

# TEST DATA OF STMGFS802412

Regulated DC Power Supply  
May 18, 2021

Approved by : Hironobu Shimizu Design Manager

Prepared by : Hikaru Inagaki Design Engineer

**COSEL CO.,LTD.**

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# COSEL

Model		STMGFS802412		Temperature 25°C																																																																												
Item		Input Current (by Load Current)		Testing Circuitry Figure A																																																																												
Object																																																																																
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<div><div>Input Current [A]</div><div><div>0.0 2.0 4.0 6.0 8.0</div><div>0.0 3.2 6.4 9.6 12.8 16.0</div><div>Load Current [A]</div></div></div>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Input 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>0.0</td><td>0.093</td><td>0.075</td><td>0.058</td><td>0.049</td><td>0.013</td></tr><tr><td>1.3</td><td>1.928</td><td>1.441</td><td>0.965</td><td>0.731</td><td>0.502</td></tr><tr><td>2.7</td><td>4.016</td><td>2.950</td><td>1.956</td><td>1.473</td><td>0.992</td></tr><tr><td>4.0</td><td>5.942</td><td>4.401</td><td>2.883</td><td>2.162</td><td>1.450</td></tr><tr><td>4.7</td><td>7.044</td><td>5.162</td><td>3.376</td><td>2.526</td><td>1.696</td></tr><tr><td>5.4</td><td>- ※1</td><td>5.952</td><td>3.893</td><td>2.903</td><td>1.937</td></tr><tr><td>6.7</td><td>- ※1</td><td>- ※2</td><td>4.848</td><td>3.600</td><td>2.399</td></tr><tr><td>7.4</td><td>- ※1</td><td>- ※2</td><td>5.375</td><td>3.989</td><td>2.644</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>		Load Current [A]	Input Current [A]					Input Volt. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	0.0	0.093	0.075	0.058	0.049	0.013	1.3	1.928	1.441	0.965	0.731	0.502	2.7	4.016	2.950	1.956	1.473	0.992	4.0	5.942	4.401	2.883	2.162	1.450	4.7	7.044	5.162	3.376	2.526	1.696	5.4	- ※1	5.952	3.893	2.903	1.937	6.7	- ※1	- ※2	4.848	3.600	2.399	7.4	- ※1	- ※2	5.375	3.989	2.644	--	-	-	-	-	-	--	-	-	-	-	-	--	-	-	-	-	-
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Model		STMGFS802412	
Item		Line Regulation	
Object		+12V6.7A	
1.Graph		2.Values	

