

TEST DATA OF SUCS1R50512

Regulated DC Power Supply
Sep 15, 2004

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Tetsuo Sugimori Design Manager

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Masahiro Shima Design Engineer

COSEL CO.,LTD.

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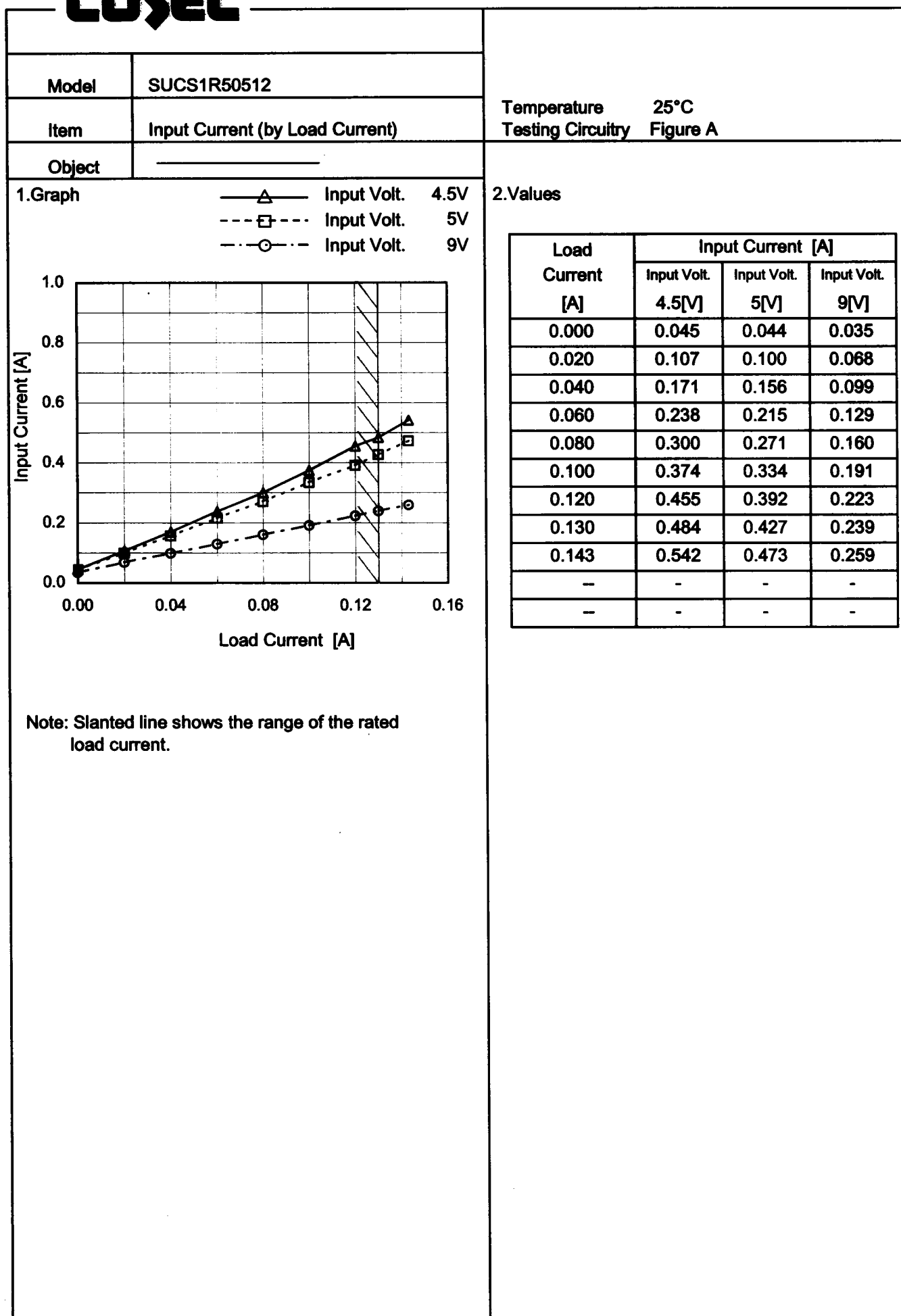
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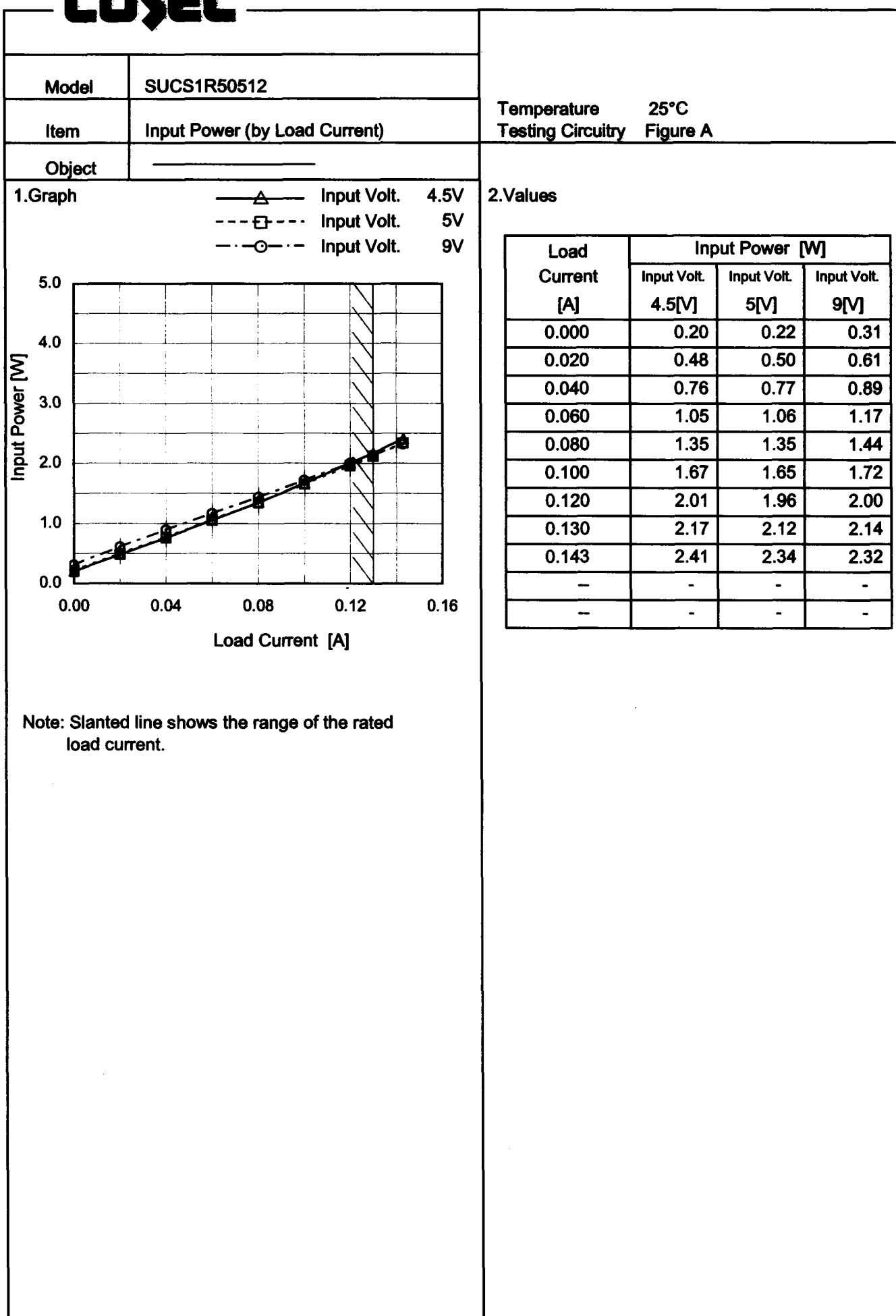
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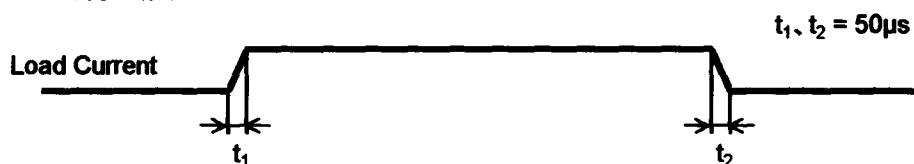
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Note: Slanted line shows the range of the rated load current.																																																						

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Model	SUCS1R50512	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+12V0.13A	

Input Volt. 5 V
Cycle 100 mS



Min. Load (0A) \longleftrightarrow
Load 100% (0.13A)

