

TEST DATA OF MGFS802405

Regulated DC Power Supply
April 17 ,2019

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Junichi Hatagishi Design Manager

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COSEL CO.,LTD.

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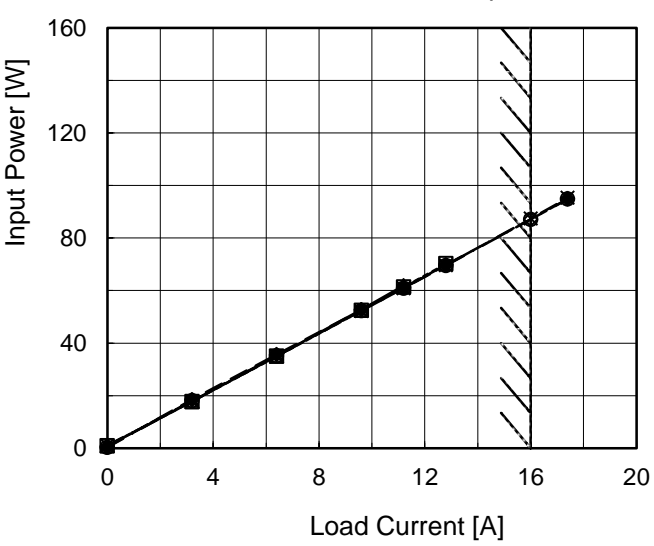
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Model		MGFS802405																																																																																
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<div><div><div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div>Load 100%</div></div><div><div>Load 50%</div></div><div><div>Load 0%</div></div></div><p>Note: Slanted line shows the range of the rated input voltage.</p></div>		<table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="3">Input Current [A]</th></tr><tr><th>Load 0%</th><th>Load 50%</th><th>Load 100%</th></tr><tr><td>0.0</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>7.6</td><td>0.001</td><td>0.001</td><td>- ※</td></tr><tr><td>7.8</td><td>0.001</td><td>0.001</td><td>- ※</td></tr><tr><td>8.0</td><td>0.001</td><td>0.001</td><td>- ※</td></tr><tr><td>8.2</td><td>0.001</td><td>0.001</td><td>- ※</td></tr><tr><td>8.4</td><td>0.100</td><td>5.257</td><td>- ※</td></tr><tr><td>8.6</td><td>0.098</td><td>5.101</td><td>- ※</td></tr><tr><td>8.8</td><td>0.097</td><td>5.027</td><td>- ※</td></tr><tr><td>9.0</td><td>0.095</td><td>4.913</td><td>- ※</td></tr><tr><td>12.0</td><td>0.076</td><td>3.620</td><td>- ※</td></tr><tr><td>18.0</td><td>0.058</td><td>2.416</td><td>4.805</td></tr><tr><td>24.0</td><td>0.013</td><td>1.809</td><td>3.551</td></tr><tr><td>36.0</td><td>0.013</td><td>1.221</td><td>2.371</td></tr><tr><td>40.0</td><td>0.013</td><td>1.106</td><td>2.137</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><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table> <p>※During this area, overcurrent protection activates and power supply operates in hiccup mode.</p>		Input Voltage [V]	Input Current [A]			Load 0%	Load 50%	Load 100%	0.0	0.000	0.000	0.000	7.6	0.001	0.001	- ※	7.8	0.001	0.001	- ※	8.0	0.001	0.001	- ※	8.2	0.001	0.001	- ※	8.4	0.100	5.257	- ※	8.6	0.098	5.101	- ※	8.8	0.097	5.027	- ※	9.0	0.095	4.913	- ※	12.0	0.076	3.620	- ※	18.0	0.058	2.416	4.805	24.0	0.013	1.809	3.551	36.0	0.013	1.221	2.371	40.0	0.013	1.106	2.137	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
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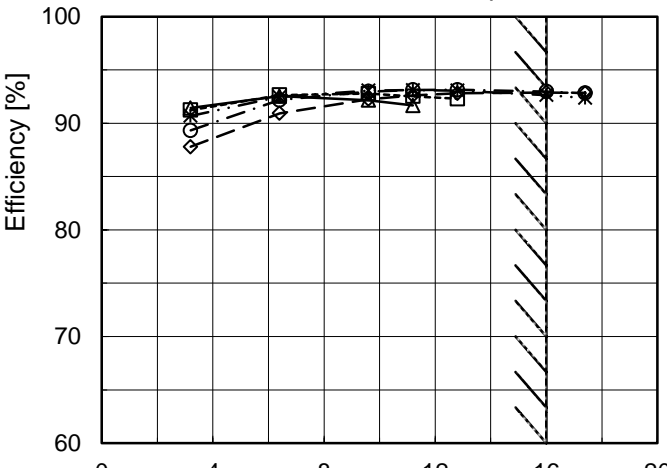
Model		MGFS802405		Temperature 25°C	
Item		Input Current (by Load Current)		Testing Circuitry Figure A	
Object					
1.Graph		<div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>---□---</div><div>Input Volt.</div><div>12V</div></div><div><div>-·-·*·-·-</div><div>Input Volt.</div><div>18V</div></div><div><div>-·-○-·-</div><div>Input Volt.</div><div>24V</div></div><div><div>---◇---</div><div>Input Volt.</div><div>36V</div></div></div> <div><div><div>Input Current [A]</div><div>16.0</div><div>12.8</div><div>9.6</div><div>6.4</div><div>3.2</div><div>0.0</div></div><div><div>0</div><div>4</div><div>8</div><div>12</div><div>16</div><div>20</div></div><div><div>Load Current [A]</div></div></div>		2.Values	

Note: Slanted line shows the range of the rated load current.

