

TEST DATA OF MHFW62415

Regulated DC Power Supply
October 27, 2021

Approved by : Kenichi Tsukada
Design Manager

Prepared by : Yoshihiko Saeki
Design Engineer

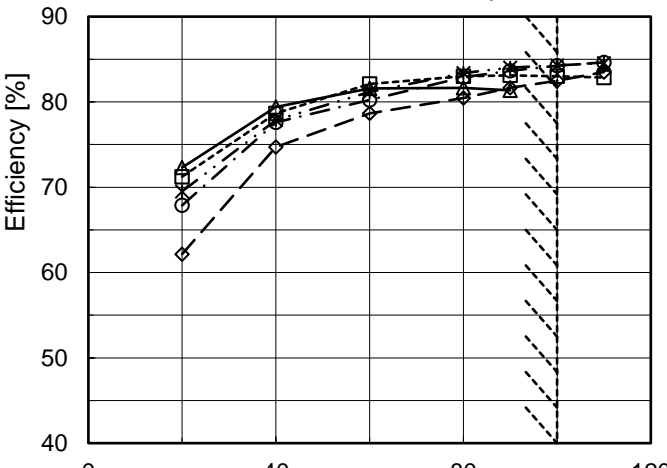
COSEL CO.,LTD.

CONTENTS

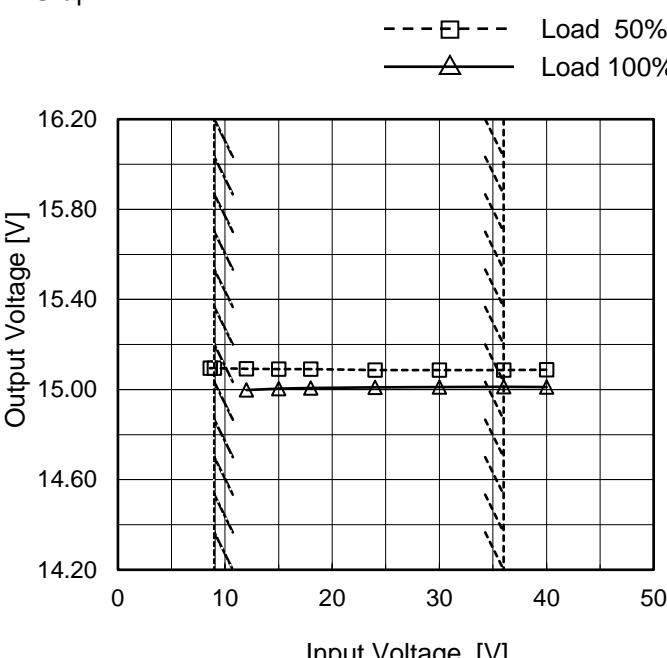
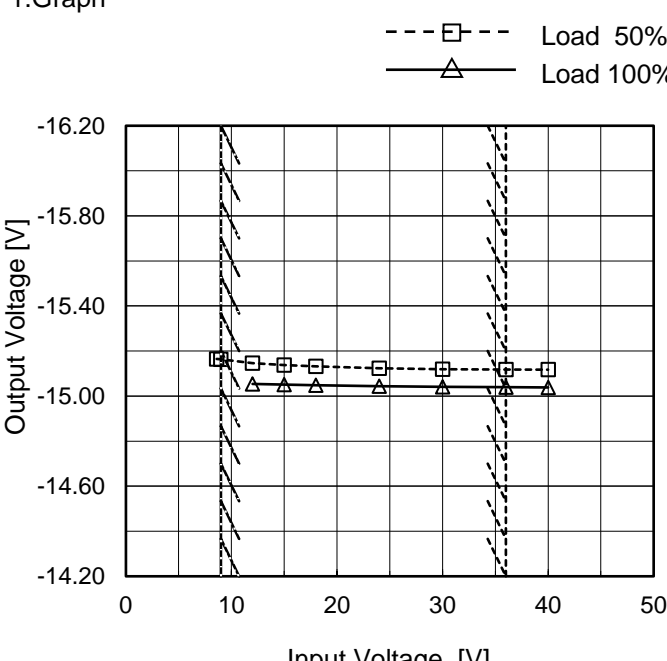
1.Input Current (by Load Current)	1
2.Efficiency (by Load Current)	2
3.Line Regulation	3
4.Cross Regulation	4,5
5.Ripple-Noise	4,5
6.Dynamic Load Response	6,7
7.Rise and Fall Time	8,9
8.Overcurrent Protection	10
9.Ambient Temperature Drift	11,12
10.Minimum Input Voltage for Regulated Output Voltage	11,12
11.Switching frequency (by Load Current)	13
12.Figure of Testing Circuitry	14

