For Reference

TEST DATA OF MUW1R51215

Regulated DC Power Supply
February 6, 2025

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COSEL CO.,LTD.

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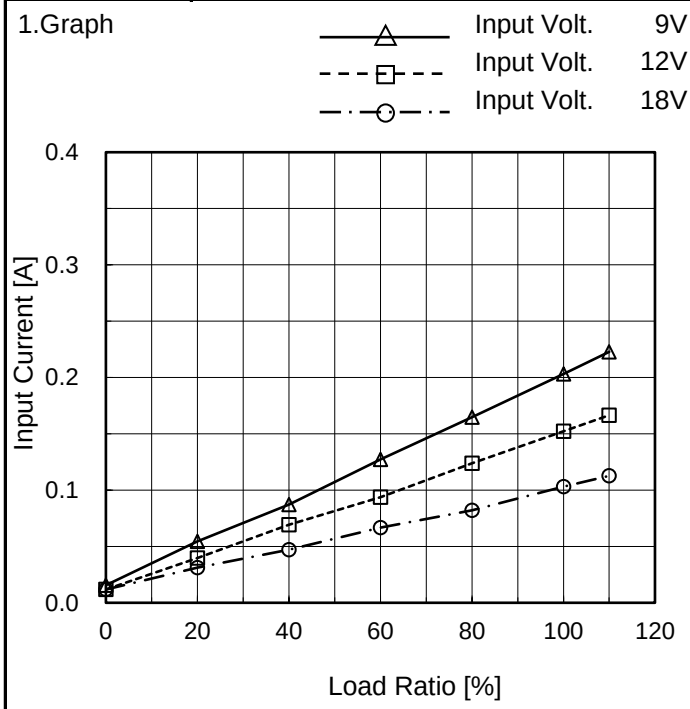
Model	MUW1R51215
Item	Input Current (by Load Current)
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



2.Values

Load Ratio [%]	Input Current [A]		
	Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
0	0.016	0.012	0.012
20	0.054	0.040	0.031
40	0.087	0.069	0.047
60	0.127	0.094	0.067
80	0.165	0.124	0.082
100	0.203	0.152	0.103
110	0.223	0.167	0.113
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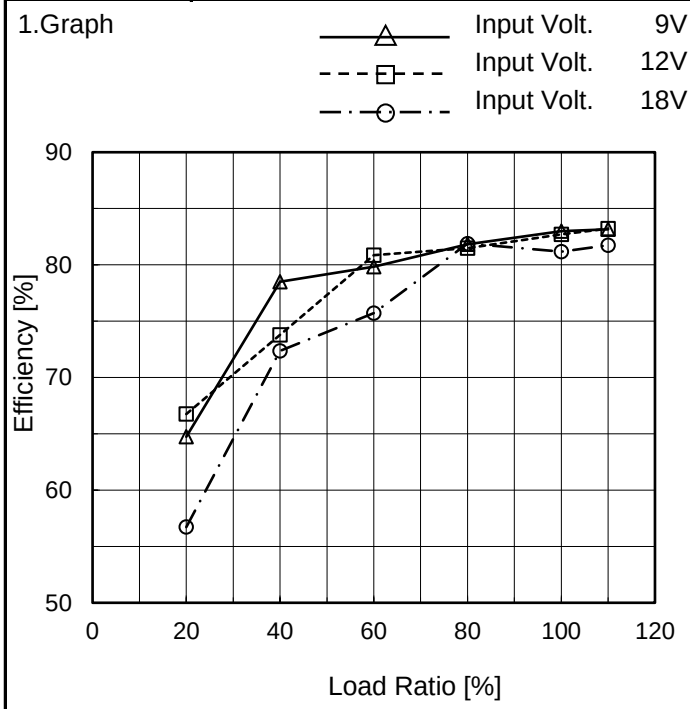
Model	MUW1R51215
Item	Efficiency (by Load Current)
Object	————————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



2.Values

Load Ratio [%]	Efficiency [%] Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
0	-	-	-
20	64.7	66.8	56.7
40	78.5	73.8	72.4
60	79.8	80.9	75.7
80	81.8	81.5	81.9
100	83.0	82.7	81.2
110	83.2	83.2	81.8
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--	-	-	-
--	-	-	-

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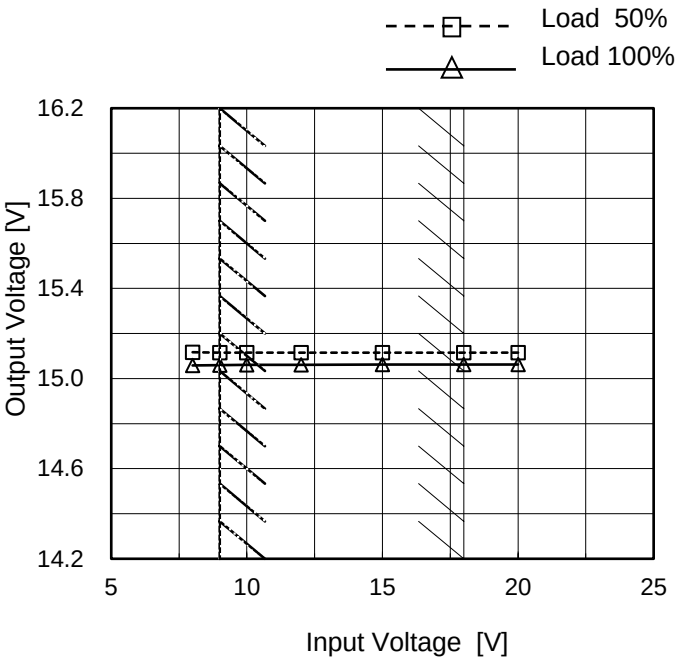
Model	MUW1R51215
Item	Line Regulation
Object	+15V0.05A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