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2.Values		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Input Power [W]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.0</td><td>0.86</td><td>0.91</td><td>1.04</td><td>0.30</td><td>0.45</td></tr><tr><td>3.2</td><td>17.72</td><td>17.75</td><td>17.87</td><td>18.13</td><td>18.45</td></tr><tr><td>6.4</td><td>35.02</td><td>34.98</td><td>35.04</td><td>35.15</td><td>35.63</td></tr><tr><td>9.6</td><td>52.73</td><td>52.39</td><td>52.22</td><td>52.27</td><td>52.66</td></tr><tr><td>11.2</td><td>61.86</td><td>61.29</td><td>60.89</td><td>60.89</td><td>61.19</td></tr><tr><td>12.8</td><td>- ※1</td><td>70.19</td><td>69.62</td><td>69.55</td><td>69.76</td></tr><tr><td>16.0</td><td>- ※1</td><td>- ※2</td><td>87.40</td><td>87.07</td><td>87.11</td></tr><tr><td>17.4</td><td>- ※1</td><td>- ※2</td><td>95.32</td><td>94.84</td><td>94.79</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> <div><div>※1 Maximum output current at minimum input Voltage is 70% of rated load current.</div><div>※2 Maximum output current at 12V input Voltage is 80% of rated load current.</div><div>Refer to instruction manuals for details of input derating.</div></div>		Load Current [A]	Input Power [W]					Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	0.0	0.86	0.91	1.04	0.30	0.45	3.2	17.72	17.75	17.87	18.13	18.45	6.4	35.02	34.98	35.04	35.15	35.63	9.6	52.73	52.39	52.22	52.27	52.66	11.2	61.86	61.29	60.89	60.89	61.19	12.8	- ※1	70.19	69.62	69.55	69.76	16.0	- ※1	- ※2	87.40	87.07	87.11	17.4	- ※1	- ※2	95.32	94.84	94.79	--	-	-	-	-	-	--	-	-	-	-	-	--	-	-	-	-	-
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Object				
1.Graph			2.Values	
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Model		MGFS802405																																																																														
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1.Graph		<div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>---□---</div><div>Input Volt.</div><div>12V</div></div><div><div>-...*...</div><div>Input Volt.</div><div>18V</div></div><div><div>-...○-</div><div>Input Volt.</div><div>24V</div></div><div><div>---◇---</div><div>Input Volt.</div><div>36V</div></div></div>  <p>Note: Slanted line shows the range of the rated load current.</p>																																																																														
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Load Current [A]	Efficiency [%]																																																																															
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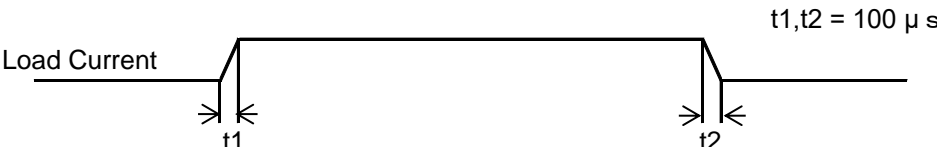
Model		MGFS802405	
Item		Line Regulation	
Object		+5V16A	
1.Graph		2.Values	

Model		MGFS802405																																																																														
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1.Graph		<div><div><div><div><div></div><div>△</div><div></div></div><div>Input Volt. 9V</div></div><div><div><div></div><div>□</div><div></div></div><div>Input Volt. 12V</div></div><div><div><div></div><div>*</div><div></div></div><div>Input Volt. 18V</div></div><div><div><div></div><div>○</div><div></div></div><div>Input Volt. 24V</div></div><div><div><div></div><div>◇</div><div></div></div><div>Input Volt. 36V</div></div></div><div>Note: Slanted line shows the range of the rated load current.</div></div>																																																																														
2.Values		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Output Voltage [V]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.0</td><td>5.069</td><td>5.068</td><td>5.068</td><td>5.070</td><td>5.070</td></tr><tr><td>3.2</td><td>5.068</td><td>5.067</td><td>5.067</td><td>5.067</td><td>5.066</td></tr><tr><td>6.4</td><td>5.066</td><td>5.066</td><td>5.065</td><td>5.065</td><td>5.064</td></tr><tr><td>9.6</td><td>5.065</td><td>5.065</td><td>5.064</td><td>5.064</td><td>5.062</td></tr><tr><td>11.2</td><td>5.065</td><td>5.064</td><td>5.064</td><td>5.063</td><td>5.062</td></tr><tr><td>12.8</td><td>- ※1</td><td>5.064</td><td>5.063</td><td>5.063</td><td>5.061</td></tr><tr><td>16.0</td><td>- ※1</td><td>- ※2</td><td>5.063</td><td>5.062</td><td>5.060</td></tr><tr><td>17.4</td><td>- ※1</td><td>- ※2</td><td>5.062</td><td>5.062</td><td>5.059</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> <div>※1 Maximum output current at minimum input Voltage is 70% of rated load current. ※2 Maximum output current at 12V input Voltage is 80% of rated load current. Refer to instruction manuals for details of input derating.</div>		Load Current [A]	Output Voltage [V]					Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	0.0	5.069	5.068	5.068	5.070	5.070	3.2	5.068	5.067	5.067	5.067	5.066	6.4	5.066	5.066	5.065	5.065	5.064	9.6	5.065	5.065	5.064	5.064	5.062	11.2	5.065	5.064	5.064	5.063	5.062	12.8	- ※1	5.064	5.063	5.063	5.061	16.0	- ※1	- ※2	5.063	5.062	5.060	17.4	- ※1	- ※2	5.062	5.062	5.059	--	-	-	-	-	-	--	-	-	-	-	-	--	-	-	-	-	-
Load Current [A]	Output Voltage [V]																																																																															
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6.4	5.066	5.066	5.065	5.065	5.064																																																																											
9.6	5.065	5.065	5.064	5.064	5.062																																																																											
11.2	5.065	5.064	5.064	5.063	5.062																																																																											
12.8	- ※1	5.064	5.063	5.063	5.061																																																																											
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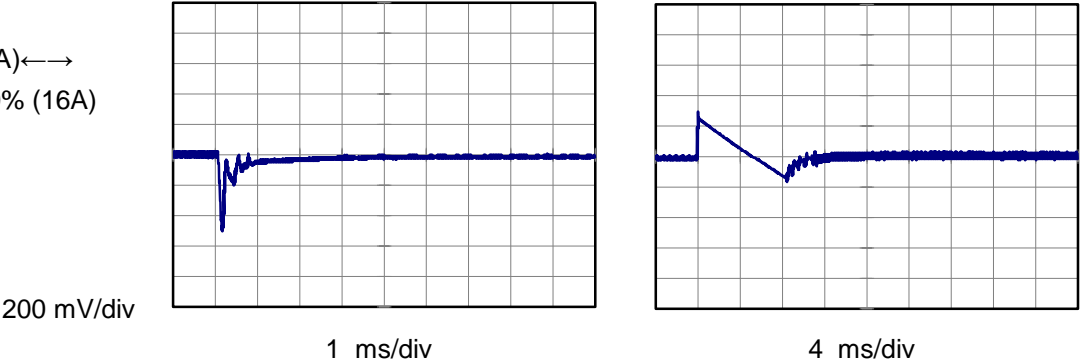