(Final Page 14)

Model		MHFW62415	Temperature		25°C																																																																								
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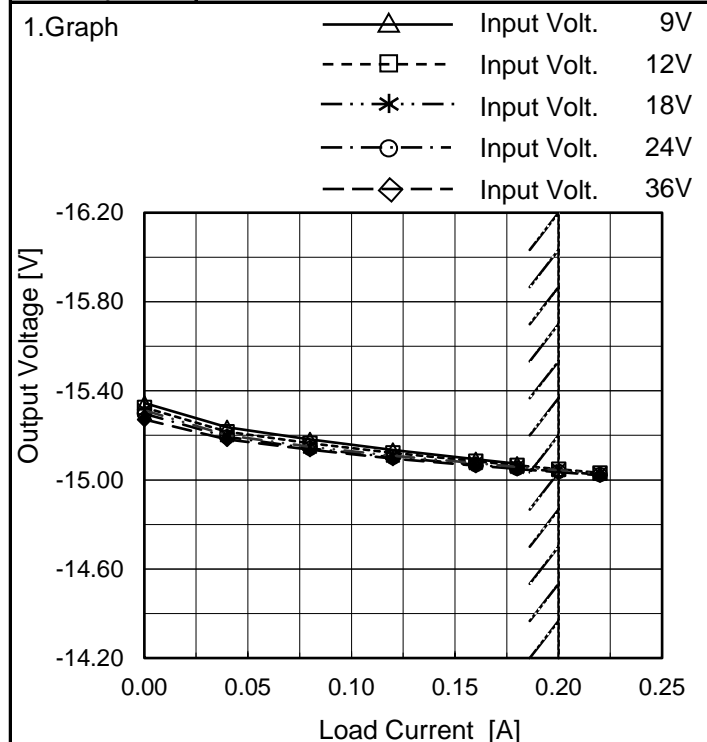
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- 4 -

