.6	1.0
4	Maximum Output Power		W	16.0						14.6		
5	Efficiency (Typ)	(*1)	%	62			62			62		
6	Input Voltage Range		—	85 ~ 132VAC (47 ~ 440Hz) or 110 ~ 175VDC								
7	Input Current (Typ)	(*1)	A	0.45			0.45			0.42		
8	In-rush Current (Typ)		A	25A at 100VAC (130VDC)								
9	Output Voltage Range	(*1)	%	CH1 - Fixed (±1% Max); CH2, CH3 - Fixed (±5% Max)								
10	Ripple & Noise - Maximum - (Typical)		mV	120 (30)	150 (50)	150 (80)	120 (30)	150 (50)	150 (80)	120 (30)	150 (50)	150 (80)
11	Maximum Line Regulation	(*2)	mV	20	48	48	20	60	60	20	48	20
12	Maximum Load Regulation	(*3)	mV	100	240	240	100	300	300	100	240	100
13	Over Current Protection	(*4)	A	2.2~	0.4~	0.3~	2.2~	0.4~	0.3~	2.2~	0.4~	0.3~
14	Over Voltage Protection		V	—								
15	Hold-Up Time (Typ)	(*5)	ms	16								
16	Remote Sensing		—	—								
17	Remote ON/OFF Control		—	—								
18	Parallel Operation		—	—								
19	Series Operation		—	Possible								
20	Operating Temperature	(*7)	℃	0 ~ +70								
21	Operating Humidity		%	30% ~ 90% RH								
22	Storage Temperature		℃	-30 ~ +85								
23	Storage Humidity		%	10% ~ 95% RH								
24	Cooling		—	Convection cooled								
25	Temperature Coefficient		%	CH1… 1% (Typ) ; CH2,CH3…Less than 2% at 0℃ ~ +70℃								
26	Withstand Voltage	(*6)	—	Input - Chassis, Input - Output…1.5kVAC 1min Output - Chassis… 500VAC 1min								
27	Isolation Resistance		Ω	More than 100MΩ at 25℃ and 70% RH Output-Chassis…500VDC								
28	Vibration		—	Less than 9.8m/s²								
29	Shock		—	Less than 98.1m/s²								
30	Weight		g	300								
31	Size (W·H·D)		mm	35 · 97 · 113.5 Refer to Outline Drawing								

NOTES

*1 : At 100VAC & Maximum Output Power.
*2 : From 85 ~ 132VAC or 110 ~ 175VDC, constant load.
*3 : From No load ~ Full load, constant input voltage.
*4 : CH1 Constant current limiting with automatic recovery.
CH2, CH3 Fold back limiting with automatic recovery.
(Refer to instruction manual for details)
*5 : At 85VAC, Nominal output voltage & Maximum output power.
*6 : Refer to instruction manual for testing procedure.
*7 : Ratings - Refer to Derating Curve on the right.
- Load(%) is percent of maximum output power or maximum output current, whichever is greater.
- Refer to instruction manual for further mounting details.

Derating Curve (Vertical mounting)



RT - 2

2-1. Regulation-line and load, temp. drift

1. Regulation line and load

522

Conditions Ta: 25°c

CH1

Iout \ Vin	AC 85 v	AC 100 v	AC 132 v	line regulation	
0 A	5.055 v	5.056 v	5.056 v	1 mv	0.02 %
1 A	5.049 v	5.049 v	5.049 v	0 mv	0 %
2 A	5.050 v	5.051 v	5.051 v	1 mv	0.02 %
load regulation	6 mv	7 mv	7 mv		
	0.12 %	0.14 %	0.14 %		

CH2

Iout \ Vin	AC 85 v	AC 100 v	AC 132 v	line regulation	
0 A	12.117 v	12.100 v	12.124 v	24 mv	0.20 %
0.15 A	12.134 v	12.131 v	12.127 v	7 mv	0.06 %
0.3 A	12.080 v	12.074 v	12.072 v	8 mv	0.07 %
load regulation	54 mv	57 mv	55 mv		
	0.45 %	0.48 %	0.46 %		

CH3

Iout \ Vin	AC 85 v	AC 100 v	AC 132 v	line regulation	
0 A	-12.165 v	-12.152 v	-12.172 v	20 mv	0.17 %
0.1 A	-12.156 v	-12.152 v	-12.150 v	6 mv	0.05 %
0.2 A	-12.122 v	-12.122 v	-12.120 v	2 mv	0.02 %
load regulation	43 mv	30 mv	52 mv		
	0.36 %	0.25 %	0.43 %		