Model	MGFS802405		
Item	Dynamic Load Response	Temperature	25°C
Object	+5V16A	Testing Circuitry	Figure A

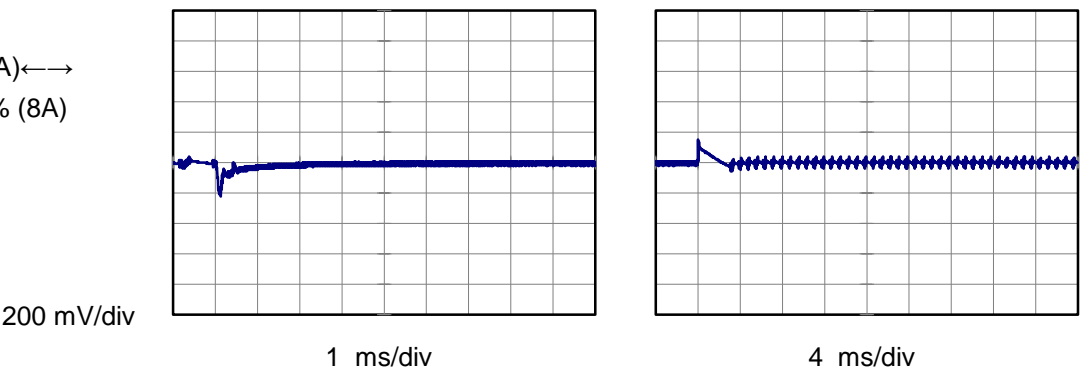
Input Volt. 24 V
Cycle 100 ms



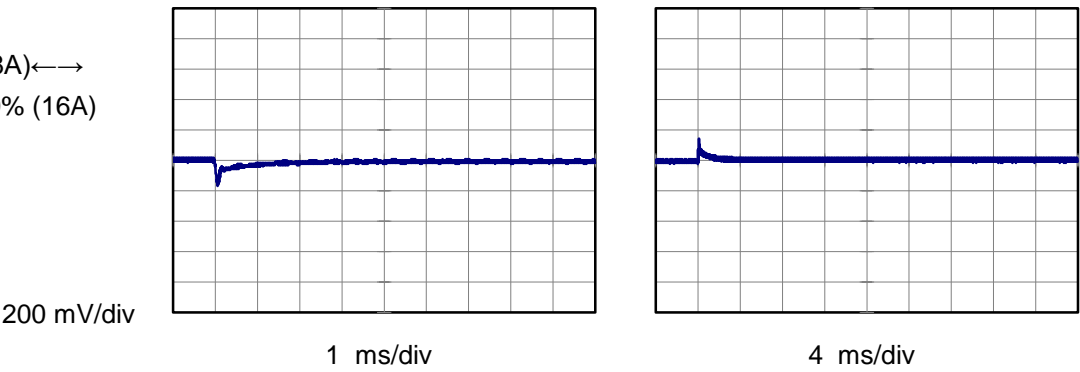
Min.Load (0A)←→
Load 100% (16A)



Min.Load (0A)←→
Load 50% (8A)




Load 50% (8A)←→
Load 100% (16A)