2.Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
8	15.117	15.058
9	15.115	15.060
10	15.115	15.060
12	15.115	15.061
15	15.116	15.062
18	15.115	15.062
20	15.115	15.062
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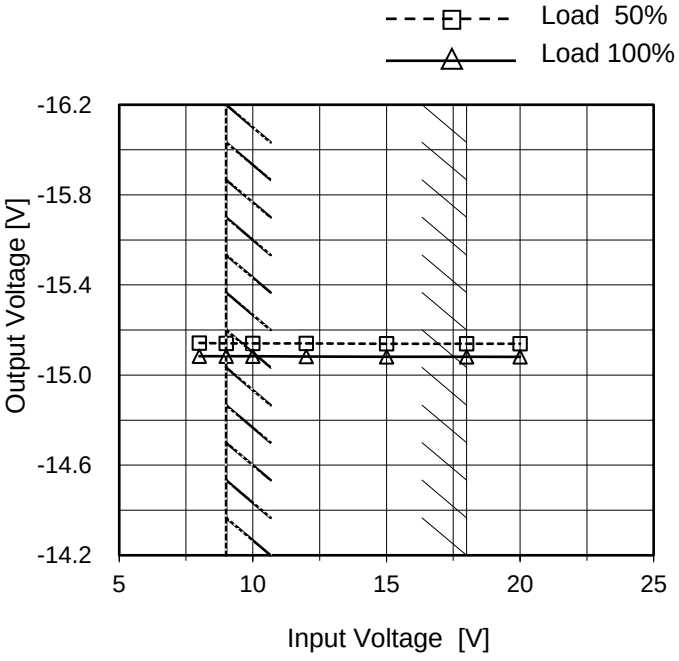
-15V:Rated Load Current

Object	-15V0.05A

1.Graph



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

2.Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
8	-15.143	-15.084
9	-15.141	-15.083
10	-15.140	-15.083
12	-15.140	-15.082
15	-15.139	-15.081
18	-15.140	-15.081
20	-15.140	-15.081
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--	-	-

+15V:Rated Load Current

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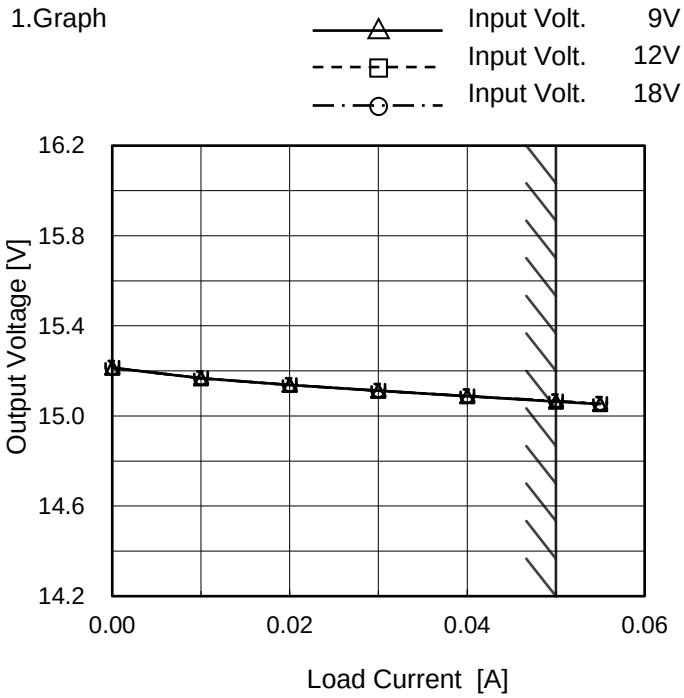
Model	MUW1R51215
Item	Load Regulation
Object	+15V0.05A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
0.000	15.214	15.214	15.214
0.010	15.168	15.168	15.168
0.020	15.138	15.138	15.138
0.030	15.112	15.112	15.112
0.040	15.088	15.088	15.088
0.050	15.064	15.065	15.066
0.055	15.053	15.054	15.055
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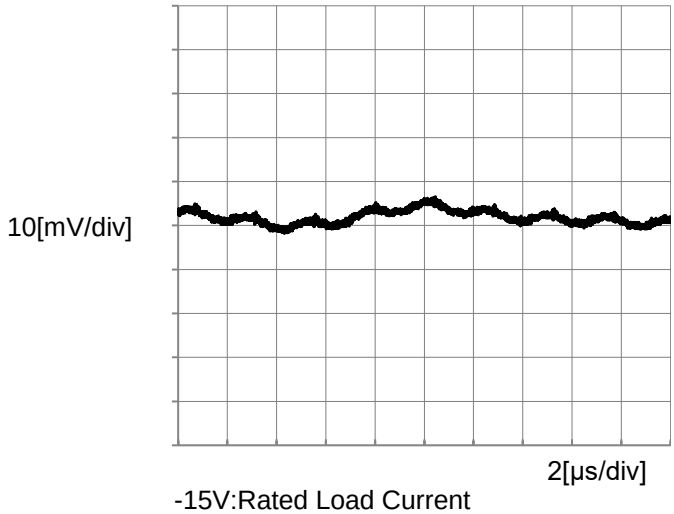
-15V:Rated Load Current