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2. Temperature drift

522

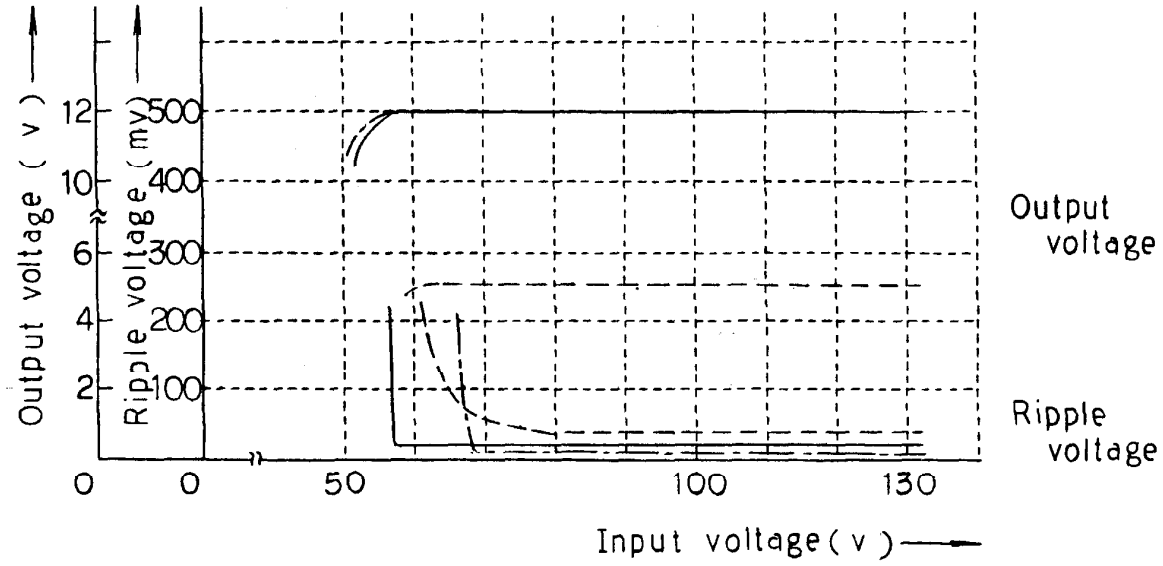
Conditions Vin : AC 100v
Iout : Rated

Vout \ Ta	0 °c	25 °c	50 °c	Temp. stability	
CH1	5.015v	5.051v	5.049v	36 mv	0.72 %
CH2	12.213v	12.074v	12.129v	139 mv	1.16 %
CH3	-12.029v	-12.122v	-12.155v	126 mv	1.05 %