BC-11830



Model	MHFW62415
Item	Cross Regulation
Object	-15V0.2A



Temperature 25°C
Testing Circuitry Figure A

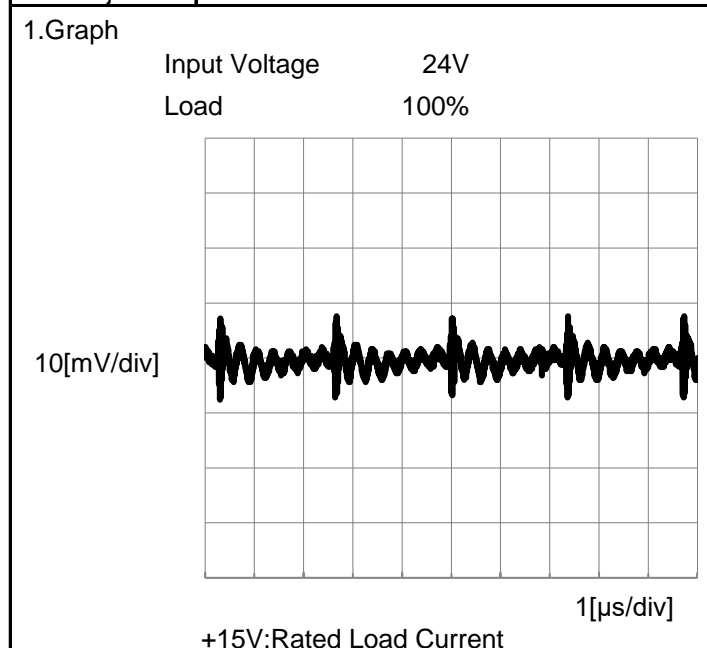
2.Values

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]
0.00	-15.345	-15.325	-15.313	-15.297	-15.272
0.04	-15.237	-15.217	-15.201	-15.194	-15.182
0.08	-15.182	-15.165	-15.149	-15.142	-15.136
0.12	-15.134	-15.121	-15.109	-15.102	-15.096
0.16	-15.093	-15.084	-15.075	-15.069	-15.064
0.18	-15.073	-15.066	-15.059	-15.053	-15.049
0.20	*1	-15.049	-15.043	-15.039	-15.035
0.22	*1	-15.031	-15.028	-15.024	-15.021
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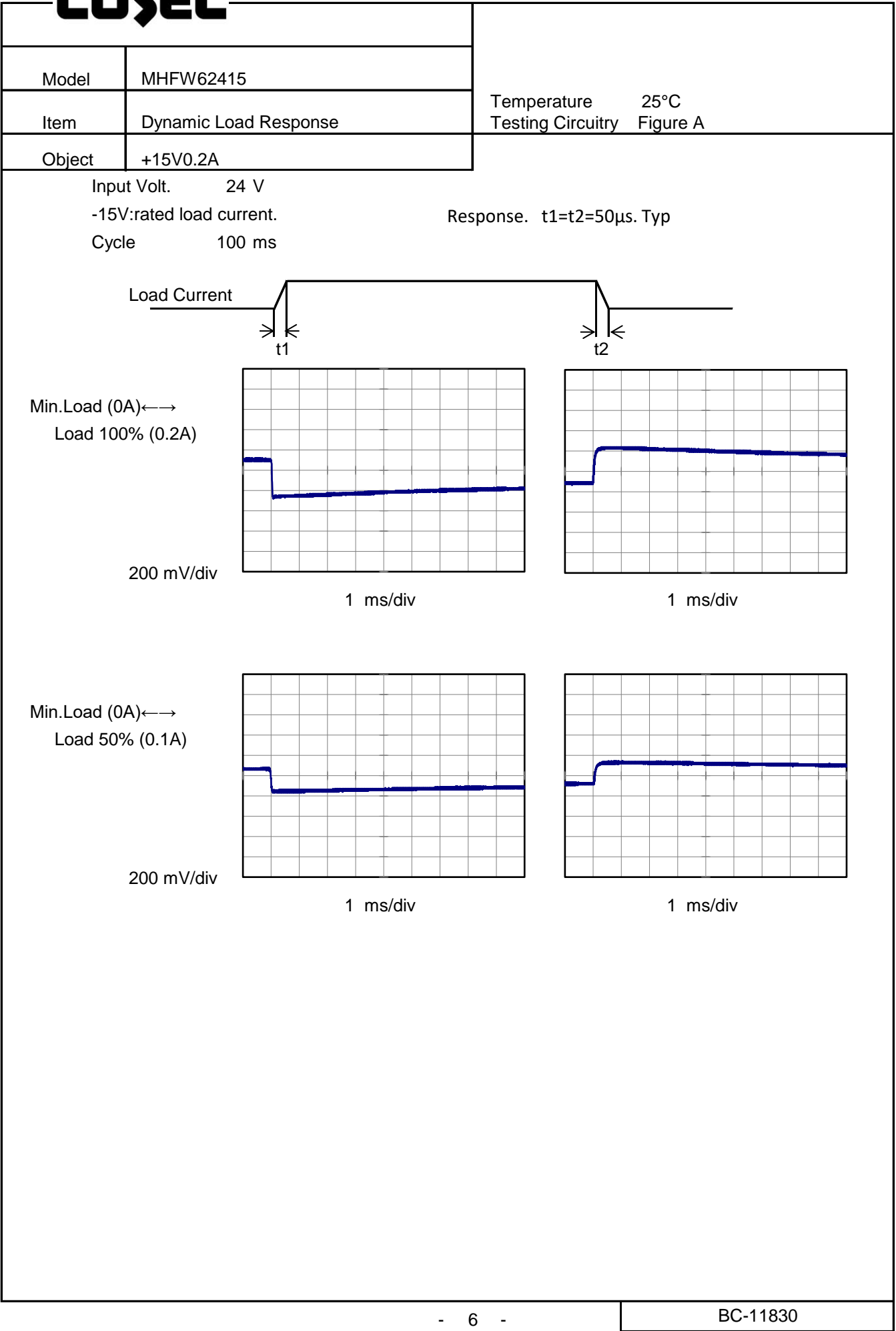
+15V:Rated Load Current