Item	Ripple-Noise
Object	+15V0.05A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 12V
Load 100%



-15V:Rated Load Current

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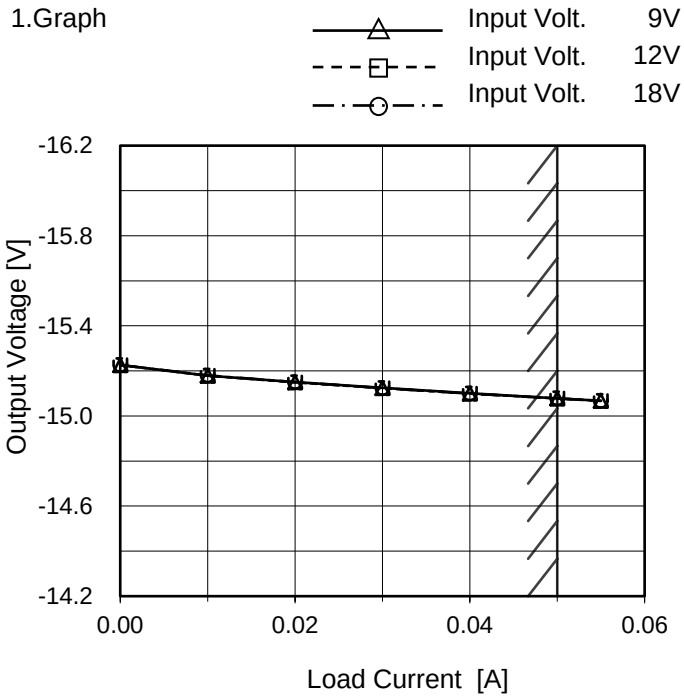
Model	MUW1R51215
Item	Load Regulation
Object	-15V0.05A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
0.000	-15.226	-15.226	-15.226
0.010	-15.180	-15.180	-15.180
0.020	-15.150	-15.150	-15.150
0.030	-15.125	-15.124	-15.124
0.040	-15.101	-15.100	-15.100
0.050	-15.079	-15.078	-15.078
0.055	-15.067	-15.067	-15.066
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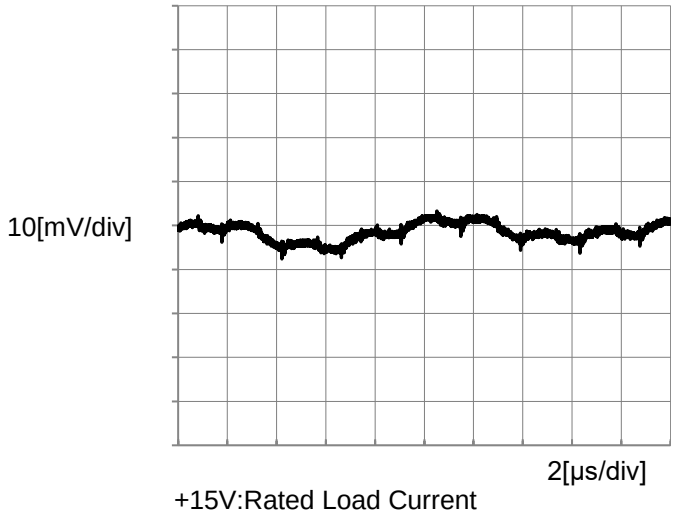
+15V:Rated Load Current

Item	Ripple-Noise
Object	-15V0.05A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 12V
Load 100%



+15V:Rated Load Current

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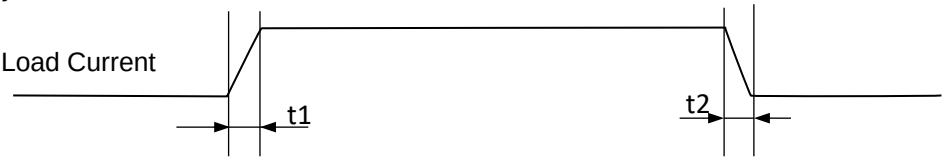
Model	MUW1R51215	
Item	Dynamic Load Response	Temperature 25°C Testing Circuitry Figure A
Object	+15V0.05A	