2-2.Output voltage and ripple voltage v.s. input voltage

522

Conditions Iout : Rated
Ta : 25°c
Vout : CH1 -----
CH2 ——
CH3 ——

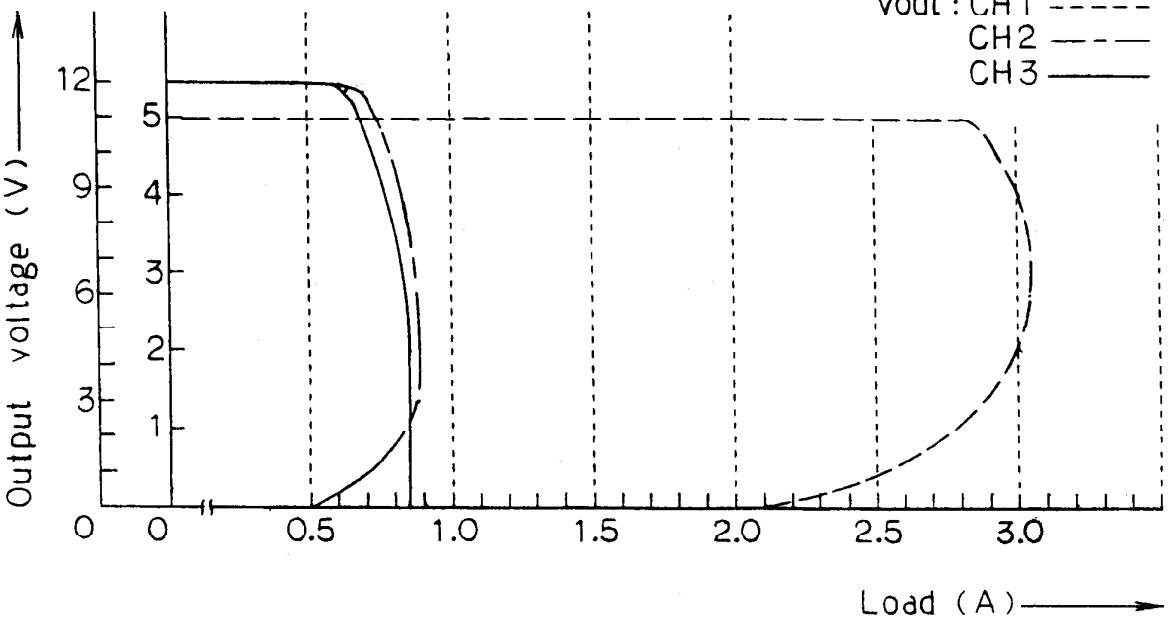


RT－2

2-3.O·C·P Characteristics

522

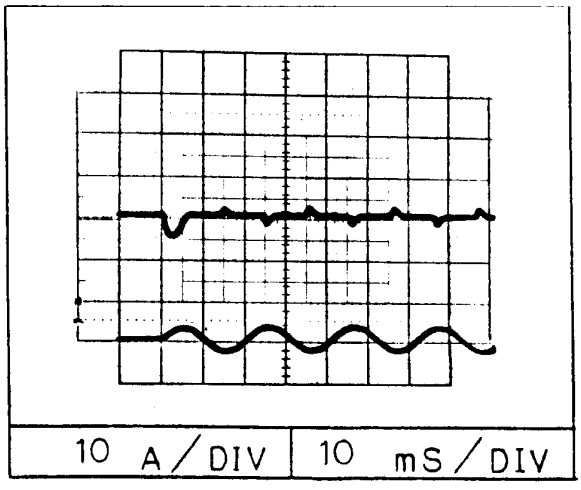
Conditions Vin : AC100v
Ta : 25°c
Vout : CH1 -----
CH2 — — —
CH3 ———



2-4.Inrush current waveform

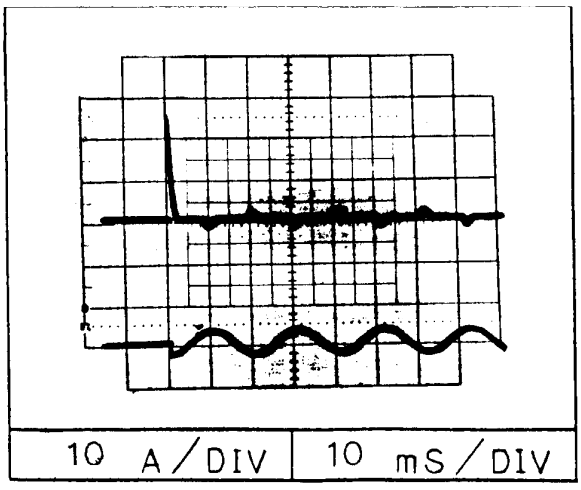
522

Conditions Vin : AC100v
Vout : Rated
Iout : Rated
Ta : 25°c



Switch in phase angle of input AC voltage

$\phi = 0°$



Switch in phase angle of input AC voltage

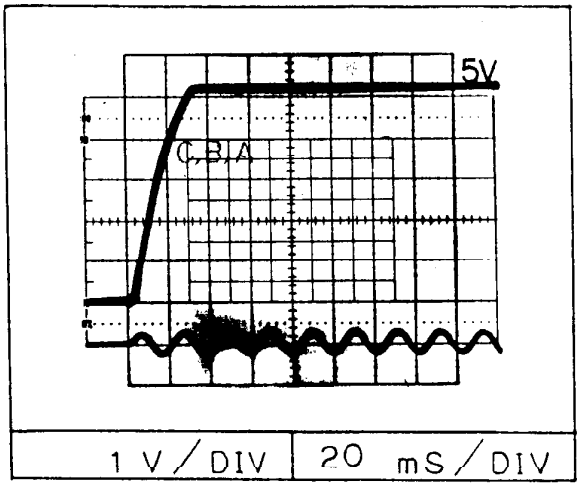
$\phi = 90°$

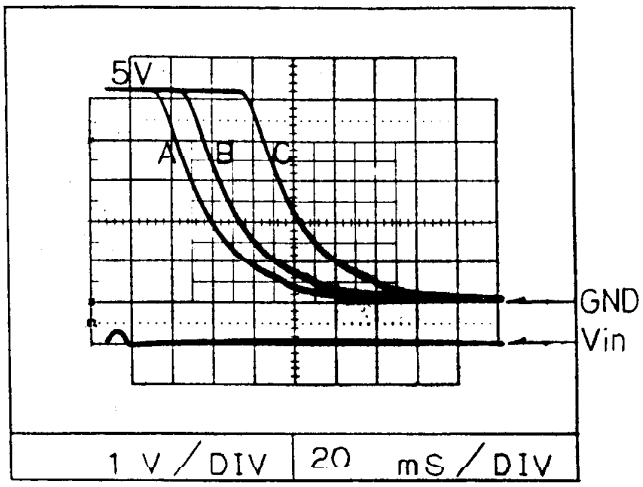
RT – 2

2-5. Output rise time , Output fall time

Conditions Vin : AC A 85v, B 100v, C 132v
Iout : Rated
Ta : 25°c

Vout : 5V





Conditions Vin : AC100v
Iout : Rated
Ta : 25°c

Vout : 5V, 12V -12V