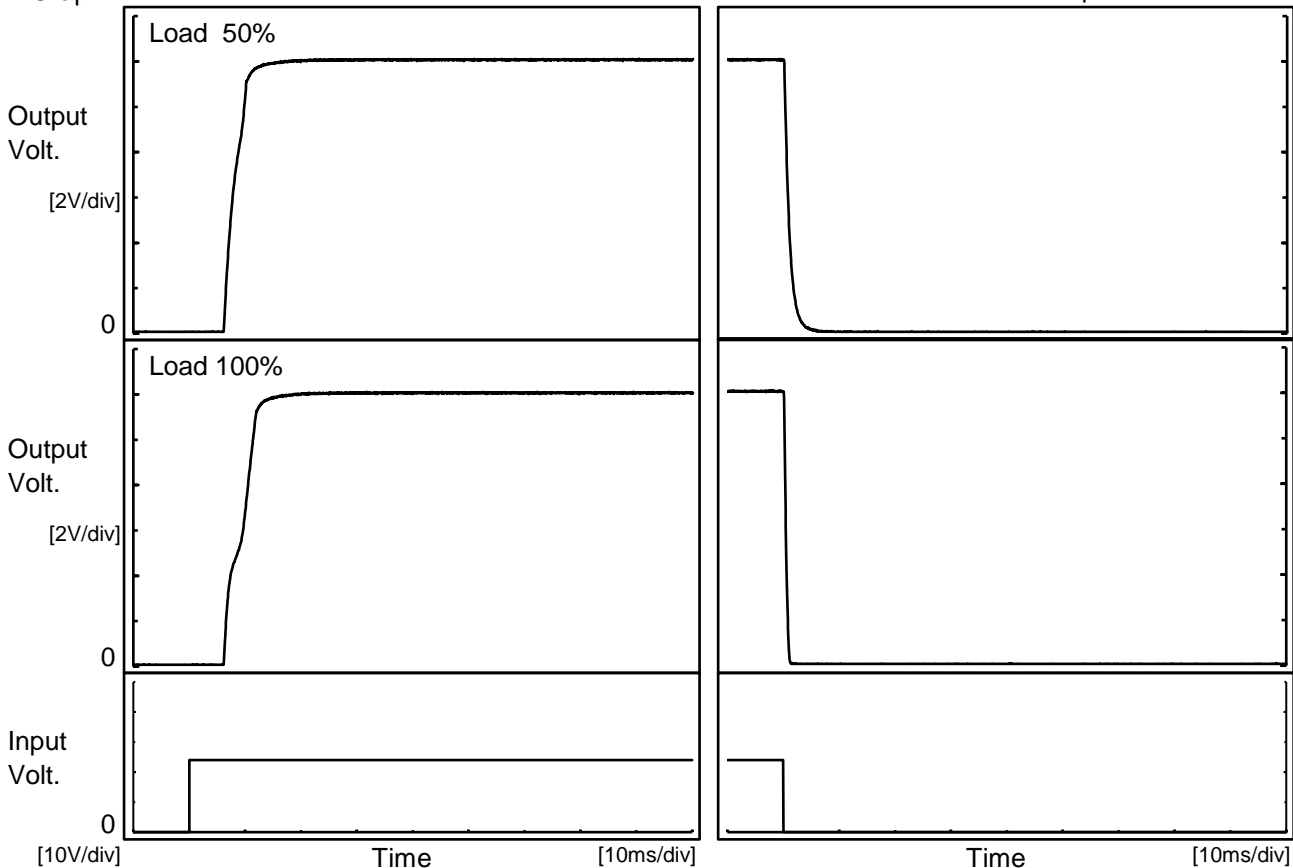
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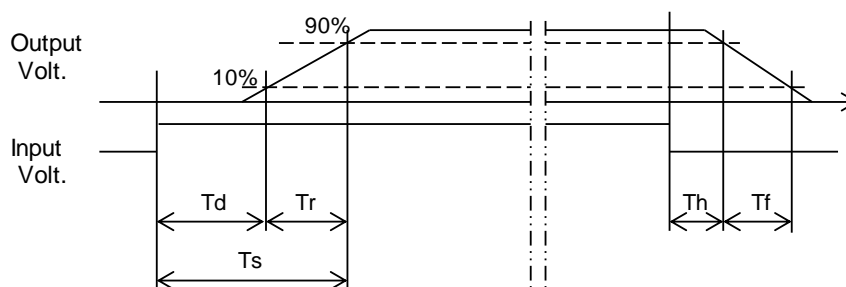
Model	STMGFS802412	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+12V6.7A		

# 1.Graph



# 2.Values

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	6.4	3.8	10.2	0.3	2.0
100 %	6.5	5.4	11.9	0.2	0.7



Model	STMGFS802412																																																																																							
Item	Overcurrent Protection		Temperature 25°C Testing Circuitry Figure A																																																																																					
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Model	STMGFS802412					
Item	Ambient Temperature Drift					
Object	+12V6.7A					
		Testing Circuitry    Figure A				
1.Values		Load 100%				
		Output Voltage [V]				
Ambient Temperature[°C]	Input Volt. 9V	Input Volt. 12V	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V	
-20	12.020	12.022	12.017	12.017	12.016	
25	12.053	12.052	12.047	12.047	12.046	
40	12.058	12.057	12.053	12.052	12.051	
Note: In case of input Volt.9V, Load 70%. 12V, Load 80%. Other case Load 100%.						
Item	Minimum Input Voltage for Regulated Output Voltage					
Object	+12V6.7A					
		Testing Circuitry    Figure A				
1.Values						
		Input Voltage [V]				
Ambient Temperature[°C]	Load 50%	Load 70%				
-20	7.6	7.6				
25	7.6	7.7				
40	7.6	7.6				
Item	Overvoltage Protection					
Object	+12V6.7A					
		Testing Circuitry    Figure A				
1.Values		Load 0%				
		Operating Point [V]				
Ambient Temperature[°C]	Input Volt. 9V	Input Volt. 12V	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V	
-20	14.80	14.80	14.80	14.80	14.80	
25	14.87	14.87	14.87	14.87	14.87	
40	14.87	14.87	14.87	14.87	14.87	