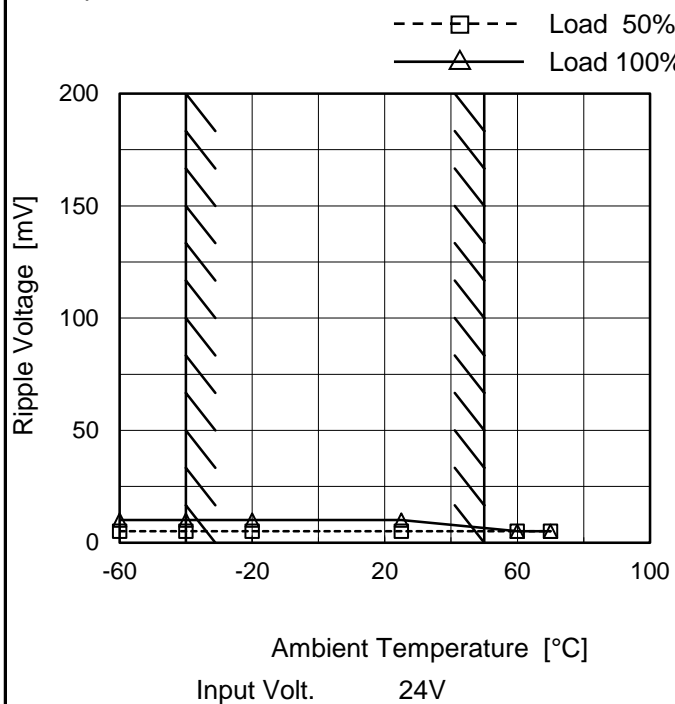


Model		MGFS802405		Temperature 25°C																																							
Item		Ripple Voltage (by Load Current)		Testing Circuitry Figure B																																							
Object		+5V16A																																									
1.Graph				2.Values																																							
<div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>- - ○ - -</div><div>Input Volt.</div><div>36V</div></div></div> <p>Measured by 100 MHz Oscilloscope. Ripple Voltage is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.</p>				<table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple Voltage [mV]</th></tr><tr><th>Input Volt. 9 [V]</th><th>Input Volt. 36 [V]</th></tr><tr><td>0.0</td><td>15</td><td>40</td></tr><tr><td>3.2</td><td>5</td><td>5</td></tr><tr><td>6.4</td><td>5</td><td>5</td></tr><tr><td>9.6</td><td>15</td><td>5</td></tr><tr><td>11.2</td><td>30</td><td>5</td></tr><tr><td>12.8</td><td>- ※</td><td>5</td></tr><tr><td>16.0</td><td>- ※</td><td>5</td></tr><tr><td>17.6</td><td>- ※</td><td>5</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> <p>※ Maximum output current at minimum input Voltage is 70% of rated load current. Refer to instruction manuals for details of input derating.</p>		Load Current [A]	Ripple Voltage [mV]		Input Volt. 9 [V]	Input Volt. 36 [V]	0.0	15	40	3.2	5	5	6.4	5	5	9.6	15	5	11.2	30	5	12.8	- ※	5	16.0	- ※	5	17.6	- ※	5	--	-	-	--	-	-	--	-	-
Load Current [A]	Ripple Voltage [mV]																																										
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<p>Ripple [mVp-p]</p> <p>Fig.Complex Ripple Wave Form</p>																																											

Model		MGFS802405																																							
Item		Ripple-Noise																																							
Object		+5V16A																																							
1.Graph		2.Values																																							
<div><div><div>△</div><div>Input Volt.</div><div>9V</div></div><div><div>○</div><div>Input Volt.</div><div>36V</div></div></div> <p>Measured by 100 MHz Oscilloscope. Ripple-Noise is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.</p> <div><p>Ripple Noise[mVp-p]</p></div> <p>Fig.Complex Ripple Noise Wave Form</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 9 [V]</th><th>Input Volt. 36 [V]</th></tr><tr><td>0.0</td><td>15</td><td>40</td></tr><tr><td>3.2</td><td>10</td><td>10</td></tr><tr><td>6.4</td><td>5</td><td>10</td></tr><tr><td>9.6</td><td>20</td><td>10</td></tr><tr><td>11.2</td><td>35</td><td>10</td></tr><tr><td>12.8</td><td>- ※</td><td>10</td></tr><tr><td>16.0</td><td>- ※</td><td>15</td></tr><tr><td>17.6</td><td>- ※</td><td>20</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> <p>※ Maximum output current at minimum input Voltage is 70% of rated load current. Refer to instruction manuals for details of input derating.</p>		Load Current [A]	Ripple-Noise [mV]		Input Volt. 9 [V]	Input Volt. 36 [V]	0.0	15	40	3.2	10	10	6.4	5	10	9.6	20	10	11.2	35	10	12.8	- ※	10	16.0	- ※	15	17.6	- ※	20	--	-	-	--	-	-	--	-	-
Load Current [A]	Ripple-Noise [mV]																																								
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17.6	- ※	20																																							
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Model	MGFS802405
Item	Ripple Voltage (by Ambient Temp.)
Object	+5V16A

1.Graph



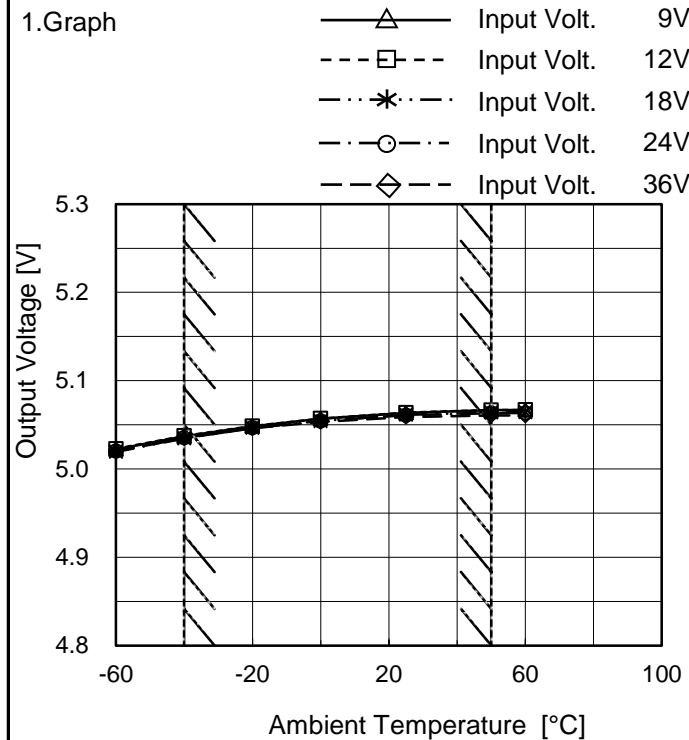
Measured by 100 MHz Oscilloscope.

