



TEST DATA OF DAS504805

(48V INPUT)

Regulated DC Power Supply

Date : Feb. 8. 1998

Approved by : Y. Nagai
Design Manager

Prepared by : K. Shino
Design Engineer

コーセル株式会社
COSEL CO., LTD.

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(Final Page 11)

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Model

DAS504805

Item

Line Regulation 静的入力変動

Object

+5.0V10.00A

1. Graph

□ Load 50%

—△— Load 100%

[V]

Note: Slanted line shows the range of the rated input voltage.

(注)斜線は定格入力電圧範囲を示す。

Temperature

25℃

Testing Circuitry

Figure A

2. Values

Input Voltage [V]	Load 50% Output Volt. [V]	Load 100% Output Volt. [V]
33	5.135	5.135
36	5.135	5.135
42	5.136	5.136
48	5.136	5.136
54	5.136	5.136
60	5.136	5.136
66	5.136	5.136
72	5.136	5.136
75	5.136	5.136

— 2 —

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Model	DAS504805																																																	
Item	Load Regulation 静的負荷変動	Temperature	25°C																																															
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<div> <div>△</div> Input Volt. 36V <div>□</div> Input Volt. 48V <div>○</div> Input Volt. 72V </div>		<table> <tr> <th rowspan="2">Load Current [A]</th><th>Input Volt. 36[V]</th><th>Input Volt. 48[V]</th><th>Input Volt. 72[V]</th></tr> <tr> <th>Output Volt. [V]</th><th>Output Volt. [V]</th><th>Output Volt. [V]</th></tr> <tr><td>0.0</td><td>5.136</td><td>5.136</td><td>5.136</td></tr> <tr><td>2.0</td><td>5.136</td><td>5.136</td><td>5.136</td></tr> <tr><td>4.0</td><td>5.136</td><td>5.136</td><td>5.136</td></tr> <tr><td>6.0</td><td>5.136</td><td>5.136</td><td>5.136</td></tr> <tr><td>8.0</td><td>5.136</td><td>5.136</td><td>5.136</td></tr> <tr><td>10.0</td><td>5.136</td><td>5.136</td><td>5.136</td></tr> <tr><td>11.0</td><td>5.136</td><td>5.136</td><td>5.136</td></tr> <tr><td>—</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>—</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>—</td><td>—</td><td>—</td><td>—</td></tr> </table>		Load Current [A]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 72[V]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]	0.0	5.136	5.136	5.136	2.0	5.136	5.136	5.136	4.0	5.136	5.136	5.136	6.0	5.136	5.136	5.136	8.0	5.136	5.136	5.136	10.0	5.136	5.136	5.136	11.0	5.136	5.136	5.136	—	—	—	—	—	—	—	—	—	—	—	—
Load Current [A]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 72[V]																																															
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Model		DAS504805	Temperature 25℃ Testing Circuitry Figure A																																																								
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<div><div><div></div><div>[V]</div></div><div><div></div><div>8.0</div></div><div><div></div><div>6.0</div></div><div><div></div><div>4.0</div></div><div><div></div><div>2.0</div></div><div><div></div><div>0.0</div></div></div> <div><div></div><div>0</div></div> <div><div></div><div>5</div></div> <div><div></div><div>10</div></div> <div><div></div><div>15</div></div> <div>Output Voltage</div> <div>Load Current</div> <div>[A]</div> <div><div></div><div>Input Volt. 36 V</div></div> <div><div></div><div>Input Volt. 48 V</div></div> <div><div></div><div>Input Volt. 72 V</div></div> <div>Note: Slanted line shows the range of the rated load current.</div> <div>(注)斜線は定格負荷電流範囲を示す。</div>		<table><tr><th rowspan="2">Output Voltage [V]</th><th>Input Volt. 36[V]</th><th>Input Volt. 48[V]</th><th>Input Volt. 72[V]</th></tr><tr><th>Load Current [A]</th><th>Load Current [A]</th><th>Load Current [A]</th></tr><tr><td>5.00</td><td>12.11</td><td>12.75</td><td>13.24</td></tr><tr><td>4.75</td><td>12.26</td><td>12.88</td><td>13.34</td></tr><tr><td>4.50</td><td>12.37</td><td>12.97</td><td>13.42</td></tr><tr><td>4.00</td><td>12.64</td><td>13.06</td><td>13.45</td></tr><tr><td>3.50</td><td>12.43</td><td>12.68</td><td>13.14</td></tr><tr><td>3.00</td><td>11.91</td><td>12.23</td><td>12.23</td></tr><tr><td>2.50</td><td>11.34</td><td>11.75</td><td>11.87</td></tr><tr><td>2.00</td><td>10.83</td><td>11.31</td><td>11.25</td></tr><tr><td>1.50</td><td>10.38</td><td>10.83</td><td>10.68</td></tr><tr><td>1.00</td><td>10.10</td><td>10.04</td><td>10.07</td></tr><tr><td>0.50</td><td>9.82</td><td>9.78</td><td>9.96</td></tr><tr><td>0.00</td><td>9.66</td><td>9.91</td><td>10.18</td></tr></table>			Output Voltage [V]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 72[V]	Load Current [A]	Load Current [A]	Load Current [A]	5.00	12.11	12.75	13.24	4.75	12.26	12.88	13.34	4.50	12.37	12.97	13.42	4.00	12.64	13.06	13.45	3.50	12.43	12.68	13.14	3.00	11.91	12.23	12.23	2.50	11.34	11.75	11.87	2.00	10.83	11.31	11.25	1.50	10.38	10.83	10.68	1.00	10.10	10.04	10.07	0.50	9.82	9.78	9.96	0.00	9.66	9.91	10.18
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Load Current