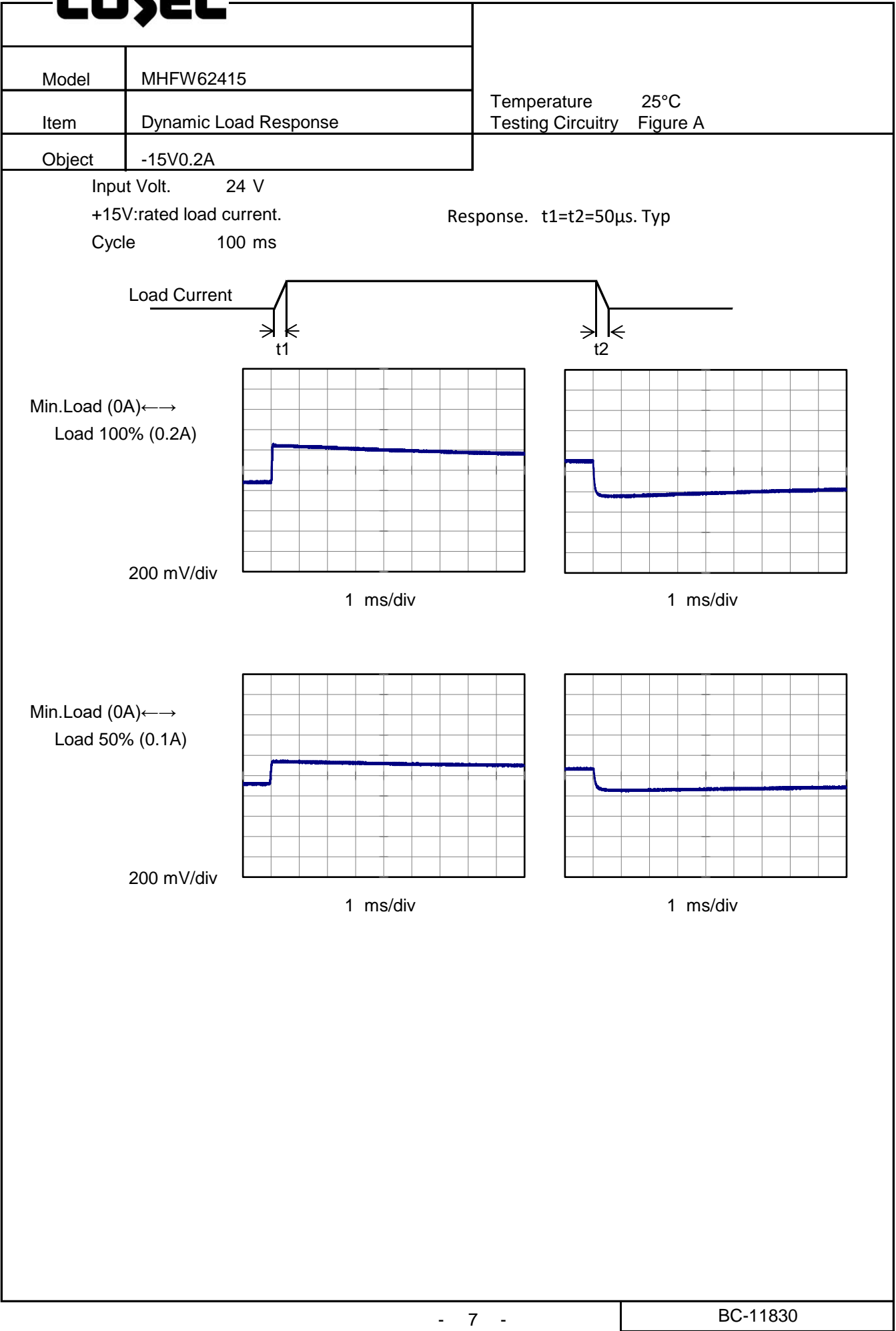
*1 Maximum output current at 9V input
Voltage is 80% of rated load current.
Refer to instruction manuals for details of input derating.

