

TEST DATA OF MUS1R54815

Regulated DC Power Supply
February 4, 2025

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Design Manager

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Design Engineer

COSEL CO.,LTD.



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Item	Input Current (by Load Current)	Temperature 25°C	Testing Circuitry Figure A																																																			
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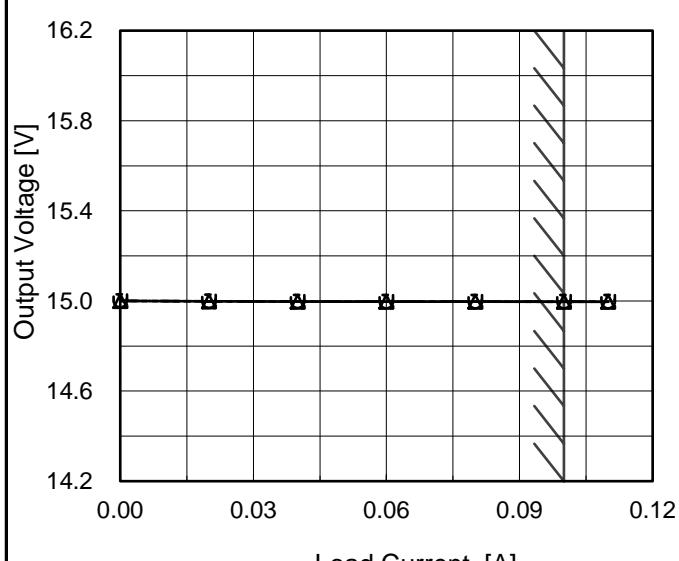
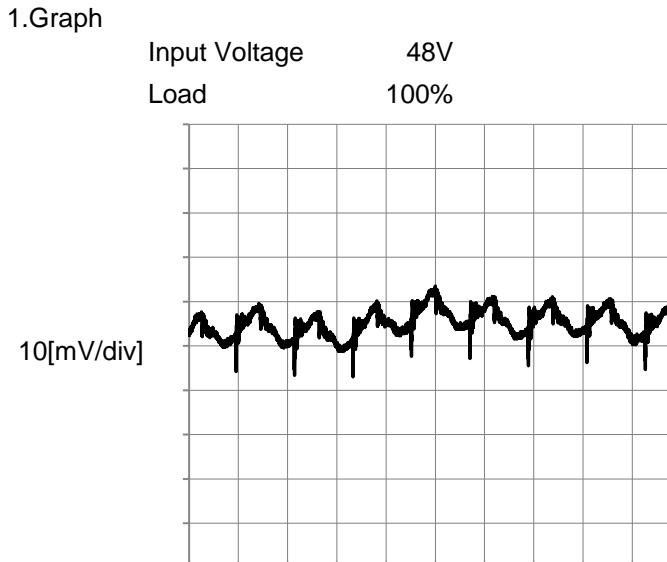
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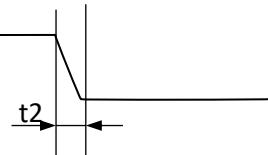
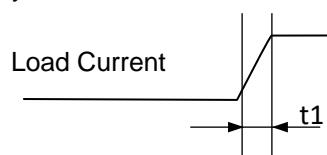
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Item	Load Regulation	Testing Circuitry	Figure A																																																			
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Item	Ripple-Noise	Temperature	25°C																																																			
Object	+15V0.1A	Testing Circuitry	Figure B																																																			
1.Graph	<p>Input Voltage 48V Load 100%</p> 																																																					

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Model	MUS1R54815	Temperature Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+15V0.1A	

Input Volt. 48 V
 Cycle 1000 ms

Response. $t_1=t_2=50\mu\text{s}$. Typ

Load 0%(0A) \longleftrightarrow
 Load 100%(0.1A)

200[mV/div]

1[ms/div]

1[ms/div]

Load 50%(0.05A) \longleftrightarrow
 Load 100%(0.1A)

200[mV/div]

1[ms/div]