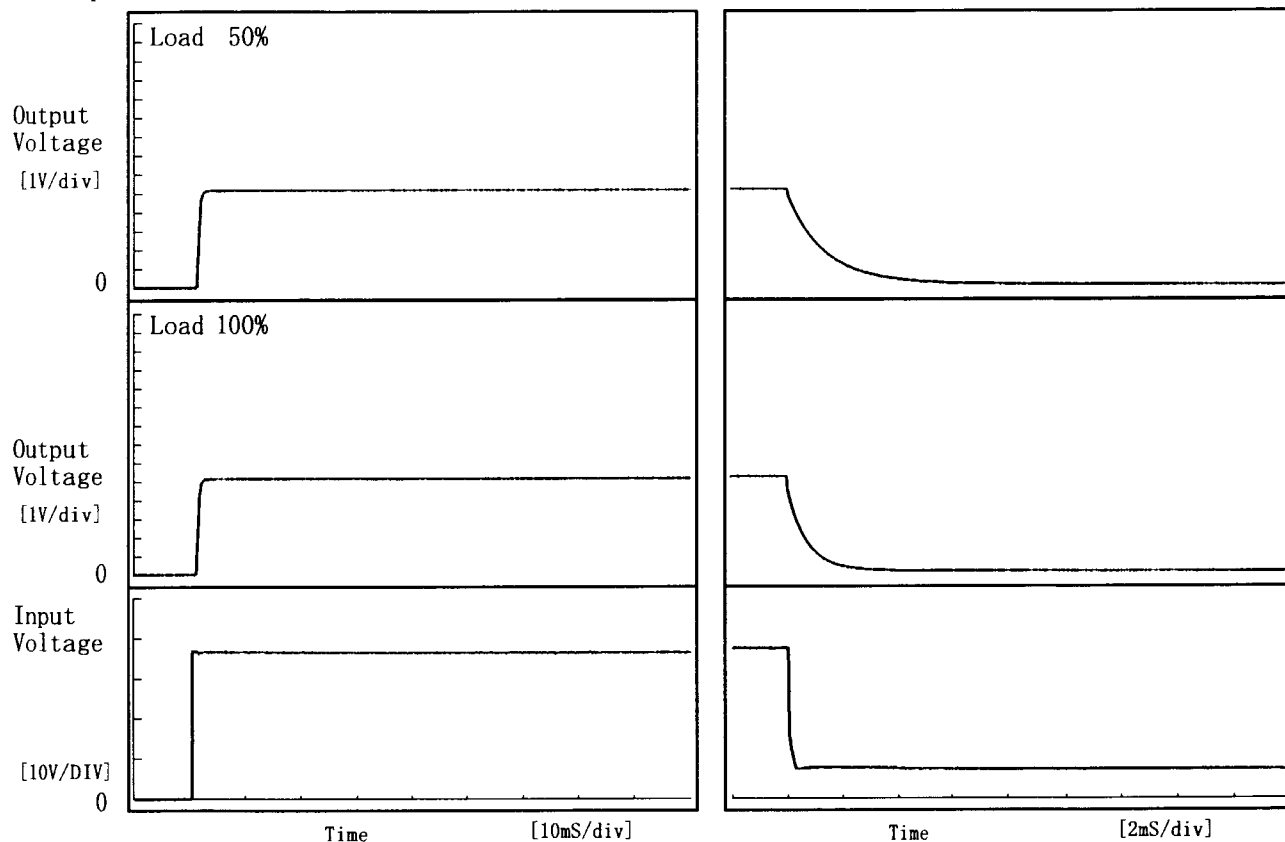
[A]