Item	Ripple-Noise
Object	-15V0.2A



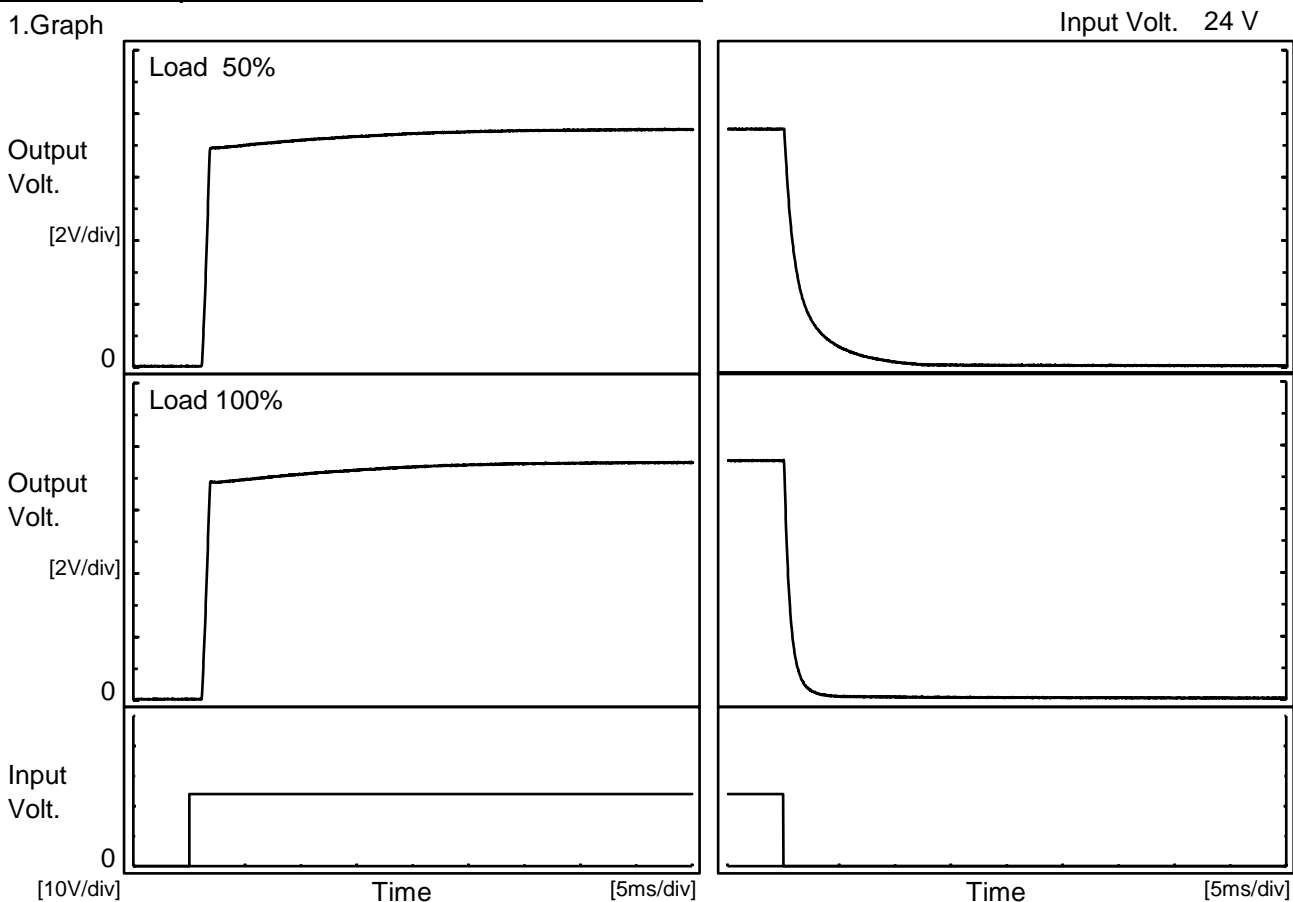
Temperature 25°C
Testing Circuitry Figure B





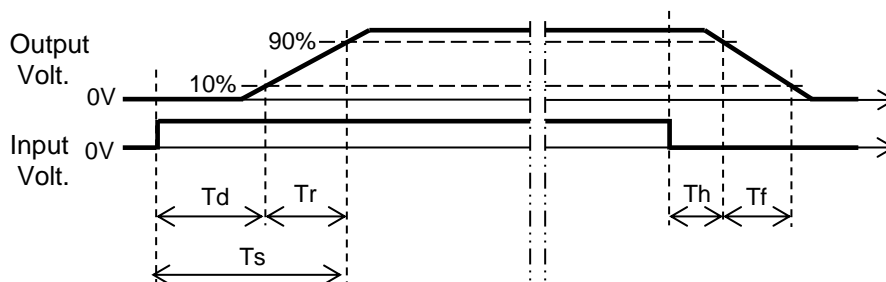
Model	MHFW62415	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+15V0.2A		