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

2.Values

Ambient Temperature [°C]	Ripple Voltage [mV]	
	Load 50%	Load 100%
-60	5	10
-40	5	10
-20	5	10
25	5	10
60	5	5
70	5	5
--	-	-
--	-	-
--	-	-
--	-	-
--	-	-

Model	MGFS802405
Item	Ambient Temperature Drift
Object	+5V16A



Testing Circuitry Figure A

2.Values

Ambient Temperature [°C]	Output Voltage [V]				
	Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]
-60	5.022	5.023	5.019	5.020	5.020
-40	5.037	5.037	5.035	5.035	5.035
-20	5.048	5.049	5.047	5.047	5.046
0	5.057	5.057	5.054	5.054	5.053
25	5.064	5.064	5.061	5.061	5.059
50	5.067	5.067	5.064	5.063	5.061
60	5.067	5.067	5.064	5.063	5.060
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

Note: In case of input Volt.9V, Load 70%.
 12V, Load 80%.
 Other case Load 100%.



Model		MGFS802405	Testing Circuitry Figure A
Item		Output Voltage Accuracy	
Object		+5V16A	

1. 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 : -40 - 50°C

Input Voltage : 9 - 36V

Load Current : 0 - 16A

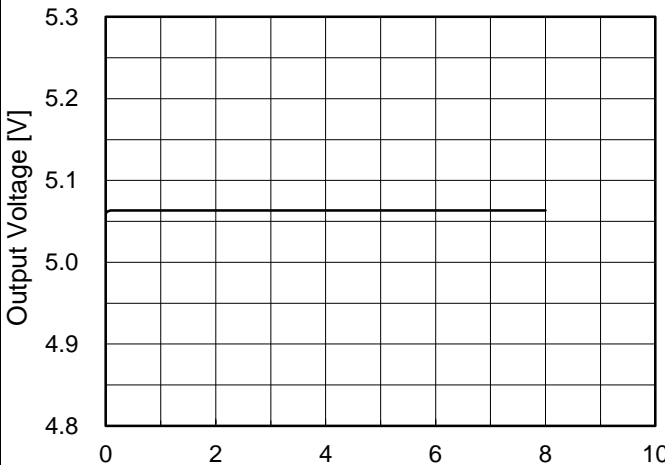
* Output Voltage Accuracy = $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

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

2. Values

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ratio [%]
Maximum Voltage	50	24	0	5.071	±18	±0.4
Minimum Voltage	-40	18	16.0	5.035		



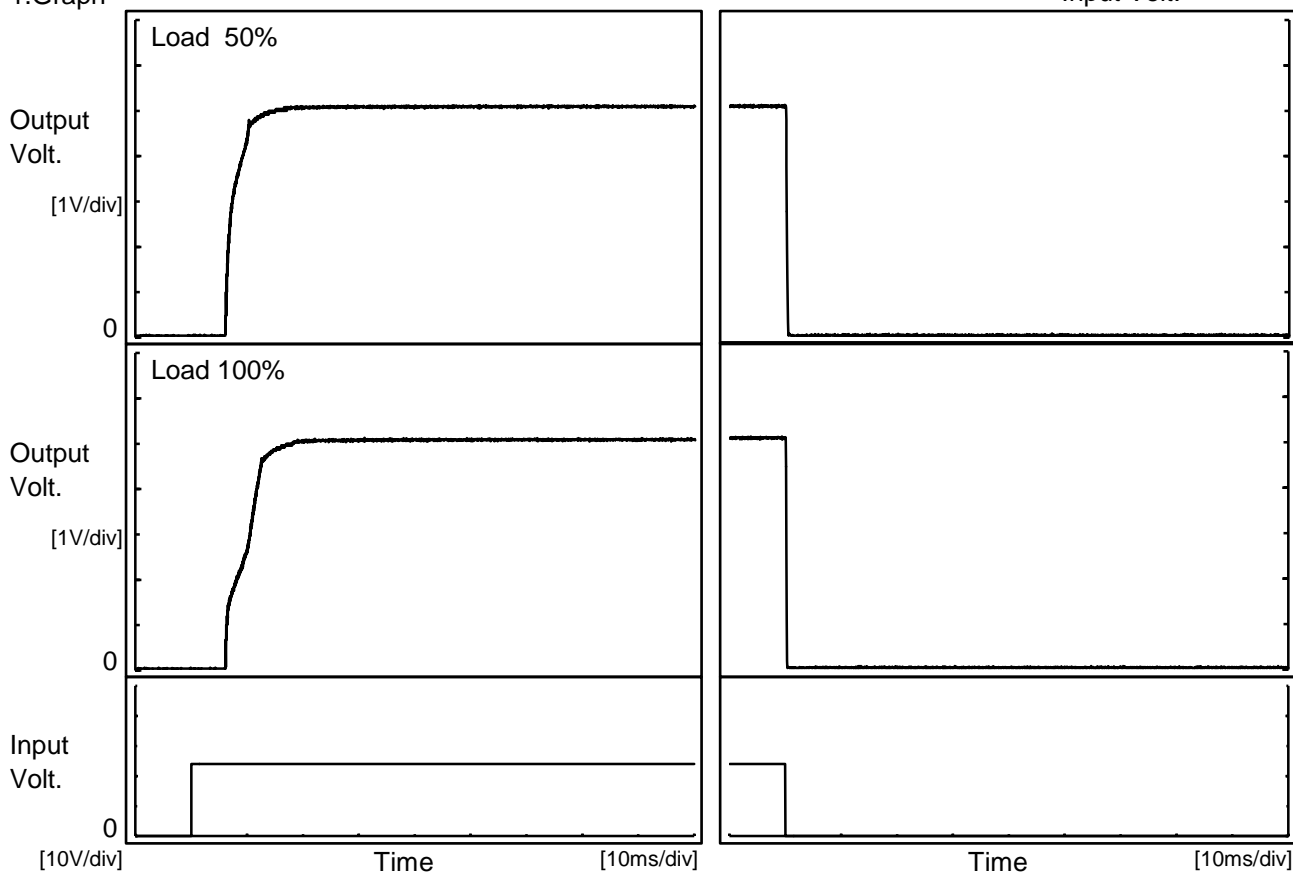
Model	MGFS802405																								
Item	Time Lapse Drift	Temperature	25°C																						
Object	+5V16A	Testing Circuitry	Figure A																						
1.Graph		2.Values																							
<div><p>Output Voltage [V]</p><p>Time [H]</p><p>Input Volt. 24V</p><p>Load 100%</p></div>		<table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>5.059</td></tr><tr><td>0.5</td><td>5.063</td></tr><tr><td>1.0</td><td>5.063</td></tr><tr><td>2.0</td><td>5.063</td></tr><tr><td>3.0</td><td>5.063</td></tr><tr><td>4.0</td><td>5.063</td></tr><tr><td>5.0</td><td>5.063</td></tr><tr><td>6.0</td><td>5.063</td></tr><tr><td>7.0</td><td>5.063</td></tr><tr><td>8.0</td><td>5.063</td></tr></table>		Time since start [H]	Output Voltage [V]	0.0	5.059	0.5	5.063	1.0	5.063	2.0	5.063	3.0	5.063	4.0	5.063	5.0	5.063	6.0	5.063	7.0	5.063	8.0	5.063
Time since start [H]	Output Voltage [V]																								
0.0	5.059																								
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5.0	5.063																								
6.0	5.063																								
7.0	5.063																								
8.0	5.063																								