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Model	DAS504805	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+5.0V 10.00A		

1. Graph

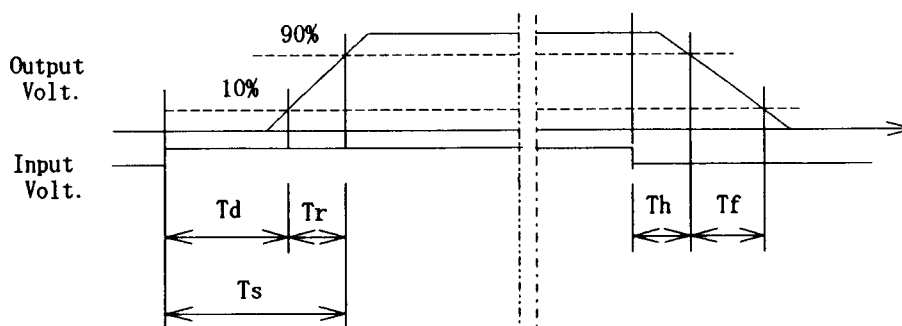
Input Volt. 36 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	0.80	0.70	1.50	0.14	3.49
100 %	0.80	0.75	1.55	0.05	1.81



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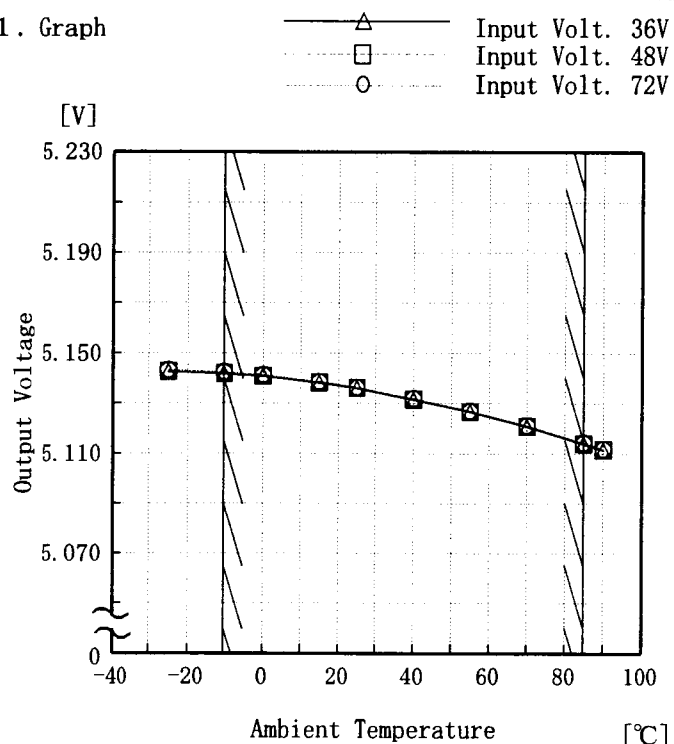
Model DAS504805