1.Graph



2.Values

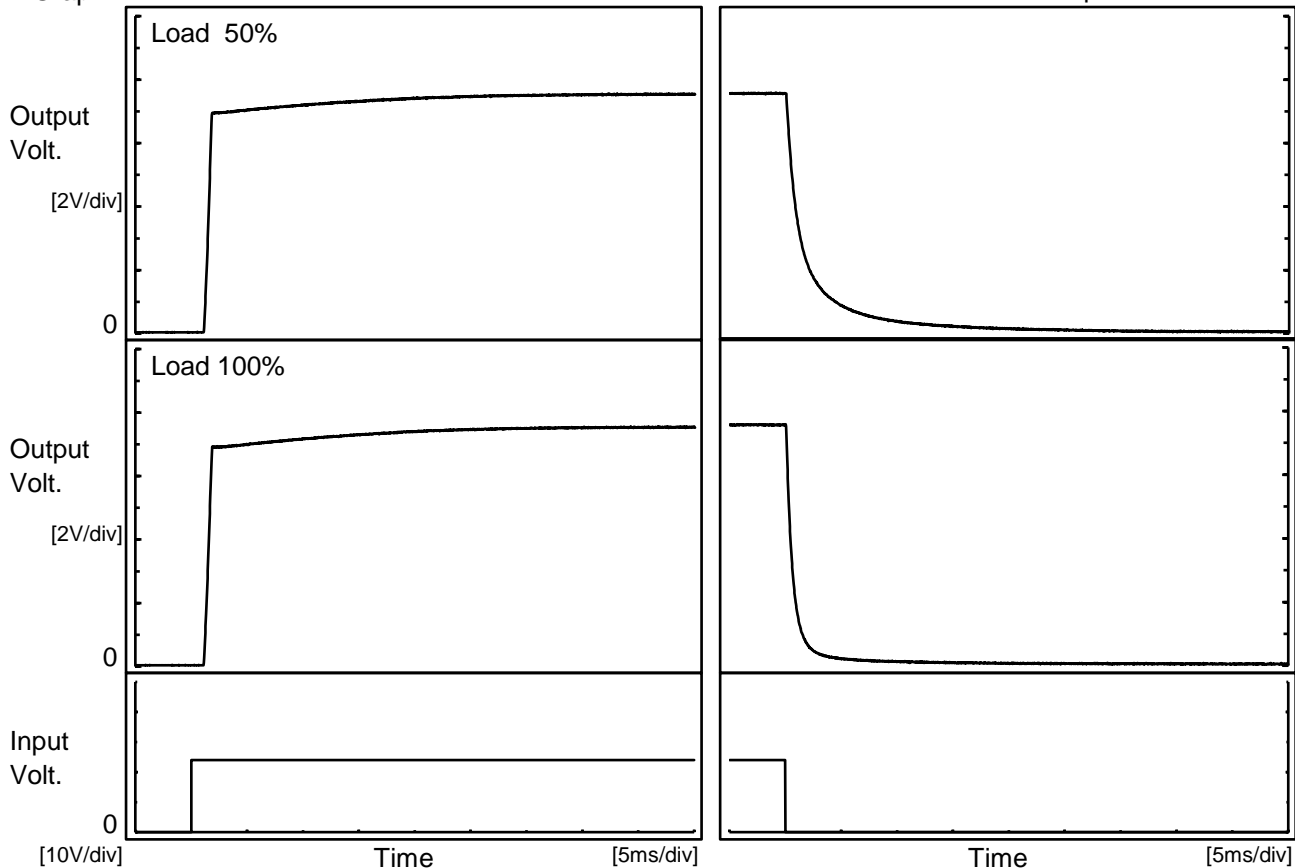
		[ms]				
Load	Time	Td	Tr	Ts	Th	Tf
50 %		1.2	0.6	1.8	0.2	4.2
100 %		1.2	0.6	1.8	0.1	1.3