Model	MGFS802405	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+5V16A		

1.Graph

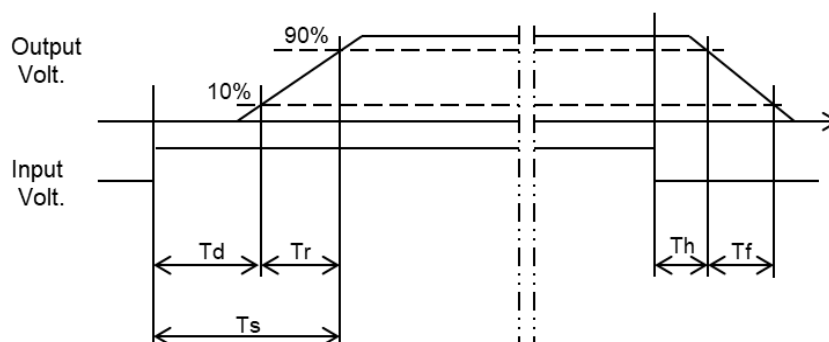
Input Volt. 24 V




2.Values

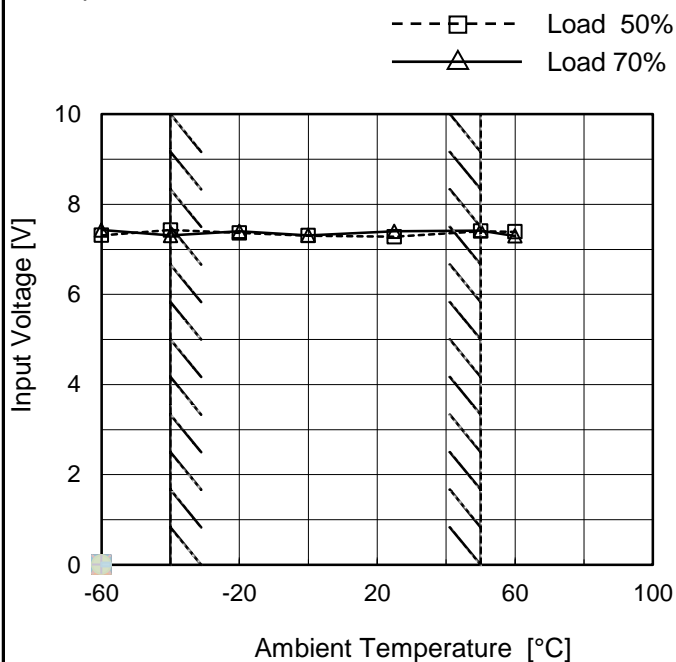
[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	6.2	3.1	9.3	0.2	0.3
100 %	6.2	4.8	11.0	0.1	0.2



	
Model	MGFS802405
Item	Minimum Input Voltage for Regulated Output Voltage
Object	+5V16A

1.Graph



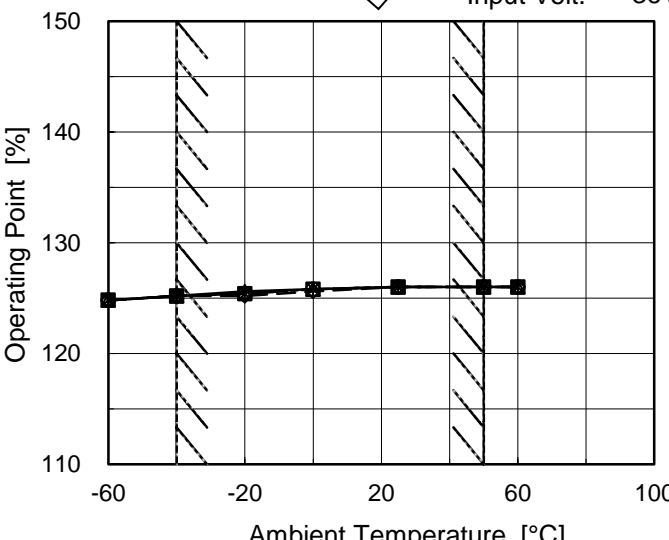
Note: Slanted line shows the range of the rated ambient temperature.