Input Volt. 12 V

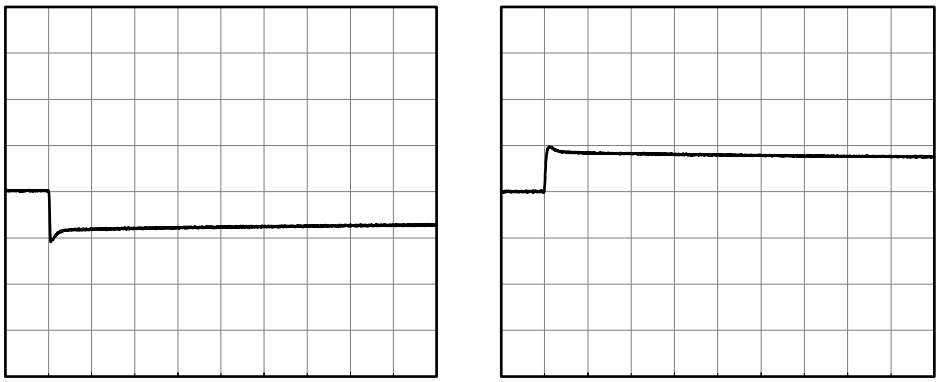
-15V:Rated Load Current

Response. t1=t2=50μs. Typ

Cycle 1000 ms



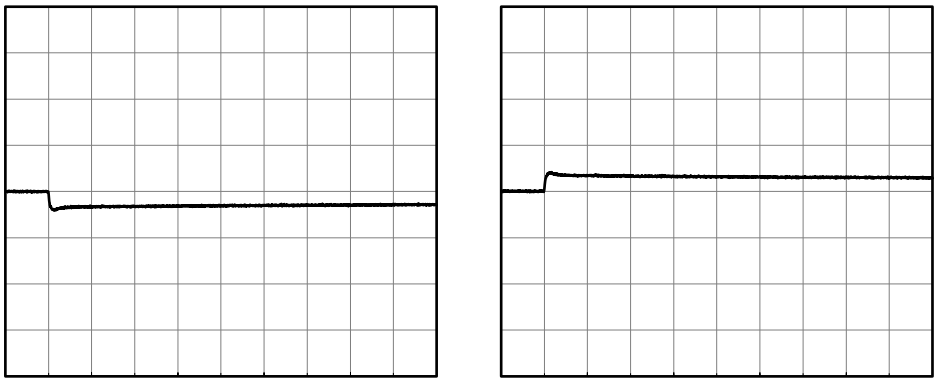
Load 0%(0A) ←→
Load 100%(0.05A)



200[mV/div]

1[ms/div] 1[ms/div]

Load 50%(0.025A) ←→
Load 100%(0.05A)



200[mV/div]

1[ms/div] 1[ms/div]

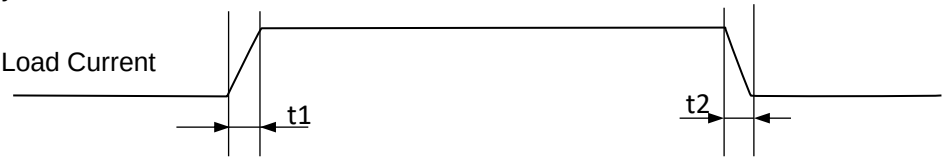
Model	MUW1R51215	
Item	Dynamic Load Response	Temperature 25°C Testing Circuitry Figure A
Object	-15V0.05A	

Input Volt. 12 V

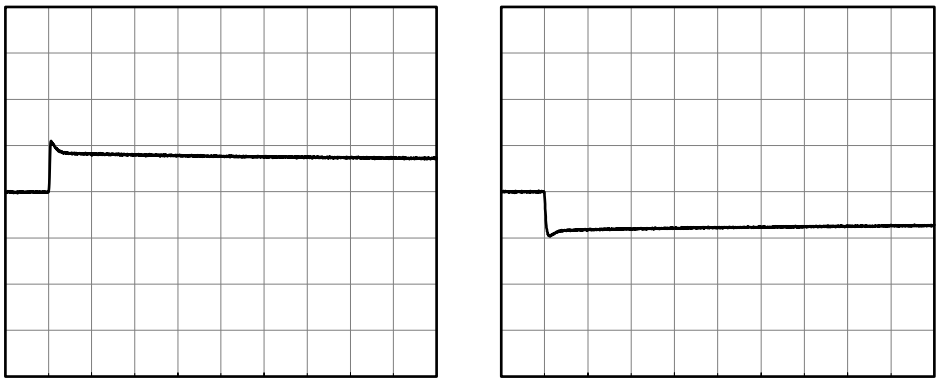
+15V:Rated Load Current

Response. t1=t2=50μs. Typ

Cycle 1000 ms



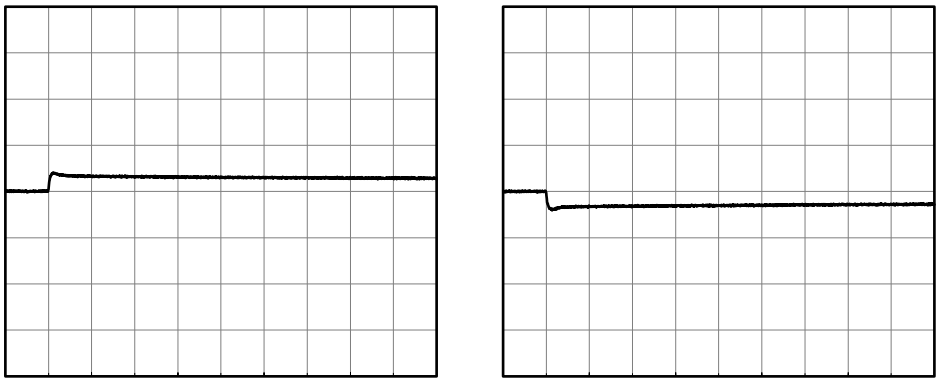
Load 0%(0A) ←→
Load 100%(0.05A)