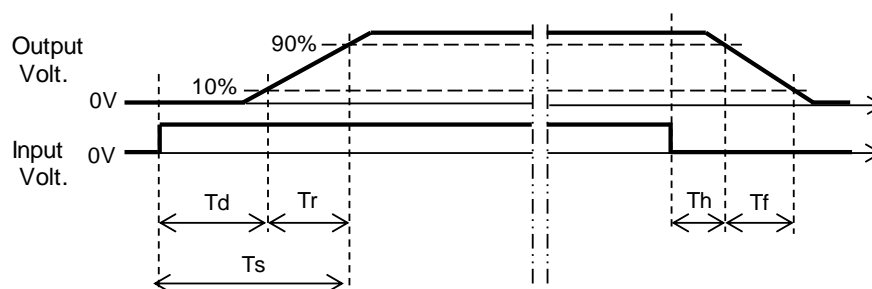
Model	MHFW62415	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	-15V0.2A		

1.Graph



2.Values

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	1.2	0.6	1.8	0.2	5.3
100 %	1.2	0.6	1.8	0.1	1.6





<div>Model</div> MHFW62415		<div>Temperature</div> 25°C																																																																														
<div>Item</div> Overcurrent Protection		<div>Testing Circuitry</div> Figure A																																																																														
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<div>Note: Slanted line shows the range of the rated load current.</div>																																																																																

- 10 -

BC-11830

COSEL

		Testing Circuitry Figure A
Model	MHFW62415	
Item	Ambient Temperature Drift	
Object	+15V0.2A	

1.Values

Load 100%

Ambient Temperature[°C]	Output Voltage [V]				
	Input Volt. 9V*1	Input Volt. 12V	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V
-40	14.900	14.905	14.913	14.916	14.920
25	14.998	15.000	15.009	15.011	15.014
55	15.013	15.014	15.023	15.025	15.027

*1 Load 80%

-15V:Rated Load Current

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+15V0.2A	

1.Values

Ambient Temperature[°C]	Input Voltage [V]	
	Load 50%	Load 80%
-40	7.2	7.2
25	7.1	7.0
55	7.0	6.9

COSEL

		Testing Circuitry Figure A
Model	MHFW62415	
Item	Ambient Temperature Drift	
Object	-15V0.2A	

1.Values

Load 100%

Ambient Temperature[°C]	Output Voltage [V]				
	Input Volt. 9V*1	Input Volt. 12V	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V
-40	-14.945	-14.949	-14.947	-14.946	-14.943
25	-15.043	-15.044	-15.040	-15.036	-15.033
55	-15.058	-15.057	-15.052	-15.048	-15.044

*1 Load 80%

+15V:Rated Load Current

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	-15V0.2A	

1.Values

Ambient Temperature[°C]	Input Voltage [V]	
	Load 50%	Load 80%
-40	7.2	7.2
25	7.1	7.0
55	7.0	6.9