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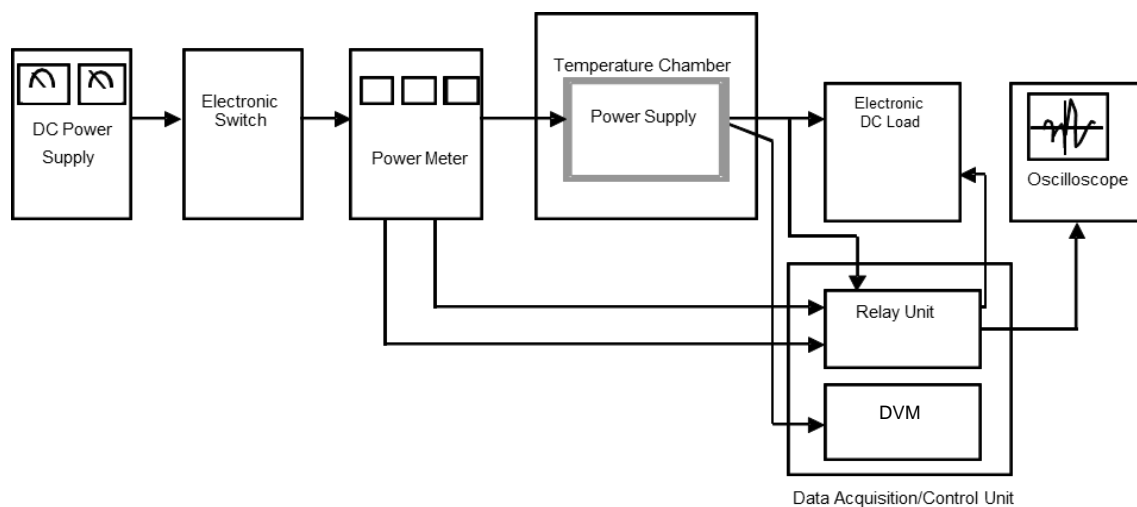


Figure A

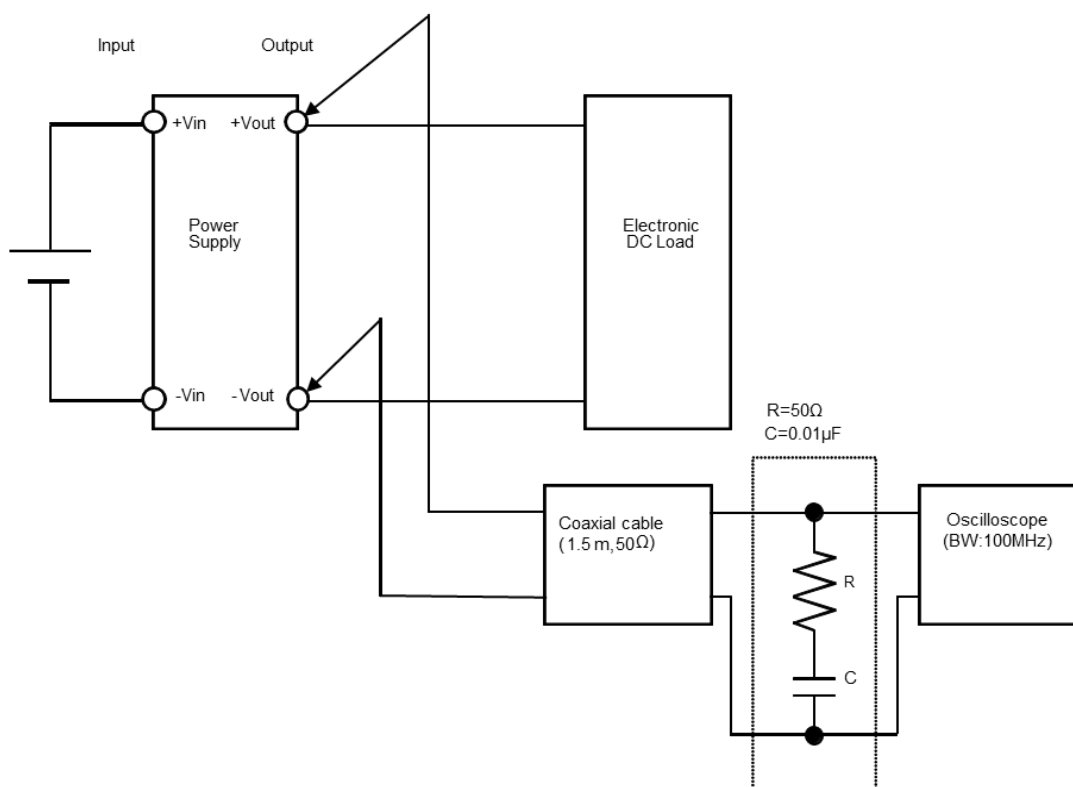


Figure B (Ripple noise Characteristic)