100mV/div



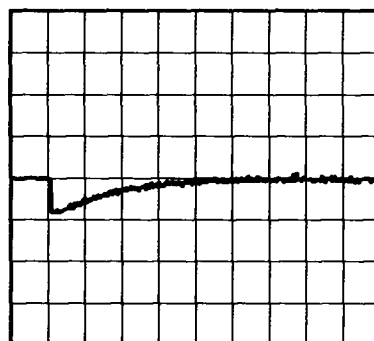
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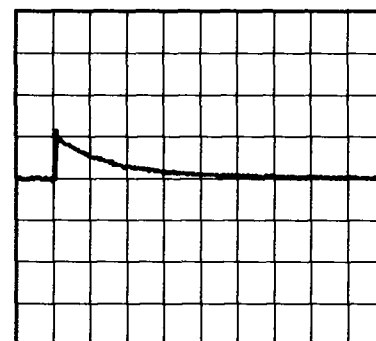
2ms/div

Min. Load (0A) \longleftrightarrow
Load 50% (0.065A)

100mV/div



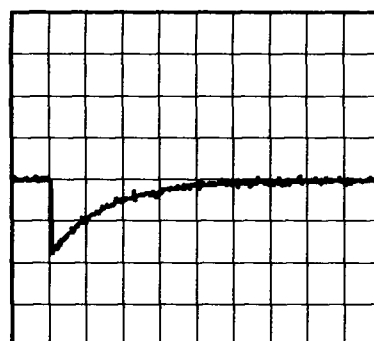
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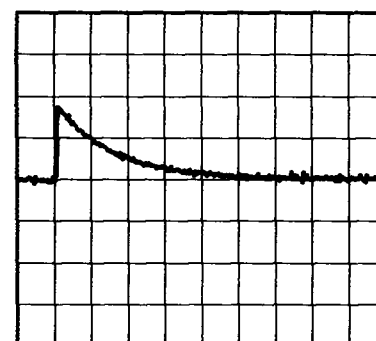
2ms/div

Load 50% (0.065A) \longleftrightarrow
Load 100% (0.13A)

100mV/div



2ms/div



2ms/div

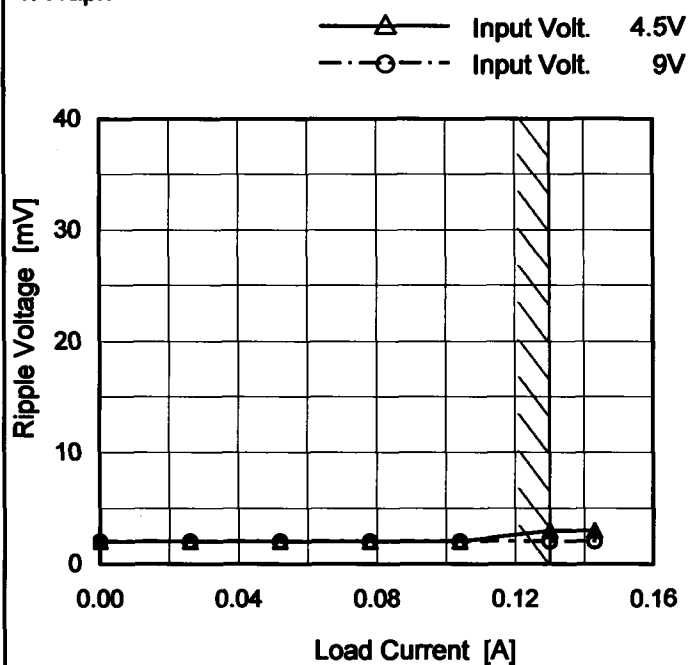
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Model SUCS1R50512

Item Ripple Voltage (by Load Current)

Object +12V0.13A

Temperature 25°C
Testing Circuitry Figure B

1. Graph


Measured by 100 MHz Oscilloscope.

Ripple Voltage is shown as p-p in the figure below.