200[mV/div]

1[ms/div] 1[ms/div]

Load 50%(0.025A) ←→
Load 100%(0.05A)



200[mV/div]

1[ms/div] 1[ms/div]

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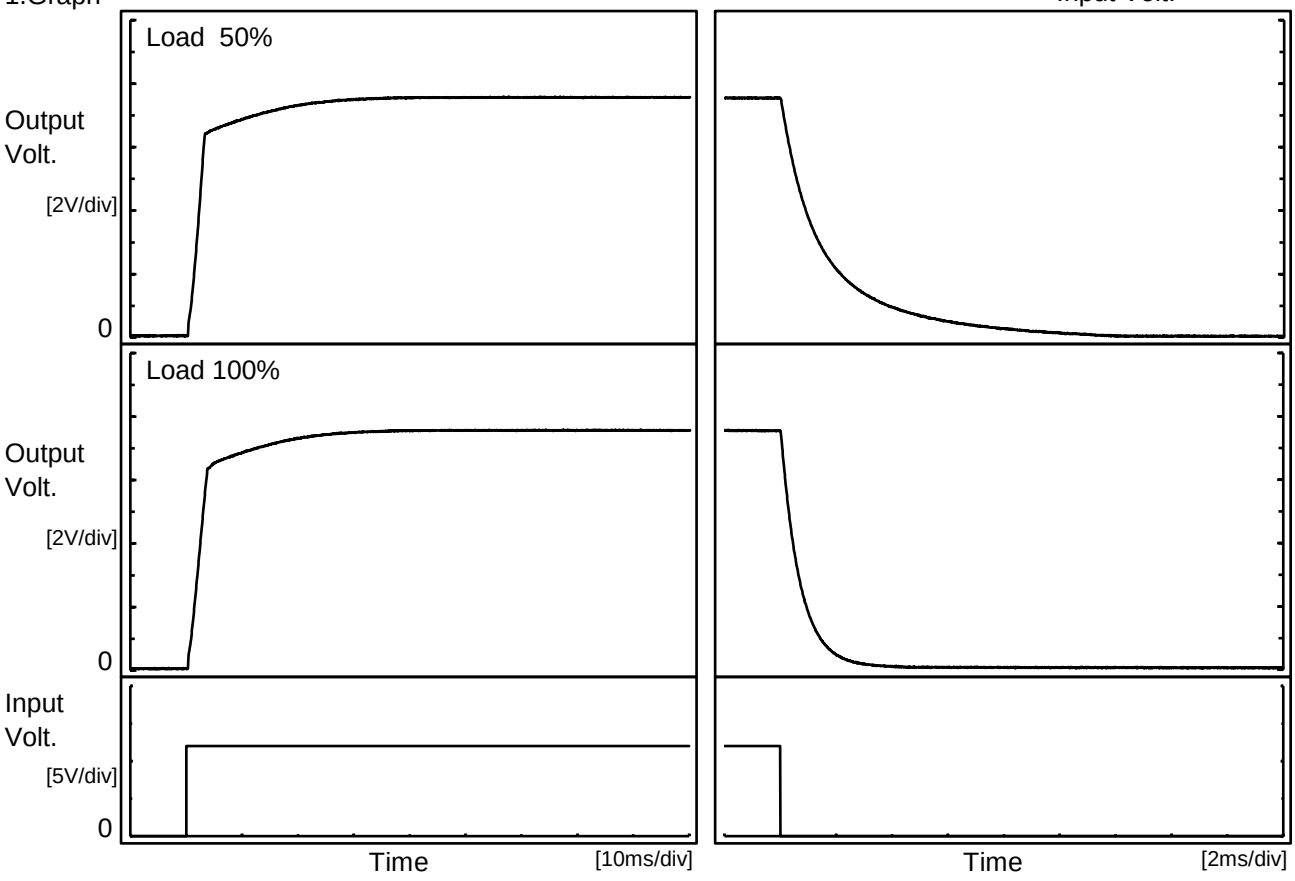
Model	MUW1R51215
Item	Rise and Fall Time
Object	+15V0.05A

Temperature 25°C
Testing Circuitry Figure A

1.Graph

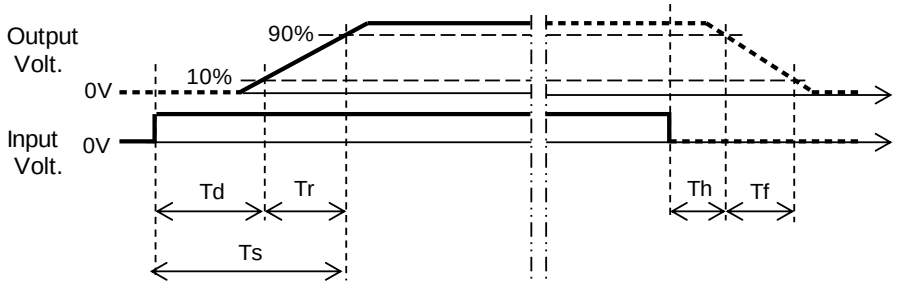
Input Volt. 12 V



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	0.7	7.7	8.4	0.2	4.5
100 %	0.8	7.9	8.7	0.1	1.5