Item Ambient Temperature Drift
周囲温度変動

Object +5.0V 10.00A

Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated ambient temperature.

(注)斜線は定格周囲温度範囲を示す。

2. Values

Temperature	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 72[V]
Output Volt. [V]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]
-25	5.142	5.143	5.143
-10	5.142	5.142	5.142
0	5.141	5.141	5.141
15	5.138	5.138	5.139
25	5.136	5.136	5.136
40	5.131	5.132	5.132
55	5.127	5.127	5.127
70	5.121	5.121	5.121
85	5.114	5.114	5.114
90	5.111	5.112	5.112
—	—	—	—

COSEL

Model		DAS504805	
Item		Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧	
Object		+5.0V10.00A	
1. Graph		2. Values	

□

Load 50%

△

Load 100%

Input Voltage

[V]

80

60

40

20

0

-40

-20

0

20

40

60

80

100

Ambient Temperature

[°C]

Note: Slanted line shows the range of the rated ambient temperature.

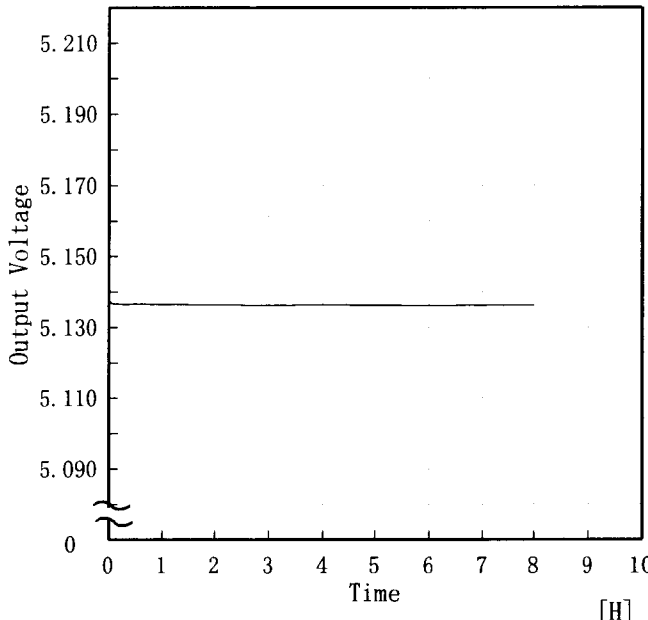
(注)斜線は定格周囲温度範囲を示す。

Ambient Temp.	Load 50%	Load 100%
	Input Volt.	Input Volt.
[°C]	[V]	[V]
-25	26.8	28.8
-10	27.3	28.8
0	27.3	28.8
15	27.3	29.3
25	27.3	29.3
40	27.8	29.8
55	28.3	30.3
70	28.3	30.8
85	28.8	31.2
90	28.8	31.2
—	—	—

