

TEST DATA OF SUTS32412

Regulated DC Power Supply
February 20, 2009

Approved by : Kazunari Asano
Kazunari Asano Design Manager

Prepared by : Sho Saito
Sho Saito Design Engineer

COSEL CO.,LTD.

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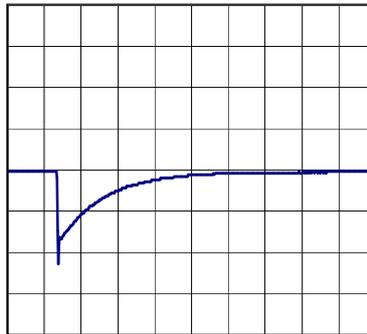
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Item		Dynamic Load Response		
Object		+12V0.25A		

Input Volt. 12 V
 Cycle 100 mS

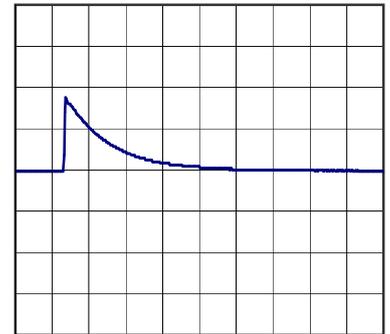


Min. Load (0A) ←→
 Load 100% (0.25A)

200mV/div



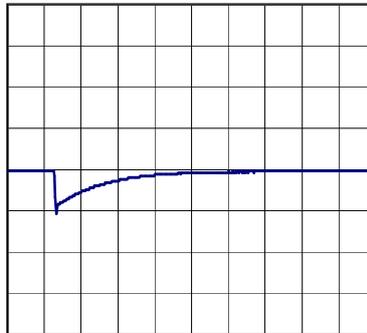
1ms/div



1ms/div

Min. Load (0A) ←→
 Load 50% (0.125A)

200mV/div



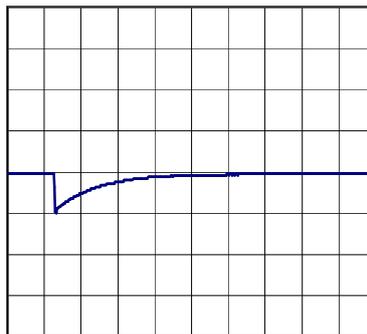
1ms/div



1ms/div

Load 50% (0.125A) ←→
 Load 100% (0.25A)

200mV/div



1ms/div



1ms/div

<p>Model SUTS32412</p>		<p>Temperature 25°C Testing Circuitry Figure B</p>																																						
Item	Ripple Voltage (by Load Current)																																							
Object	+12V0.25A																																							
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COSEL		
Model	SUTS32412	
Item	Output Voltage Accuracy	Testing Circuitry Figure A
Object	+12V0.25A	

1. Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -40 - 55°C

Input Voltage : 18 - 36V

Load Current : 0 - 0.25A

* Output Voltage Accuracy = $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

* Output Voltage Accuracy (Ration) =
$$\frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$$

2. Values

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ration [%]
Maximum Voltage	55	36	0	12.104	±32	±0.3
Minimum Voltage	-40	18	0.25	12.041		