Model		MHFW62415	Temperature		25°C																																																																													
Item		Switching frequency (by Load Current)	Testing Circuitry		Figure A																																																																													
Object		+/-15V0.2A																																																																																
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>Switching Frequency [kHz]</div><div><div>10000</div><div>1000</div><div>100</div></div><div><div>0.00</div><div>0.05</div><div>0.10</div><div>0.15</div><div>0.20</div><div>0.25</div></div><div>Load Current [A]</div></div>	2.Values																																																																															
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When load current is low, MH operates intermittently, so switching frequency would not become constant.																																																																																		
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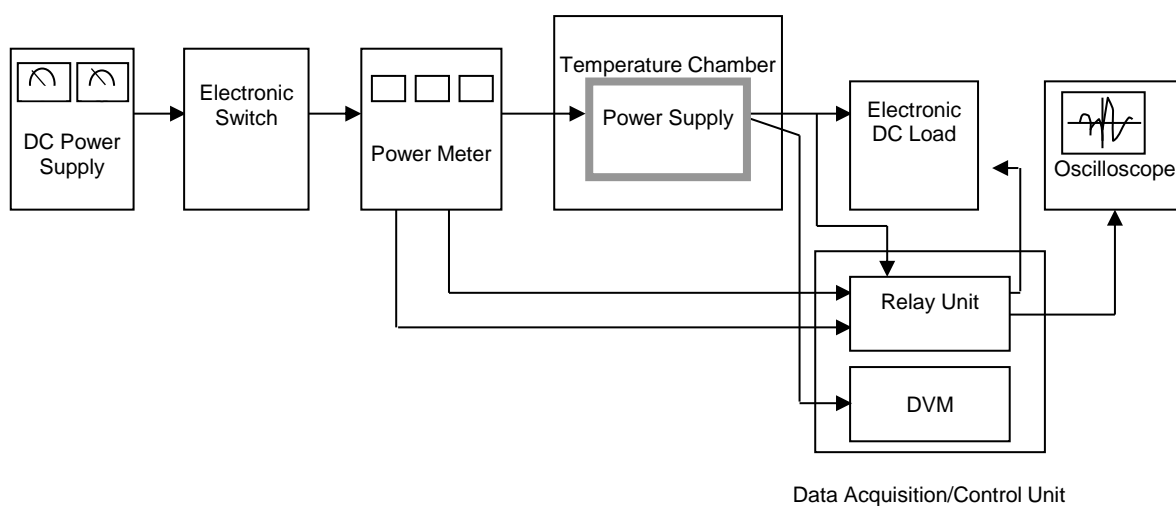


Figure A

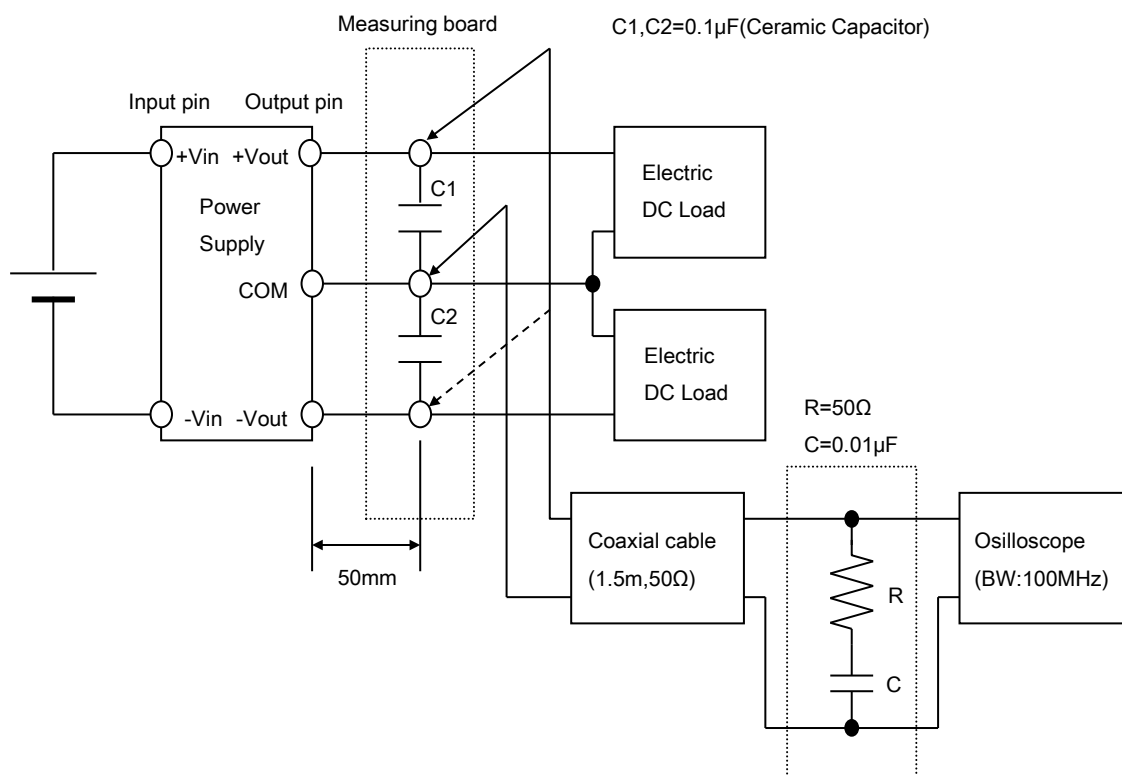


Figure B