



TEST DATA OF MUS15483R3

Regulated DC Power Supply
July 1, 2026

Approved by : Masahiro Shima
Design Manager

Prepared by : Kosei Oba
Design Engineer

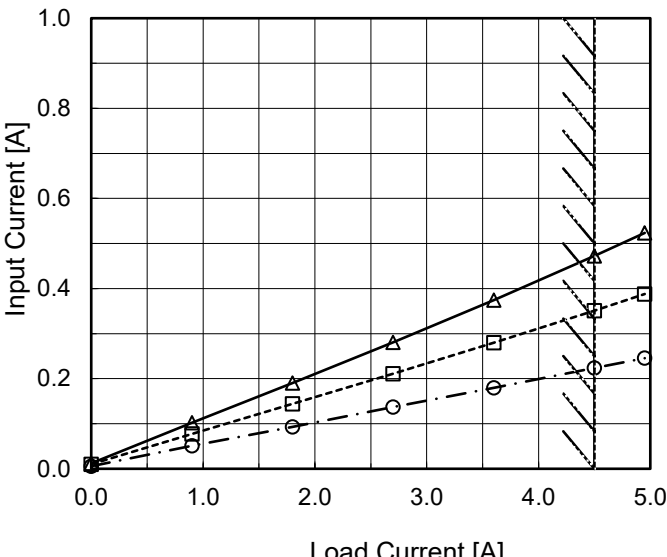
COSEL CO.,LTD.

CONTENTS

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

(Final Page 9)

COSEL

Model		MUS15483R3	Temperature		25°C																																																			
Item		Input Current (by Load Current)	Testing Circuitry		Figure A																																																			
Object		_____																																																						
1.Graph		—△— Input Volt. 36V - - -□- - Input Volt. 48V - · -○- · - Input Volt. 76V 	2.Values																																																					
			<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Input Current [A]</th></tr><tr><th>Input Volt. 36[V]</th><th>Input Volt. 48[V]</th><th>Input Volt. 76[V]</th></tr><tr><td>0.00</td><td>0.012</td><td>0.010</td><td>0.006</td></tr><tr><td>0.90</td><td>0.102</td><td>0.077</td><td>0.051</td></tr><tr><td>1.80</td><td>0.191</td><td>0.144</td><td>0.093</td></tr><tr><td>2.70</td><td>0.281</td><td>0.211</td><td>0.137</td></tr><tr><td>3.60</td><td>0.374</td><td>0.280</td><td>0.180</td></tr><tr><td>4.50</td><td>0.473</td><td>0.351</td><td>0.224</td></tr><tr><td>4.95</td><td>0.524</td><td>0.388</td><td>0.245</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>			Load Current [A]	Input Current [A]			Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]	0.00	0.012	0.010	0.006	0.90	0.102	0.077	0.051	1.80	0.191	0.144	0.093	2.70	0.281	0.211	0.137	3.60	0.374	0.280	0.180	4.50	0.473	0.351	0.224	4.95	0.524	0.388	0.245	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Input Current [A]																																																							
	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]																																																					
0.00	0.012	0.010	0.006																																																					
0.90	0.102	0.077	0.051																																																					
1.80	0.191	0.144	0.093																																																					
2.70	0.281	0.211	0.137																																																					
3.60	0.374	0.280	0.180																																																					
4.50	0.473	0.351	0.224																																																					
4.95	0.524	0.388	0.245																																																					
--	-	-	-																																																					
--	-	-	-																																																					
--	-	-	-																																																					
--	-	-	-																																																					
Note: Slanted line shows the range of the rated load current.																																																								