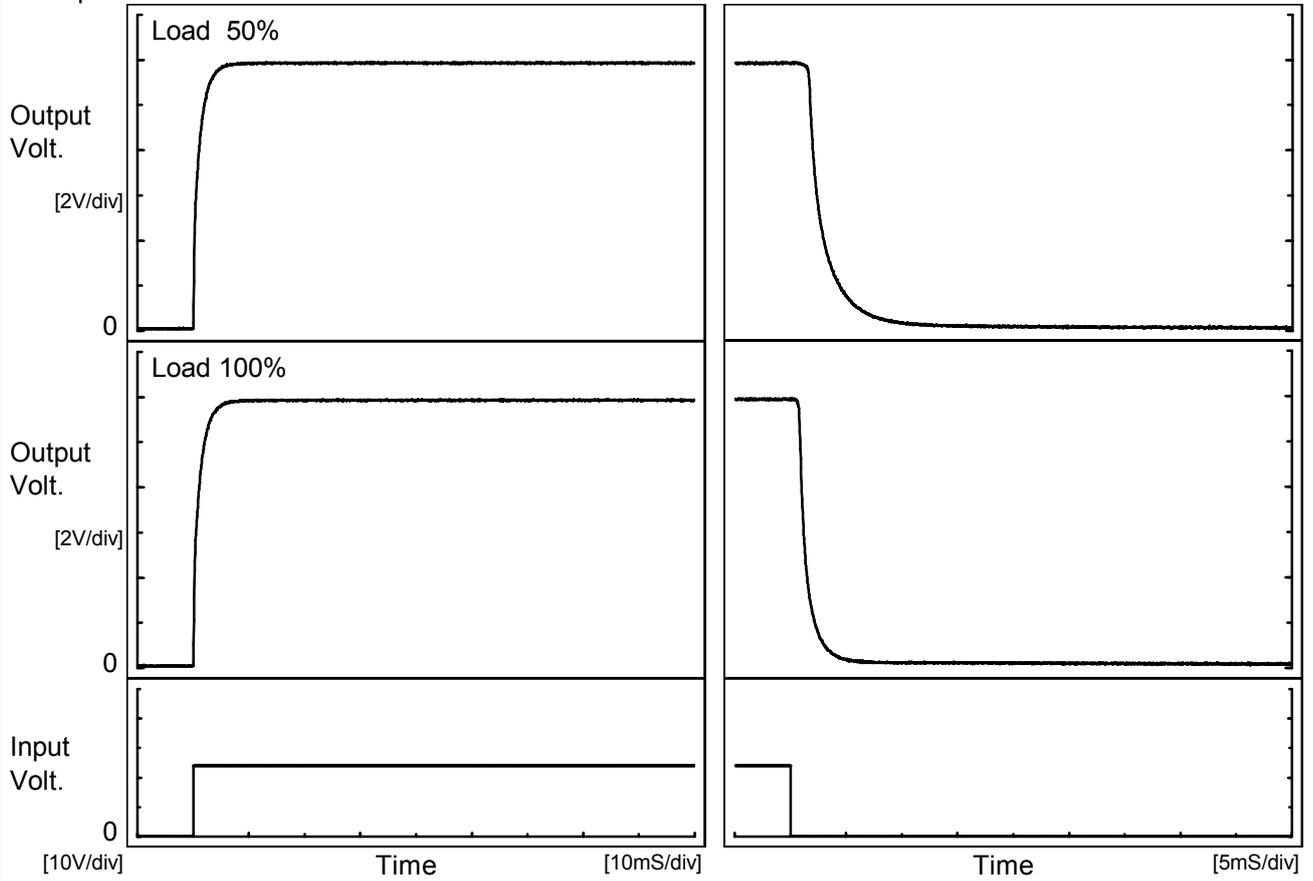
COSEL																									
Model	SUTS32412	Temperature	25°C																						
Item	Time Lapse Drift	Testing Circuitry	Figure A																						
Object	+12V0.25A																								
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COSEL		
Model	SUTS32412	
Item	Rise and Fall Time	Temperature 25°C Testing Circuitry Figure A
Object	+12V0.25A	

1. Graph

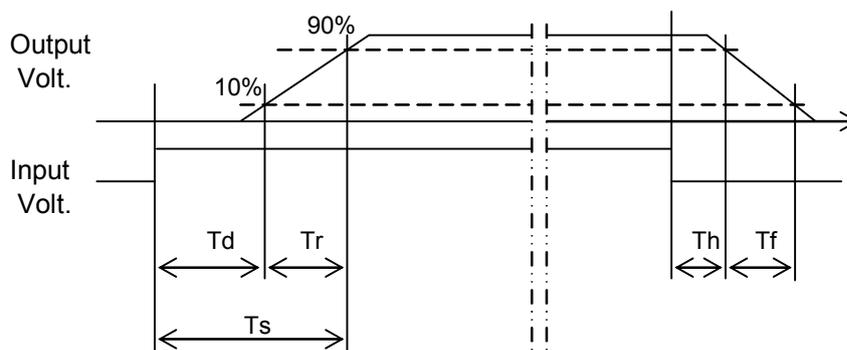
Input Volt. 24 V



2. Values

[mS]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	0.2	2.8	3.0	1.7	3.7
100 %	0.2	2.8	3.0	0.8	1.9

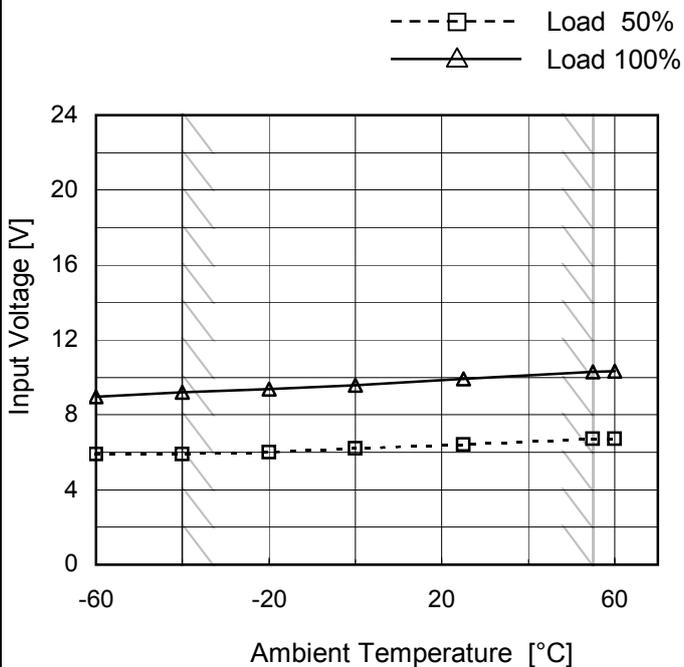




Model	SUTS32412
Item	Minimum Input Voltage for Regulated Output Voltage
Object	+12V0.25A

Testing Circuitry Figure A

1.Graph



2.Values

Ambient Temperature [°C]	Input Voltage [V]	
	Load 50%	Load 100%
-60	5.9	9.0
-40	5.9	9.2
-20	6.0	9.4
0	6.2	9.6
25	6.4	10.0
55	6.8	10.4
60	6.8	10.4
--	-	-
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--	-	-

Note: Slanted line shows the range of the rated ambient temperature.