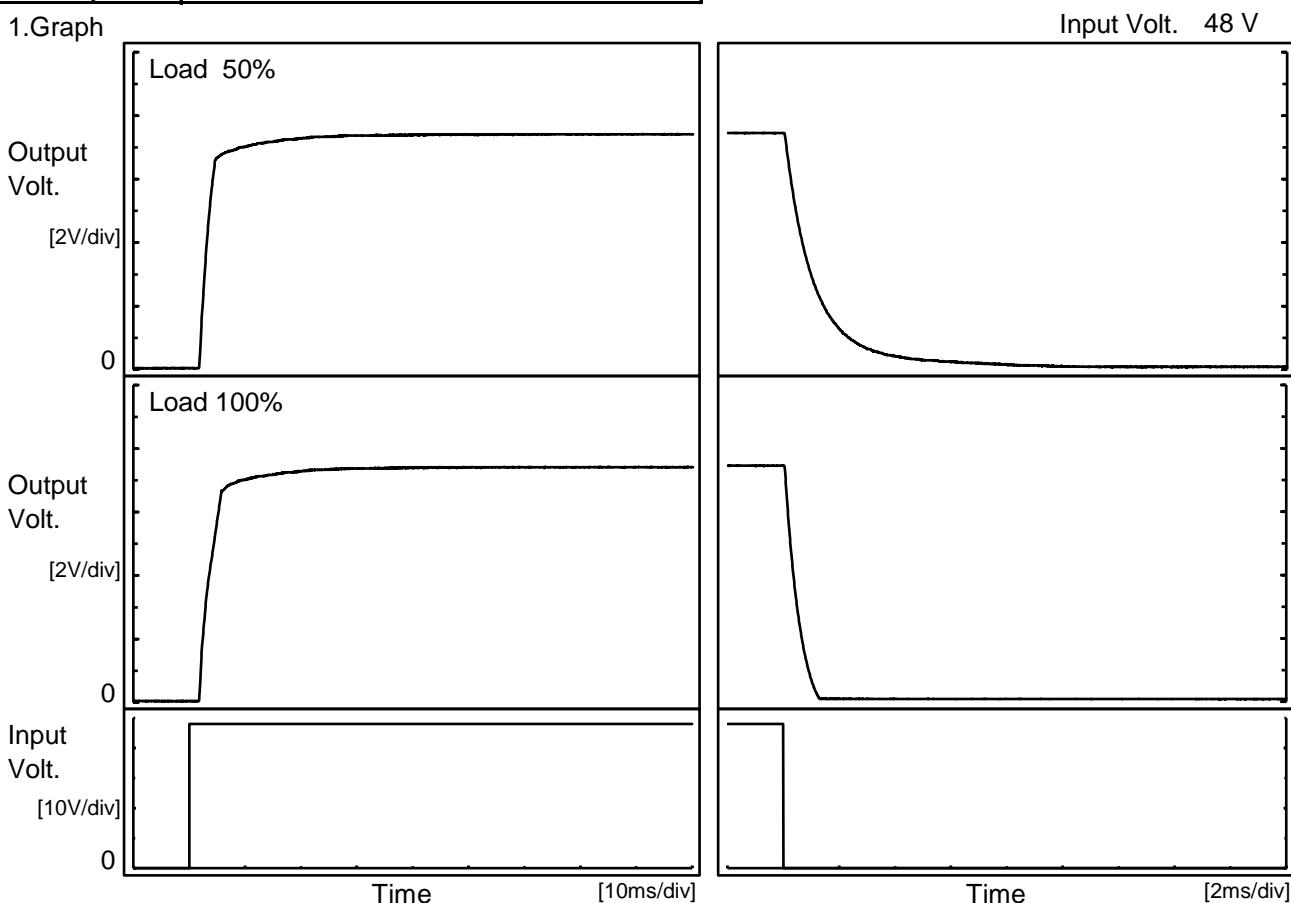
1[ms/div]

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Model	MUS1R54815
Item	Rise and Fall Time
Object	+15V0.1A

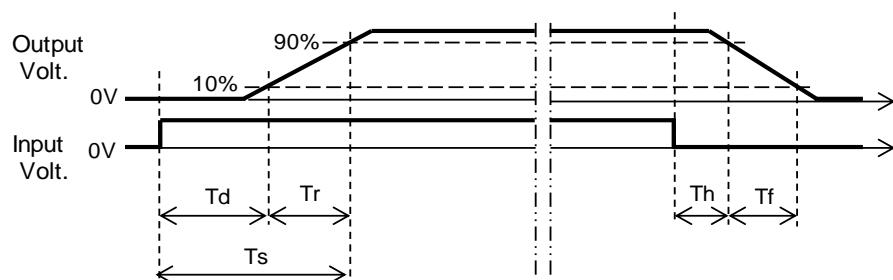
Temperature 25°C
Testing Circuitry Figure A