-

1

-

BC-12255

COSEL

Model		MUS15483R3	Temperature 25°C																																																				
Item		Efficiency (by Load Current)	Testing Circuitry Figure A																																																				
Object																																																							
1.Graph		—△— ---□--- ---○--- Input Volt. 36V Input Volt. 48V Input Volt. 76V Efficiency [%] Load Current [A]	2.Values																																																				
		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Efficiency [%]</th></tr><tr><th>Input Volt. 36[V]</th><th>Input Volt. 48[V]</th><th>Input Volt. 76[V]</th></tr><tr><td>0.00</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.90</td><td>82.3</td><td>81.3</td><td>78.1</td></tr><tr><td>1.80</td><td>87.5</td><td>86.8</td><td>84.9</td></tr><tr><td>2.70</td><td>89.1</td><td>88.7</td><td>86.4</td></tr><tr><td>3.60</td><td>89.0</td><td>89.2</td><td>87.8</td></tr><tr><td>4.50</td><td>88.1</td><td>88.8</td><td>88.2</td></tr><tr><td>4.95</td><td>87.5</td><td>88.5</td><td>88.3</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>			Load Current [A]	Efficiency [%]			Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]	0.00	-	-	-	0.90	82.3	81.3	78.1	1.80	87.5	86.8	84.9	2.70	89.1	88.7	86.4	3.60	89.0	89.2	87.8	4.50	88.1	88.8	88.2	4.95	87.5	88.5	88.3	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Efficiency [%]																																																						
	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]																																																				
0.00	-	-	-																																																				
0.90	82.3	81.3	78.1																																																				
1.80	87.5	86.8	84.9																																																				
2.70	89.1	88.7	86.4																																																				
3.60	89.0	89.2	87.8																																																				
4.50	88.1	88.8	88.2																																																				
4.95	87.5	88.5	88.3																																																				
--	-	-	-																																																				
--	-	-	-																																																				
--	-	-	-																																																				
--	-	-	-																																																				
Note: Slanted line shows the range of the rated load current.																																																							

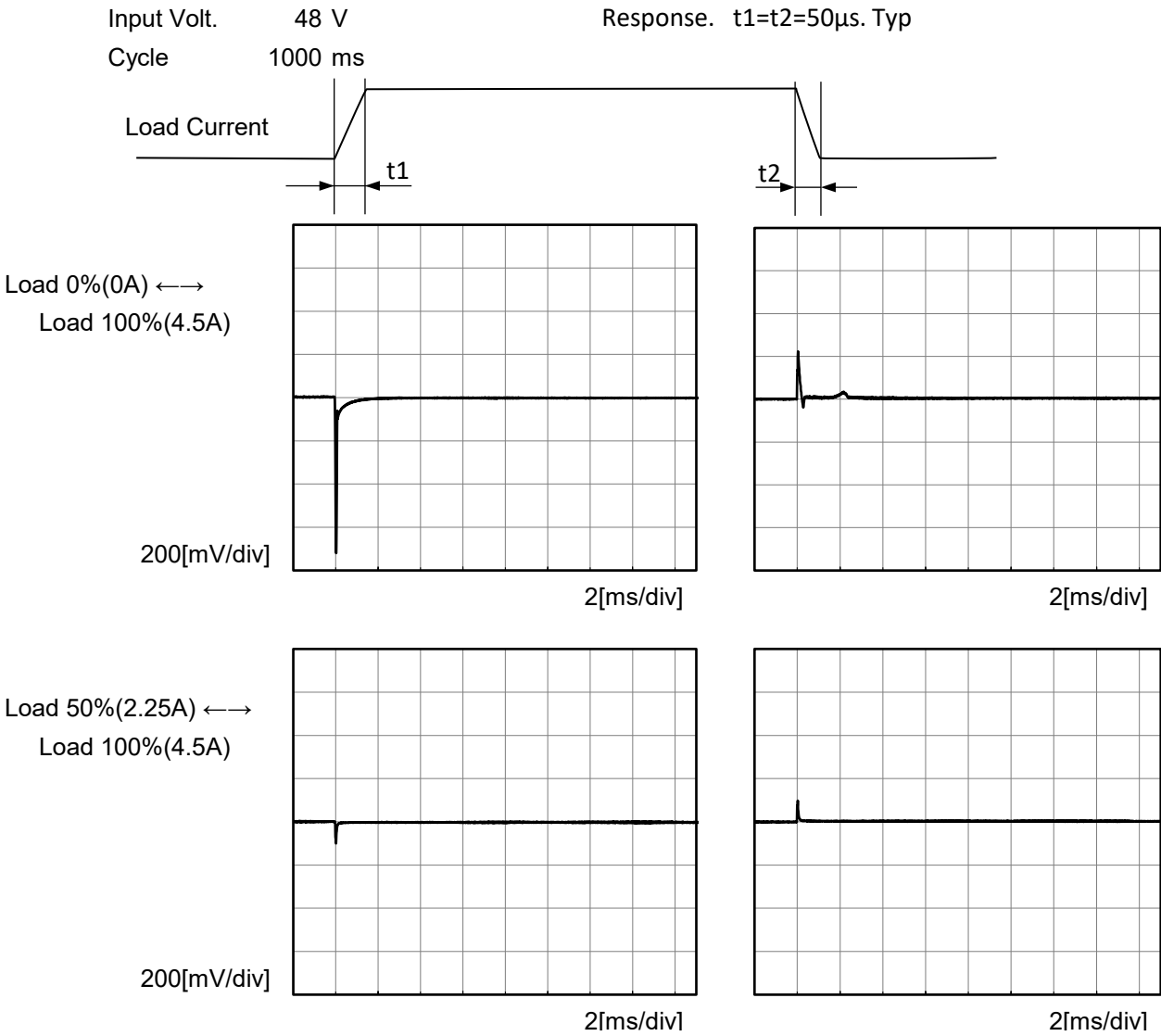
Model		MUS15483R3	Temperature		25°C
Item		Line Regulation	Testing Circuitry		Figure A
Object		+3.3V4.5A			
1.Graph			2.Values		
Load 50% Load 100% Output Voltage [V]					