Testing Circuitry Figure A

2.Values

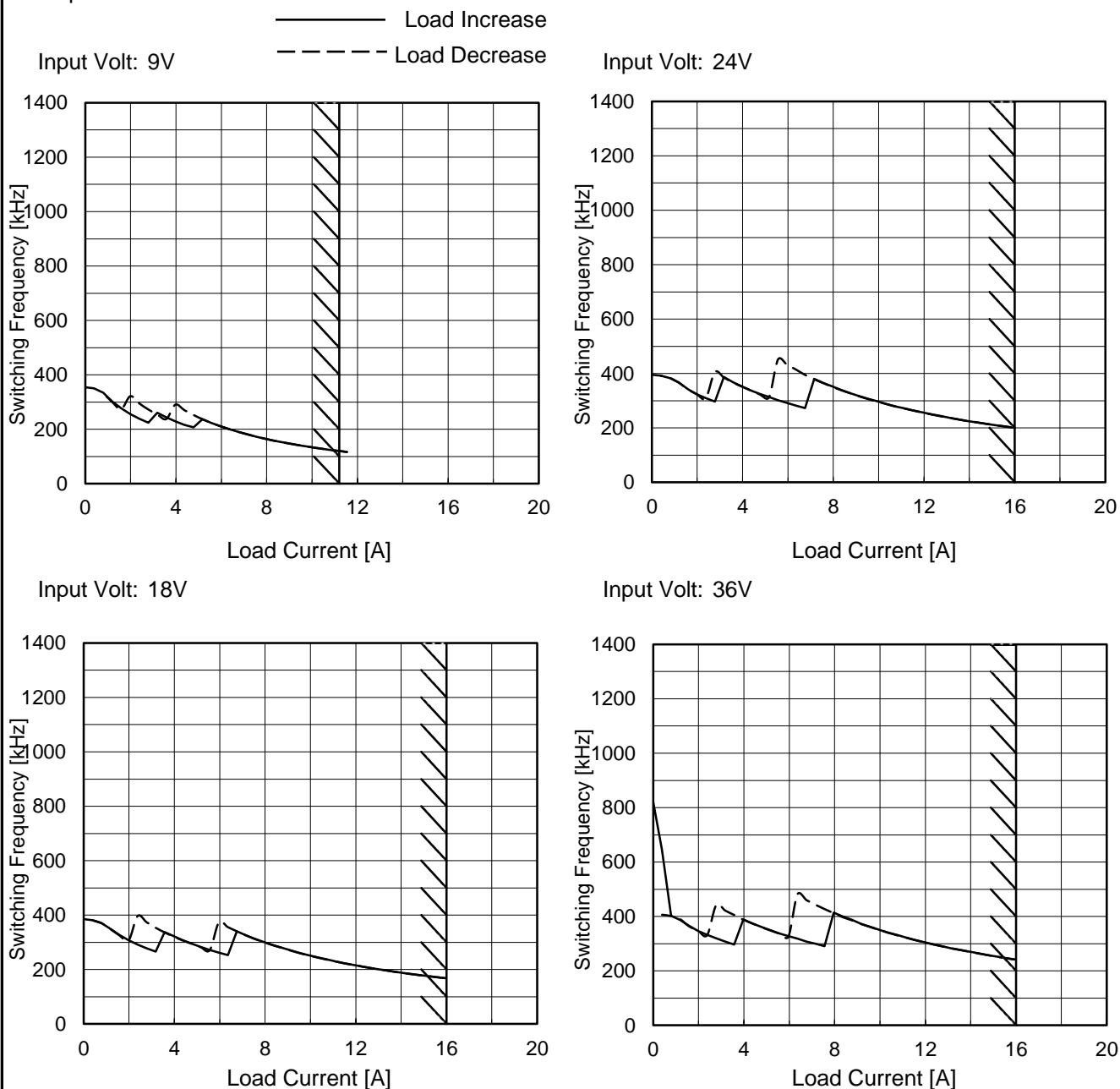
Ambient Temperature [°C]	Input Voltage [V]	
	Load 50%	Load 70%
-60	7.4	7.5
-40	7.5	7.4
-20	7.4	7.4
0	7.3	7.4
25	7.3	7.4
50	7.4	7.5
60	7.4	7.3
--	-	-
--	-	-
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Model		MGFS802405		Temperature 25°C																																																																																				
Item		Overcurrent Protection		Testing Circuitry Figure A																																																																																				
Object		+5V16A																																																																																						
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		<table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="5">Load Current [A]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>5.00</td><td>13.132</td><td>15.875</td><td>19.041</td><td>19.098</td><td>19.089</td></tr><tr><td>4.75</td><td>- ※1</td><td>- ※2</td><td>-</td><td>-</td><td>-</td></tr><tr><td>4.50</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>4.00</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>3.50</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>3.00</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2.50</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2.00</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>1.50</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>1.00</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.50</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.00</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table>		Output Voltage [V]	Load Current [A]					Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	5.00	13.132	15.875	19.041	19.098	19.089	4.75	- ※1	- ※2	-	-	-	4.50	-	-	-	-	-	4.00	-	-	-	-	-	3.50	-	-	-	-	-	3.00	-	-	-	-	-	2.50	-	-	-	-	-	2.00	-	-	-	-	-	1.50	-	-	-	-	-	1.00	-	-	-	-	-	0.50	-	-	-	-	-	0.00	-	-	-	-	-		
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Note: Slanted line shows the range of the rated load current.		Intermittent operation occurs when overcurrent protection is activated.		※1 Maximum output current at minimum input Voltage is 70% of rated load current.																																																																																				
				※2 Maximum output current at 12V input Voltage is 80% of rated load current.																																																																																				
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Model		MGFS802405																																																																														
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2.Values		<table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="5">Operating Point [%]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>-60</td><td>125</td><td>125</td><td>125</td><td>125</td><td>125</td></tr><tr><td>-40</td><td>125</td><td>125</td><td>125</td><td>125</td><td>125</td></tr><tr><td>-20</td><td>126</td><td>125</td><td>125</td><td>125</td><td>125</td></tr><tr><td>0</td><td>126</td><td>126</td><td>126</td><td>126</td><td>126</td></tr><tr><td>25</td><td>126</td><td>126</td><td>126</td><td>126</td><td>126</td></tr><tr><td>50</td><td>126</td><td>126</td><td>126</td><td>126</td><td>126</td></tr><tr><td>60</td><td>126</td><td>126</td><td>126</td><td>126</td><td>126</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table>		Ambient Temperature [°C]	Operating Point [%]					Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	-60	125	125	125	125	125	-40	125	125	125	125	125	-20	126	125	125	125	125	0	126	126	126	126	126	25	126	126	126	126	126	50	126	126	126	126	126	60	126	126	126	126	126	--	-	-	-	-	-	--	-	-	-	-	-	--	-	-	-	-	-	--	-	-	-	-	-
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Model	MGFS802405	Temperature	25°C
Item	Switching frequency (by Load Current)	Testing Circuitry	Figure A
Object	+5V16A		