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Model	DAS504805	Temperature 25 ℃ Testing Circuitry Figure A																							
Item	Time Lapse Drift 経時ドリフト																								
Object	+5.0V10.00A																								
1. Graph		2.Values																							
<div>[V]</div> <div></div> <div>Output Voltage</div> <div>Time [H]</div> <div>Input Volt. 48V</div> <div>Load 100%</div>		<table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>5.138</td></tr><tr><td>0.5</td><td>5.137</td></tr><tr><td>1.0</td><td>5.136</td></tr><tr><td>2.0</td><td>5.136</td></tr><tr><td>3.0</td><td>5.136</td></tr><tr><td>4.0</td><td>5.136</td></tr><tr><td>5.0</td><td>5.136</td></tr><tr><td>6.0</td><td>5.136</td></tr><tr><td>7.0</td><td>5.136</td></tr><tr><td>8.0</td><td>5.136</td></tr></table>		Time since start [H]	Output Voltage [V]	0.0	5.138	0.5	5.137	1.0	5.136	2.0	5.136	3.0	5.136	4.0	5.136	5.0	5.136	6.0	5.136	7.0	5.136	8.0	5.136
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Model		DAS504805	Testing Circuitry Figure A
Item		Output Voltage Accuracy 定電圧精度	
Object		+5.0V10.00A	

Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -10~85 °C

Input Voltage : 36~72 V

Load Current : 0.00~10.00 A

* Output Voltage Accuracy = $\pm (\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

* Output Voltage Accuracy (Ratio) = $\frac{\text{Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$

定電圧精度

周囲温度、入力電圧、負荷を下記仕様内で、任意に変動させたときの出力電圧の変動をいう。

周囲温度 : -10~85 °C

入力電圧 : 36~72 V

負荷電流 : 0.00~10.00 A

* 定電圧精度 (変動値) = $\pm (\text{出力電圧の最高値} - \text{出力電圧の最低値}) / 2$

* 定電圧精度 (変動率) = $\frac{\text{変動値}}{\text{定格出力電圧}} \times 100$

Item	Temperature [°C]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ratio) [%]
Maximum Voltage	-10	72	0.00	5.142	±15	±0.3
Minimum Voltage	85	36	0.00	5.113		

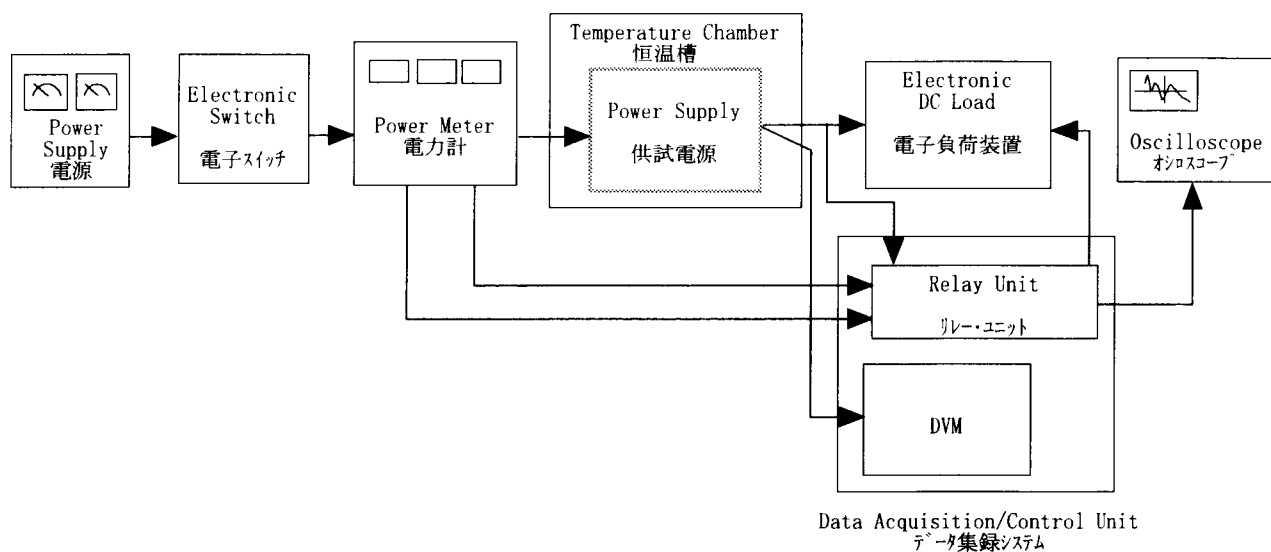


Figure A