COSEL

Model	MUS15483R3																																																					
Item	Load Regulation	Temperature	25°C																																																			
Object	+3.3V4.5A	Testing Circuitry	Figure A																																																			
1.Graph		2.Values																																																				
Input Volt. 36V Input Volt. 48V Input Volt. 76V Note: Slanted line shows the range of the rated load current.		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 36[V]</th><th>Input Volt. 48[V]</th><th>Input Volt. 76[V]</th></tr><tr><td>0.00</td><td>3.333</td><td>3.333</td><td>3.333</td></tr><tr><td>0.90</td><td>3.333</td><td>3.333</td><td>3.333</td></tr><tr><td>1.80</td><td>3.332</td><td>3.332</td><td>3.332</td></tr><tr><td>2.70</td><td>3.331</td><td>3.331</td><td>3.331</td></tr><tr><td>3.60</td><td>3.330</td><td>3.330</td><td>3.330</td></tr><tr><td>4.50</td><td>3.328</td><td>3.328</td><td>3.329</td></tr><tr><td>4.95</td><td>3.327</td><td>3.328</td><td>3.328</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>		Load Current [A]	Output Voltage [V]			Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]	0.00	3.333	3.333	3.333	0.90	3.333	3.333	3.333	1.80	3.332	3.332	3.332	2.70	3.331	3.331	3.331	3.60	3.330	3.330	3.330	4.50	3.328	3.328	3.329	4.95	3.327	3.328	3.328	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Load Current [A]	Output Voltage [V]																																																					
	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]																																																			
0.00	3.333	3.333	3.333																																																			
0.90	3.333	3.333	3.333																																																			
1.80	3.332	3.332	3.332																																																			
2.70	3.331	3.331	3.331																																																			
3.60	3.330	3.330	3.330																																																			
4.50	3.328	3.328	3.329																																																			
4.95	3.327	3.328	3.328																																																			
--	--	--	--																																																			
--	--	--	--																																																			
--	--	--	--																																																			
--	--	--	--																																																			
Item	Ripple-Noise	Temperature	25°C																																																			
Object	+3.3V4.5A	Testing Circuitry	Figure B																																																			
1.Graph																																																						
Input Voltage 48V Load 100% 20[mV/div] 2[μs/div]																																																						