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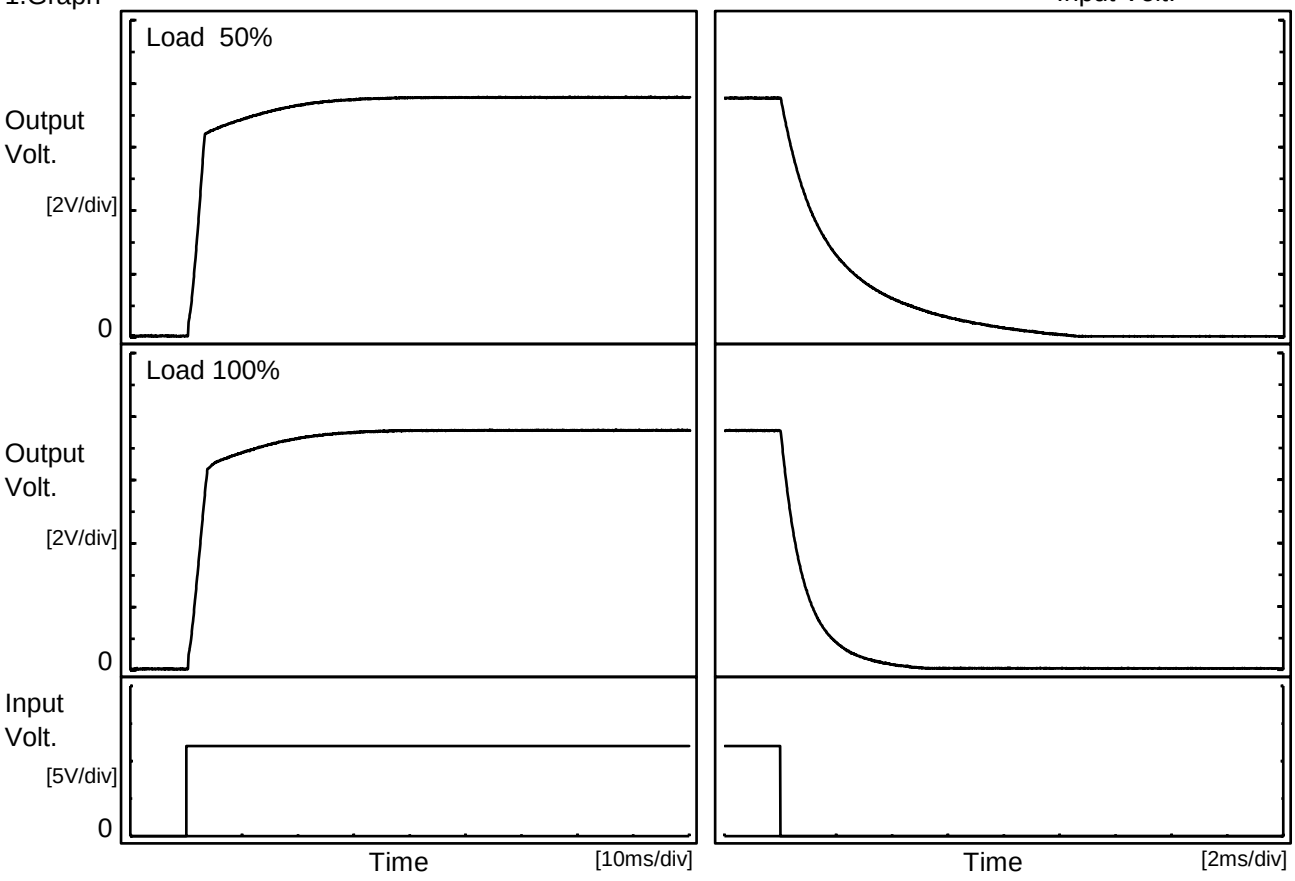
Model	MUW1R51215
Item	Rise and Fall Time
Object	-15V0.05A

Temperature 25°C
Testing Circuitry Figure A

1.Graph

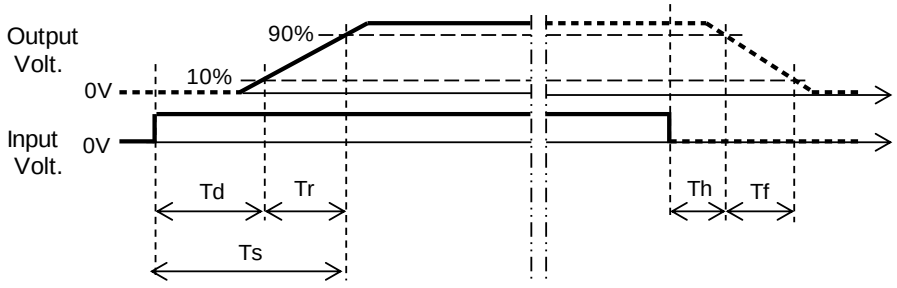
Input Volt. 12 V



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	0.8	7.7	8.5	0.2	5.2
100 %	0.7	8.0	8.7	0.1	2.0