1. Graph



2. Values

Load	Time	Td	Tr	Ts	Th	Tf	[ms]
50 %		2.0	3.9	5.9	0.1	2.6	
100 %		2.0	4.7	6.7	0.1	0.9	



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Item	Overcurrent Protection																																																									
Object	+15V0.1A																																																									
1.Graph	Input Volt. 36V Input Volt. 48V Input Volt. 76V	2.Values																																																								
	<p>The graph plots Output Voltage [V] on the y-axis (0 to 20) against Load Current [A] on the x-axis (0 to 0.6). Three curves are shown for Input Voltages of 36V, 48V, and 76V. All curves start at approximately 15V at low load currents and decrease as load current increases. A slanted line is drawn from (0.1, 15) to (0.4, 0).</p>	<table border="1"> <thead> <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> </thead> <tbody> <tr><td>14.25</td><td>0.16</td><td>0.18</td><td>0.20</td></tr> <tr><td>13.50</td><td>0.17</td><td>0.18</td><td>0.21</td></tr> <tr><td>12.00</td><td>0.18</td><td>0.20</td><td>0.22</td></tr> <tr><td>10.50</td><td>0.20</td><td>0.21</td><td>0.24</td></tr> <tr><td>9.00</td><td>0.21</td><td>0.23</td><td>0.26</td></tr> <tr><td>7.50</td><td>0.23</td><td>0.25</td><td>0.28</td></tr> <tr><td>6.00</td><td>0.25</td><td>0.27</td><td>0.30</td></tr> <tr><td>4.50</td><td>0.28</td><td>0.30</td><td>0.33</td></tr> <tr><td>3.00</td><td>0.31</td><td>0.33</td><td>0.35</td></tr> <tr><td>1.50</td><td>0.35</td><td>0.36</td><td>0.37</td></tr> <tr><td>0.00</td><td>0.39</td><td>0.40</td><td>0.51</td></tr> <tr><td>--</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table>	Output Voltage [V]	Load Current [A]			Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]	14.25	0.16	0.18	0.20	13.50	0.17	0.18	0.21	12.00	0.18	0.20	0.22	10.50	0.20	0.21	0.24	9.00	0.21	0.23	0.26	7.50	0.23	0.25	0.28	6.00	0.25	0.27	0.30	4.50	0.28	0.30	0.33	3.00	0.31	0.33	0.35	1.50	0.35	0.36	0.37	0.00	0.39	0.40	0.51	--	-	-	-	
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Note: Slanted line shows the range of the rated load current.



Model	MUS1R54815	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+15V0.1A	

1.Values

Load 100%

Ambient Temperature[°C]	Output Voltage [V]		
	Input Volt. 36V	Input Volt. 48V	Input Volt. 76V
-40	14.894	14.896	14.897
25	14.996	14.997	14.998
85	15.026	15.027	15.027

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+15V0.1A	

1.Values

Ambient Temperature[°C]	Input Voltage [V]	
	Load 50%	Load 100%
-40	28.6	28.5
25	28.6	28.7
85	28.7	28.7