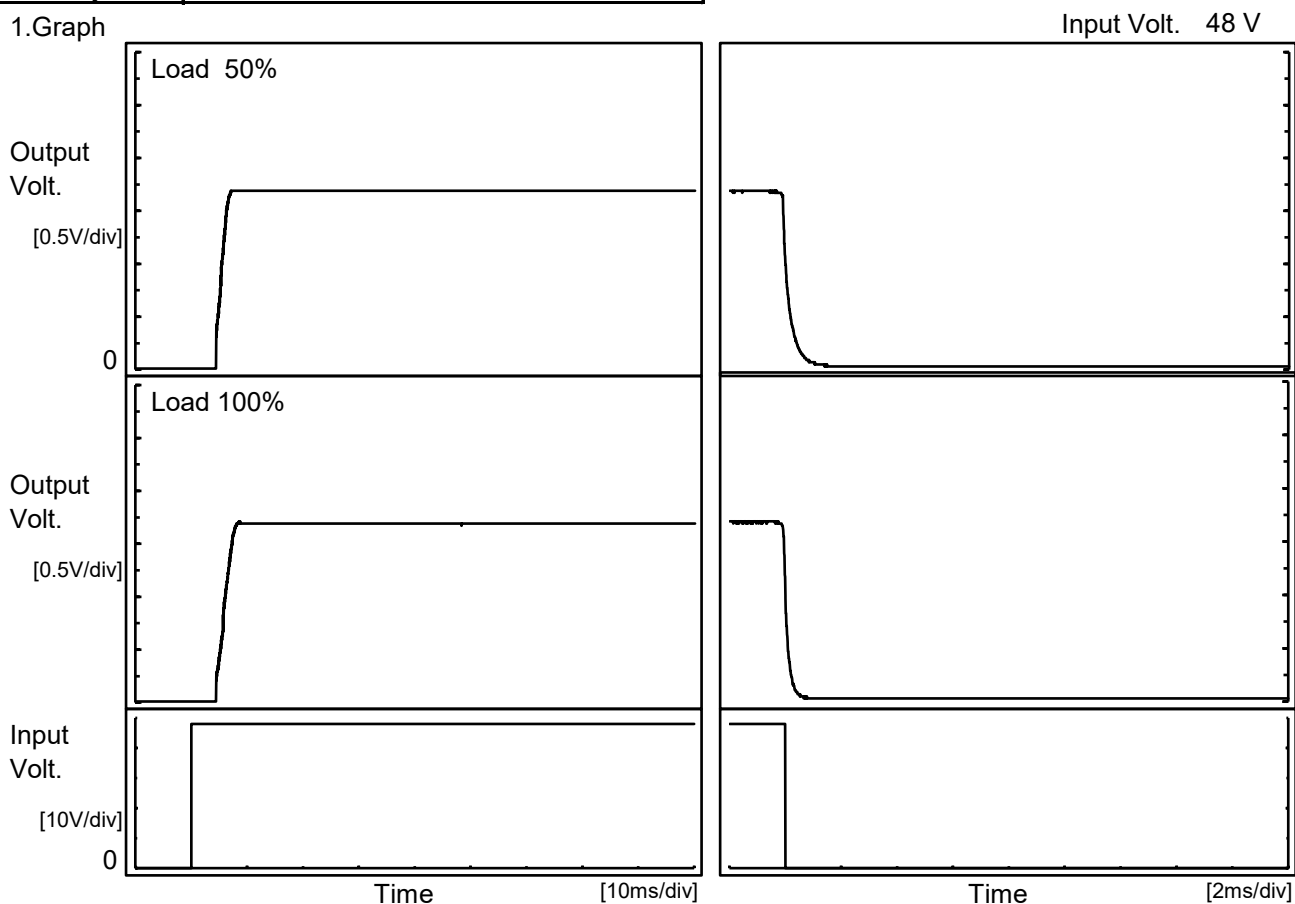
Model		MUS15483R3	Temperature 25°C Testing Circuitry Figure A
Item		Dynamic Load Response	
Object		+3.3V4.5A	



COSEL

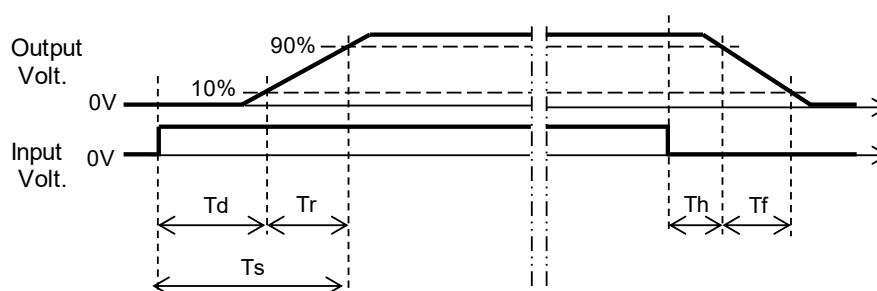
Model	MUS15483R3	Temperature 25°C Testing Circuitry Figure A
Item	Rise and Fall Time	
Object	+3.3V4.5A	