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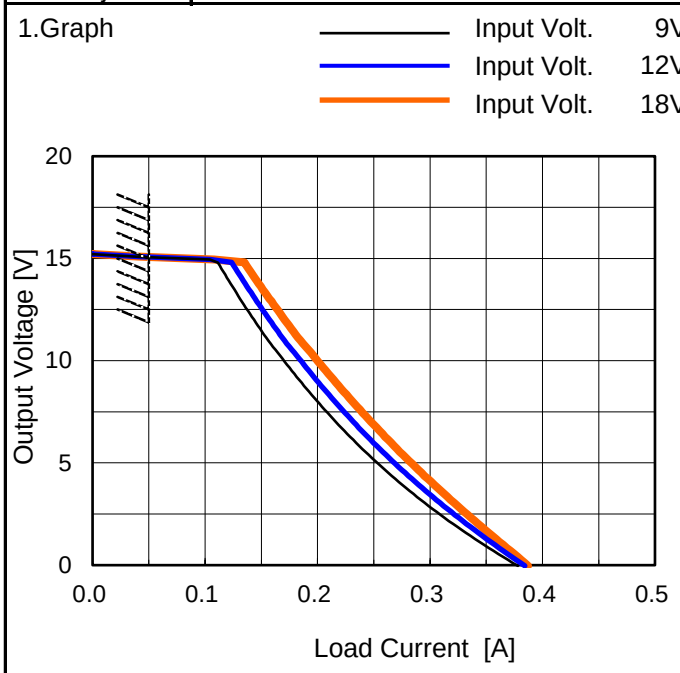
Model	MUW1R51215
Item	Overcurrent Protection
Object	+15V0.05A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



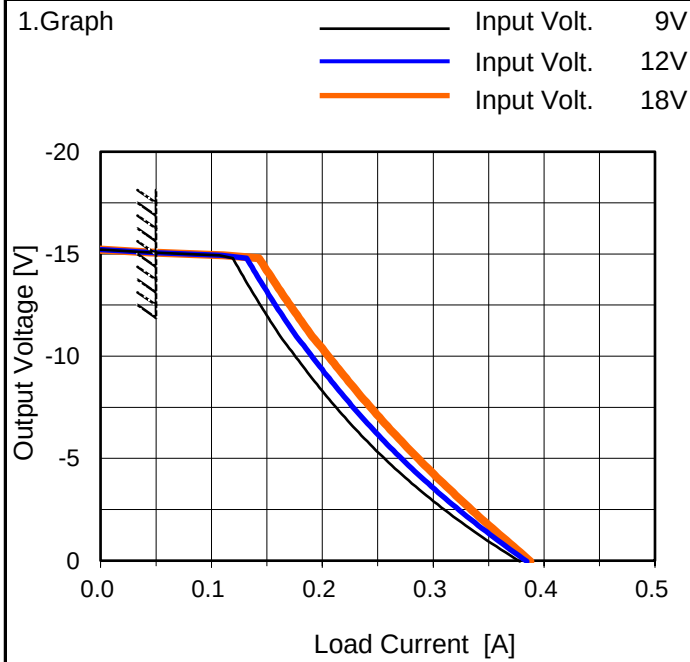
2.Values

Output Voltage [V]	Load Current [A] Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
14.25	0.12	0.13	0.14
13.50	0.12	0.14	0.15
12.00	0.14	0.16	0.17
10.50	0.16	0.18	0.19
9.00	0.18	0.20	0.21
7.50	0.21	0.22	0.24
6.00	0.23	0.25	0.26
4.50	0.26	0.28	0.29
3.00	0.30	0.31	0.32
1.50	0.33	0.34	0.35
0.00	0.38	0.38	0.39
--	-	-	-

-15V:Rated Load Current

Object	-15V0.05A

1.Graph



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

2.Values

Output Voltage [V]	Load Current [A] Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
-14.25	0.13	0.14	0.15
-13.50	0.13	0.14	0.16
-12.00	0.15	0.16	0.18
-10.50	0.17	0.18	0.20
-9.00	0.19	0.20	0.22
-7.50	0.21	0.23	0.24
-6.00	0.24	0.25	0.27
-4.50	0.27	0.28	0.30
-3.00	0.30	0.31	0.32
-1.50	0.33	0.34	0.35
0.00	0.38	0.38	0.39
--	-	-	-

+15V:Rated Load Current

Model	MUW1R51215	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+15V0.05A	

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 9V	Input Volt. 12V	Input Volt. 18V
-40	14.956	14.958	14.959
25	15.067	15.068	15.069
85	15.093	15.094	15.095

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+15V0.05A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-40	7.1	7.1
25	7.1	7.1
85	7.1	7.1

Model	MUW1R51215	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	-15V0.05A	

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 9V	Input Volt. 12V	Input Volt. 18V
-40	-14.971	-14.971	-14.971
25	-15.080	-15.079	-15.079
85	-15.107	-15.106	-15.105

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	-15V0.05A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-40	7.1	7.1
25	7.1	7.1
85	7.1	7.1