1. Graph



Note: Slanted line shows the range of the rated load current.

-switching frequency of MG80 changes depending on load current and input voltage.
When load current is low, switching frequency becomes high and step down to low frequency at certain point.
There is hysteresis, so characteristic is different between load increase (sweep from 0% to 100%) and load decrease (sweep from 100% to 0%).

-When load current is low, MG80 operates intermittently, so switching frequency would not become constant.
※ Maximum output current at minimum input Voltage is 70% of rated load current.
Refer to instruction manuals for details of input derating.

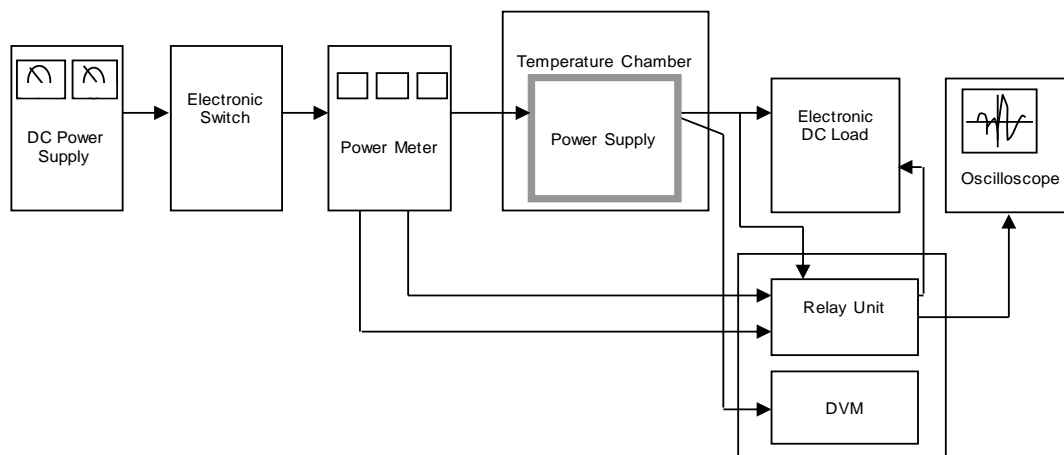


Figure A

Data Acquisition/Control Unit

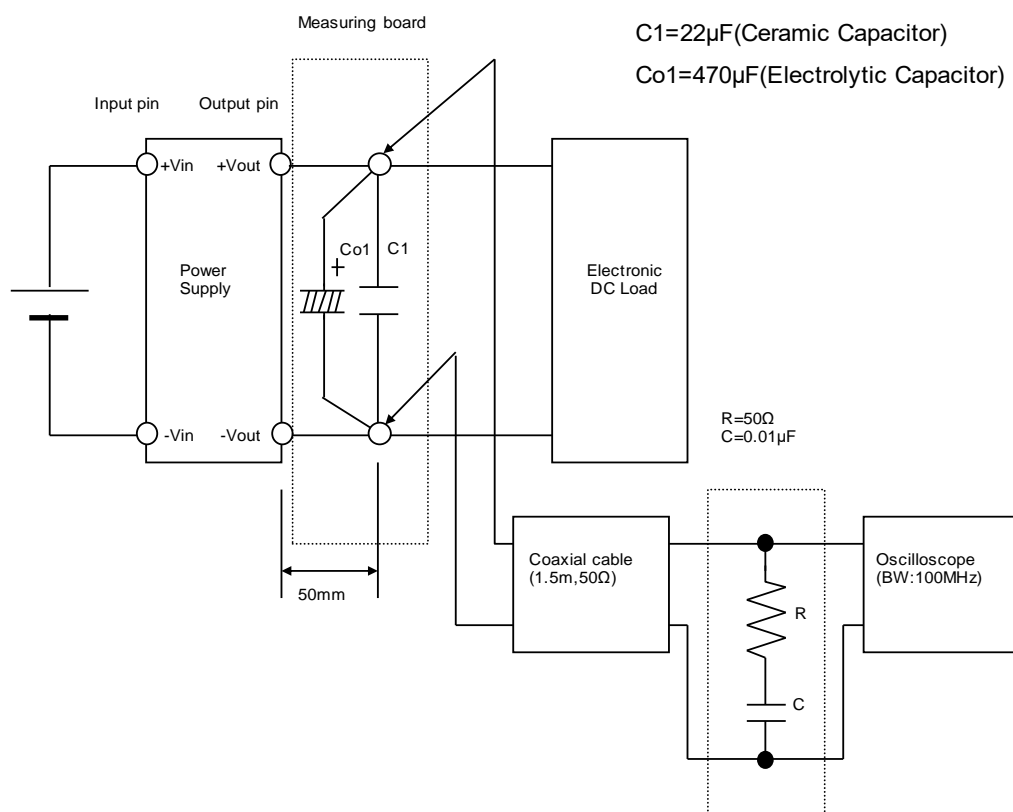


Figure B (Ripple and Ripple noise Characteristic)