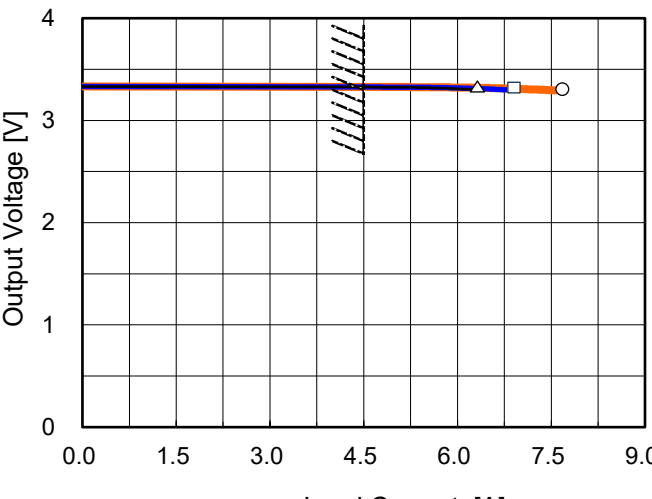
1.Graph



2.Values

		[ms]				
Load	Time	Td	Tr	Ts	Th	Tf
50 %		3.1	3.2	6.3	0.1	0.6
100 %		4.4	2.9	7.3	0.1	0.3



Model	MUS15483R3																																																									
Item	Overcurrent Protection	Temperature	25°C																																																							
		Testing Circuitry	Figure A																																																							
Object	+3.3V4.5A																																																									
1.Graph		2.Values																																																								
Input Volt. 36V Input Volt. 48V Input Volt. 76V  Note: Slanted line shows the range of the rated load current.		<table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="3">Load Current [A]</th></tr><tr><th>Input Volt. 36[V]</th><th>Input Volt. 48[V]</th><th>Input Volt. 76[V]</th></tr><tr><td>3.30</td><td>6.31</td><td>6.83</td><td>7.57</td></tr><tr><td>3.14</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2.97</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2.64</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2.31</td><td>-</td><td>-</td><td>-</td></tr><tr><td>1.98</td><td>-</td><td>-</td><td>-</td></tr><tr><td>1.65</td><td>-</td><td>-</td><td>-</td></tr><tr><td>1.32</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.99</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.66</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.33</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.00</td><td>-</td><td>-</td><td>-</td></tr></table>		Output Voltage [V]	Load Current [A]			Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]	3.30	6.31	6.83	7.57	3.14	-	-	-	2.97	-	-	-	2.64	-	-	-	2.31	-	-	-	1.98	-	-	-	1.65	-	-	-	1.32	-	-	-	0.99	-	-	-	0.66	-	-	-	0.33	-	-	-	0.00	-	-	-
Output Voltage [V]	Load Current [A]																																																									
	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]																																																							
3.30	6.31	6.83	7.57																																																							
3.14	-	-	-																																																							
2.97	-	-	-																																																							
2.64	-	-	-																																																							
2.31	-	-	-																																																							
1.98	-	-	-																																																							
1.65	-	-	-																																																							
1.32	-	-	-																																																							
0.99	-	-	-																																																							
0.66	-	-	-																																																							
0.33	-	-	-																																																							
0.00	-	-	-																																																							



		Testing Circuitry Figure A
Model	MUS15483R3	
Item	Ambient Temperature Drift	
Object	+3.3V4.5A	

1.Values

Load 100%

Ambient Temperature[°C]	Output Voltage [V]		
	Input Volt. 36V	Input Volt. 48V	Input Volt. 76V
-40	3.318	3.318	3.318
25	3.328	3.328	3.329
85	3.320	3.321	3.322

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+3.3V4.5A	

1.Values

Ambient Temperature[°C]	Input Voltage [V]	
	Load 50%	Load 100%
-40	28.3	28.4
25	28.4	28.5
85	28.5	28.6