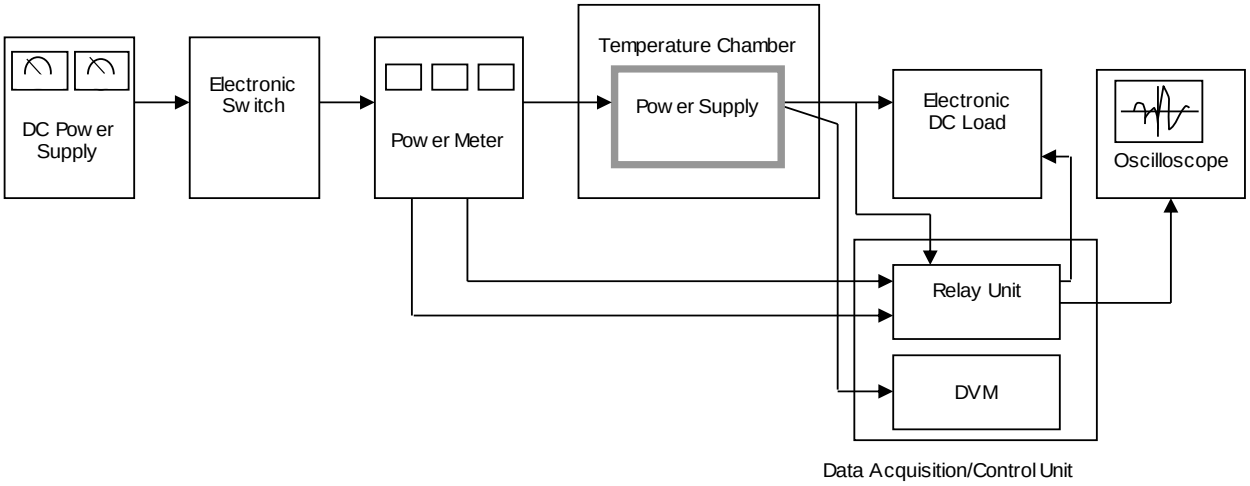


Figure A

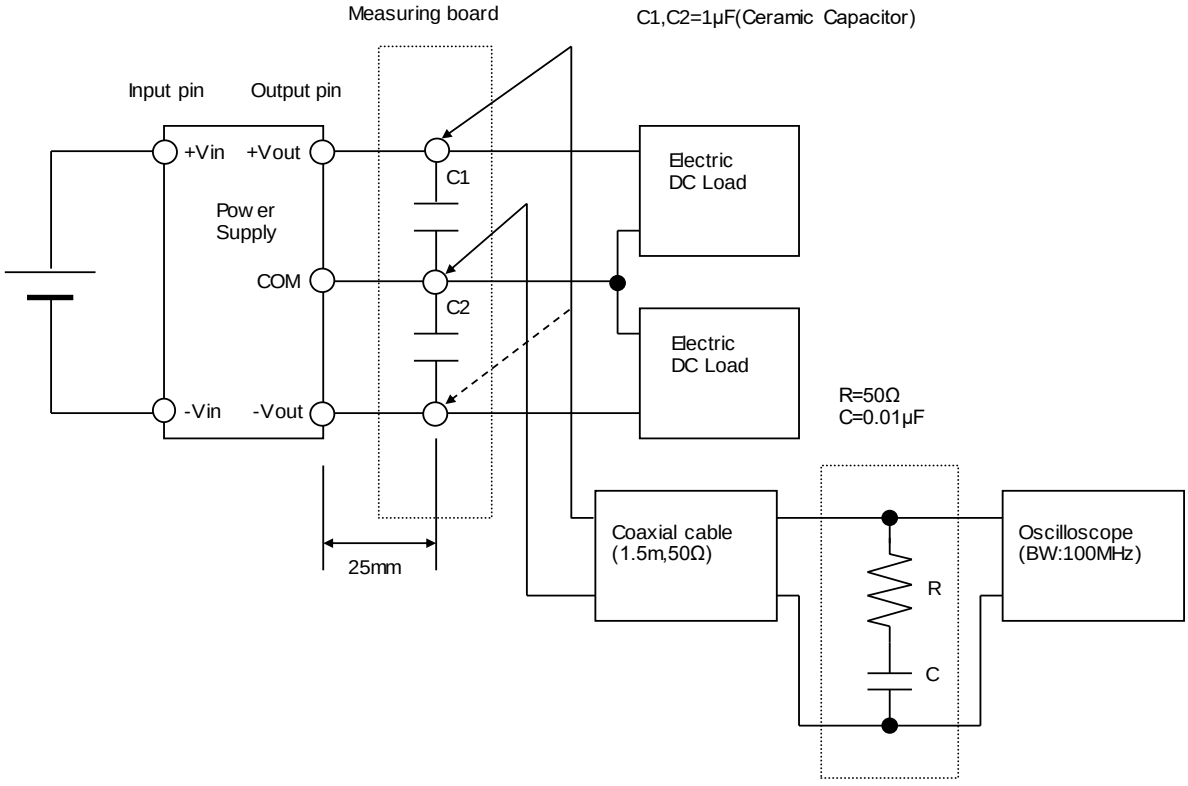


Figure B