COSEL																																																										
Model	SUTS32412	Temperature	25°C																																																							
Item	Overcurrent Protection	Testing Circuitry	Figure A																																																							
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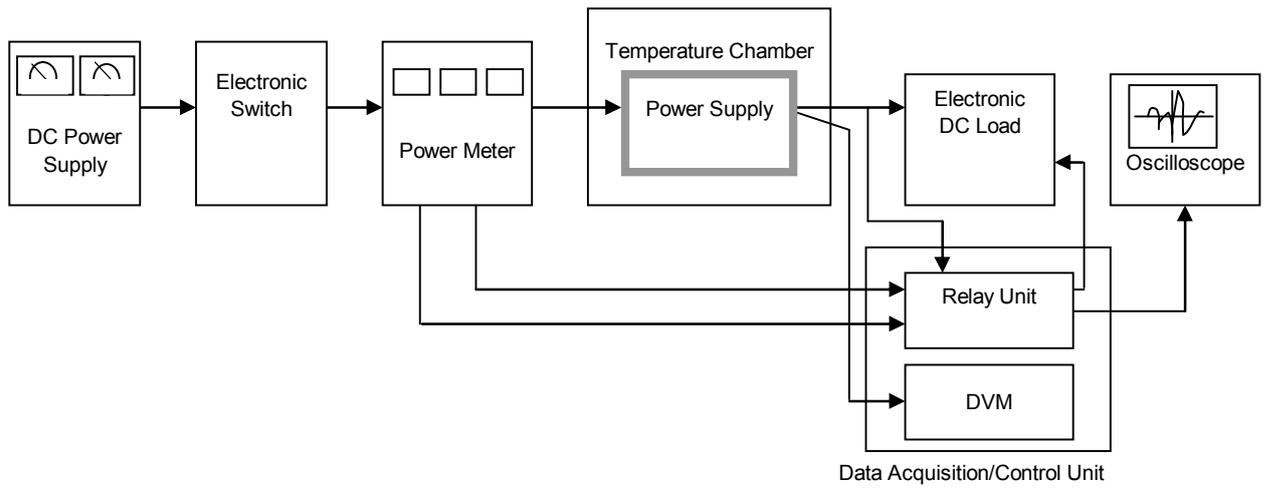


Figure A

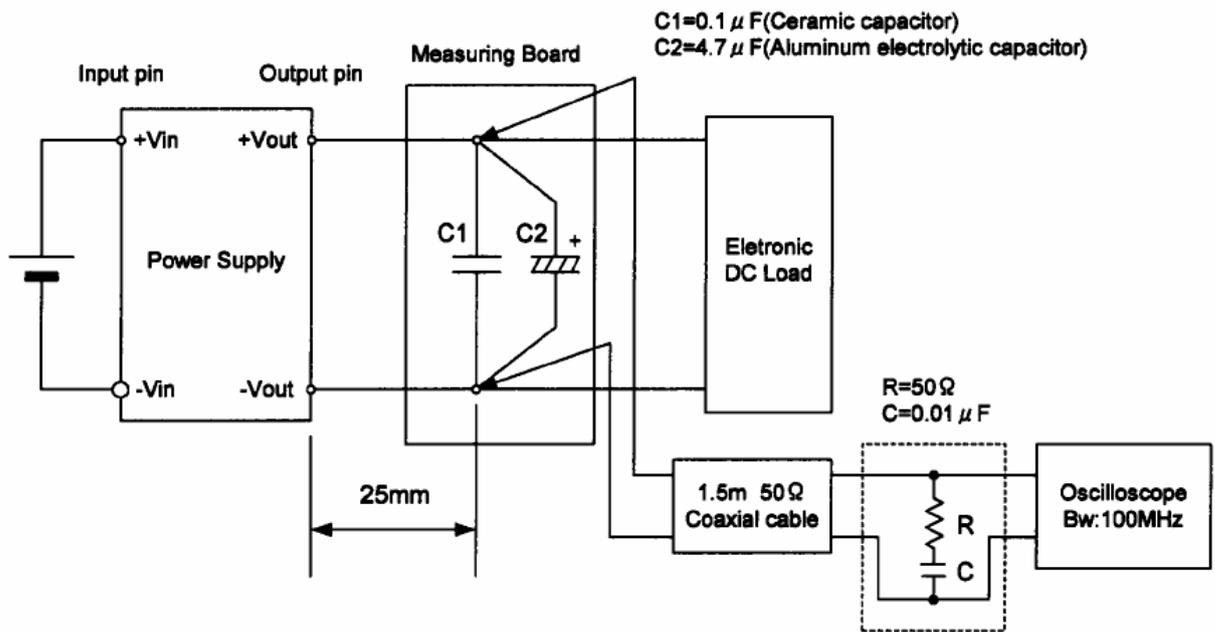


Figure B (Ripple and Ripple noise Characteristic)