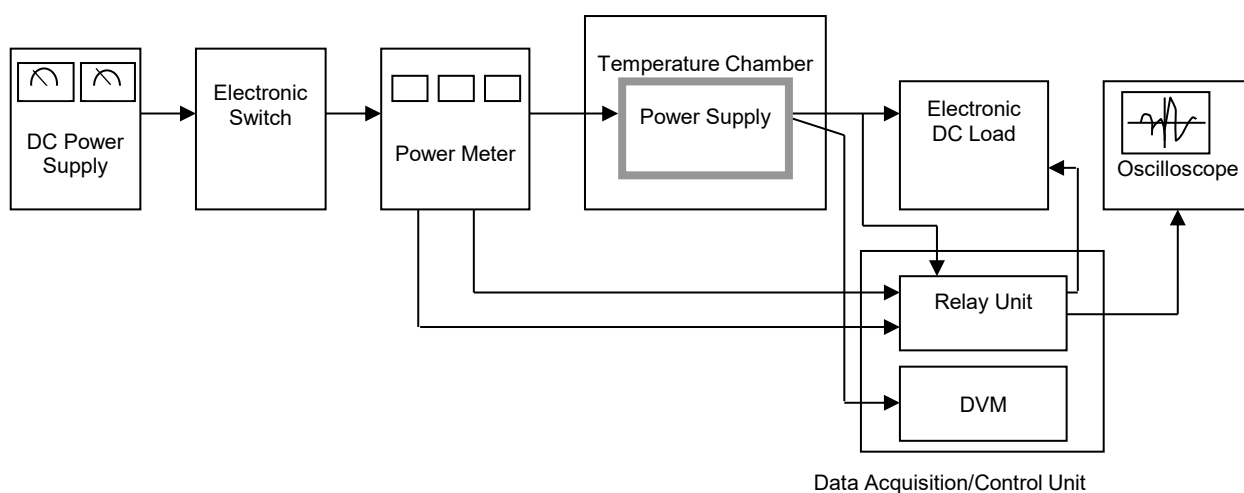


Figure A

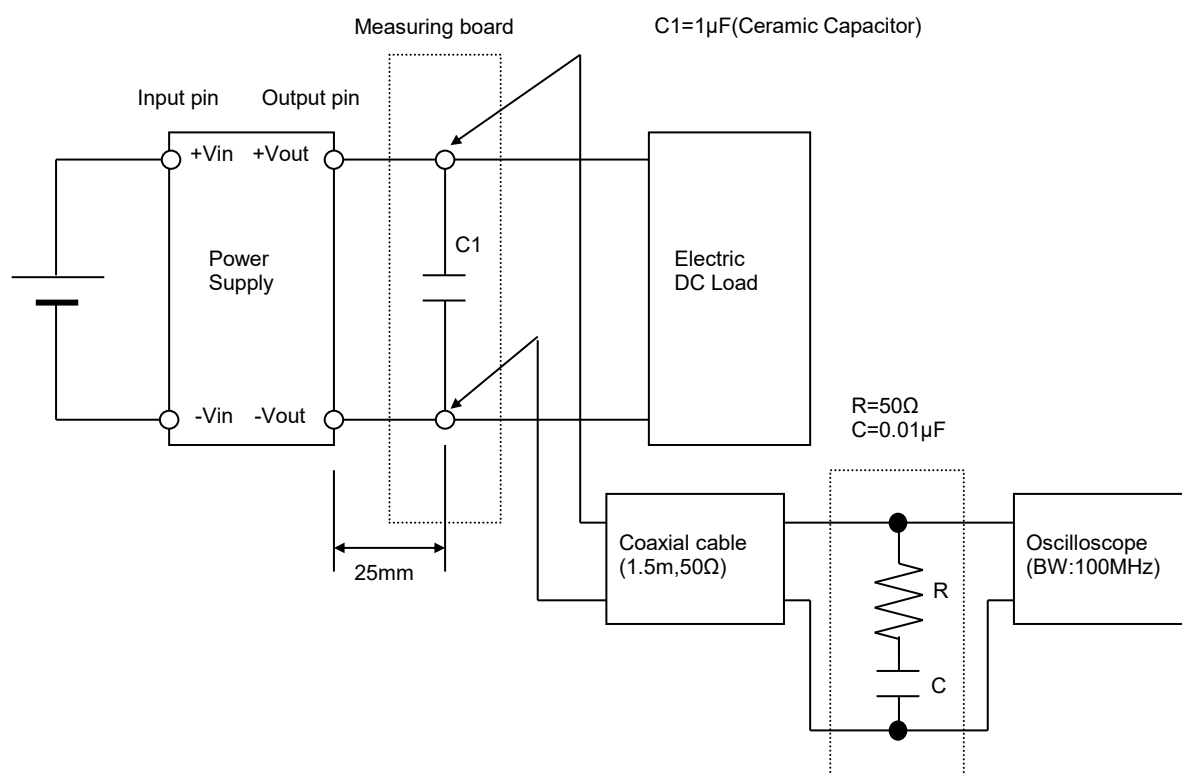


Figure B