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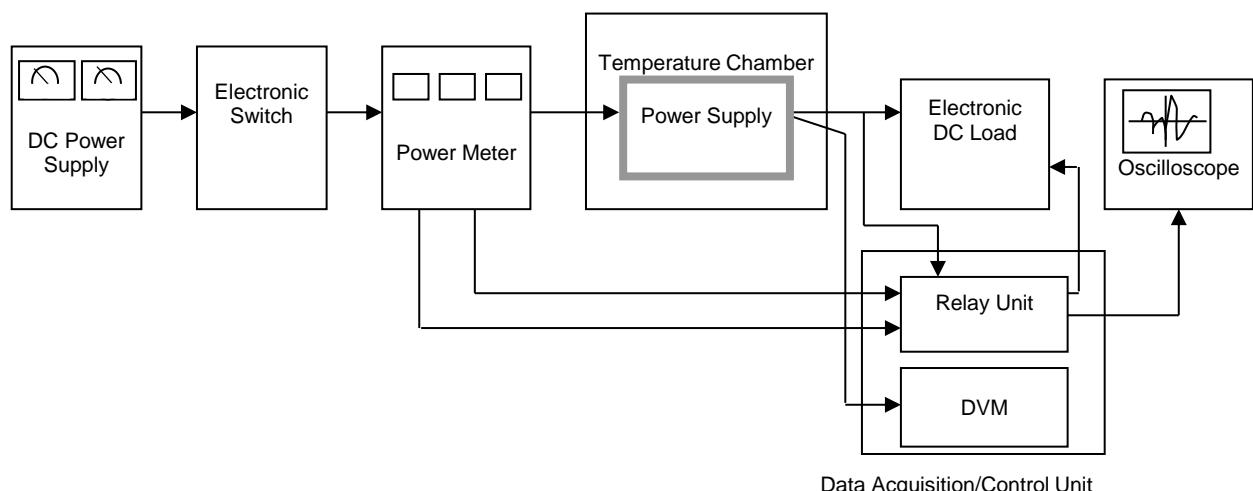


Figure A

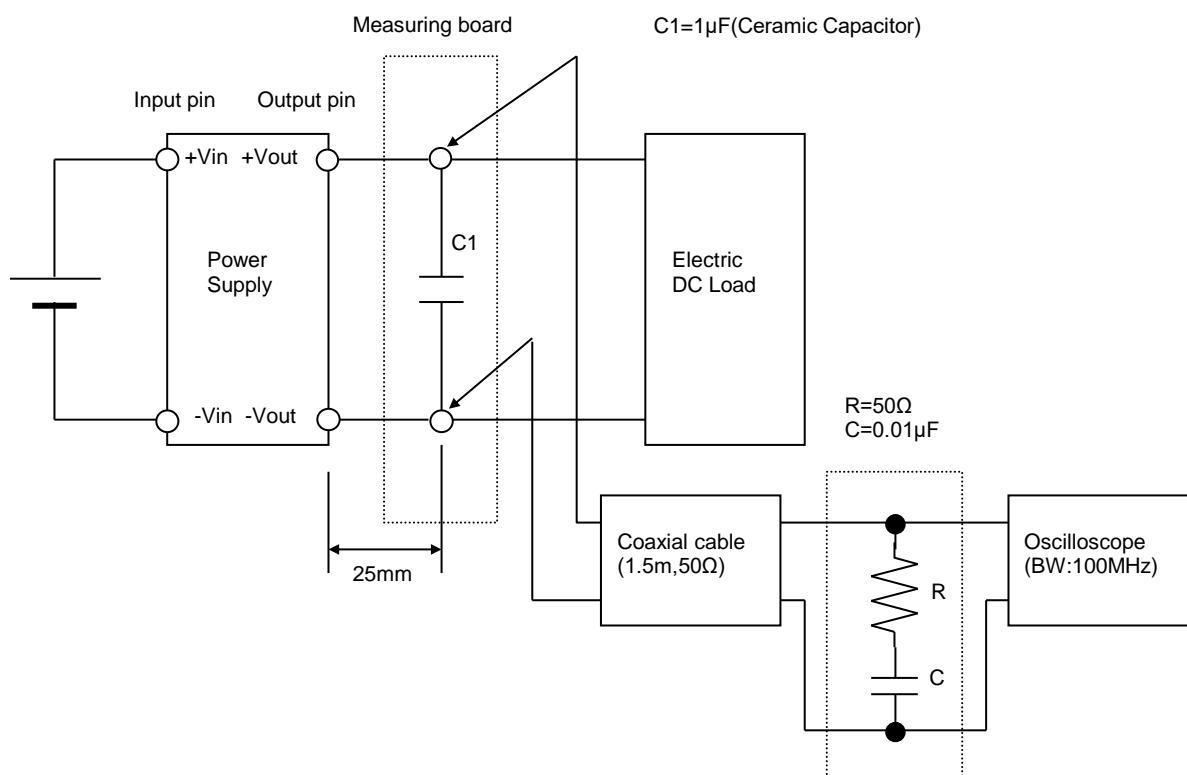


Figure B