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

Ripple [mVp-p]

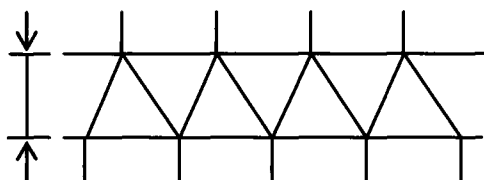
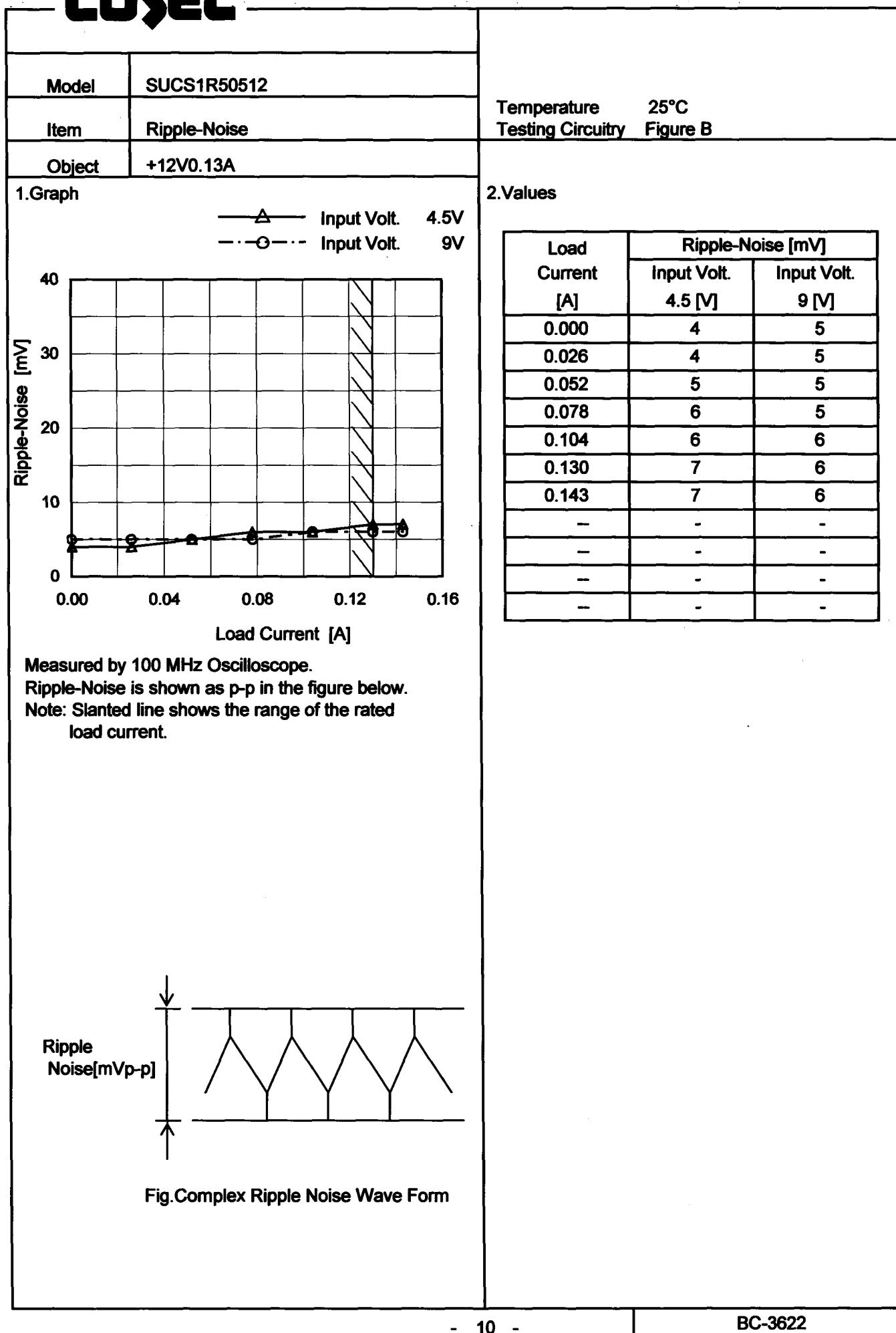


Fig. Complex Ripple Wave Form

2. Values

Load Current [A]	Ripple Voltage [mV]	
	Input Volt. 4.5 [V]	Input Volt. 9 [V]
0.000	2	2
0.026	2	2
0.052	2	2
0.078	2	2
0.104	2	2
0.130	3	2
0.143	3	2
-	-	-
-	-	-
-	-	-
-	-	-

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Model

SUCS1R50512

Item

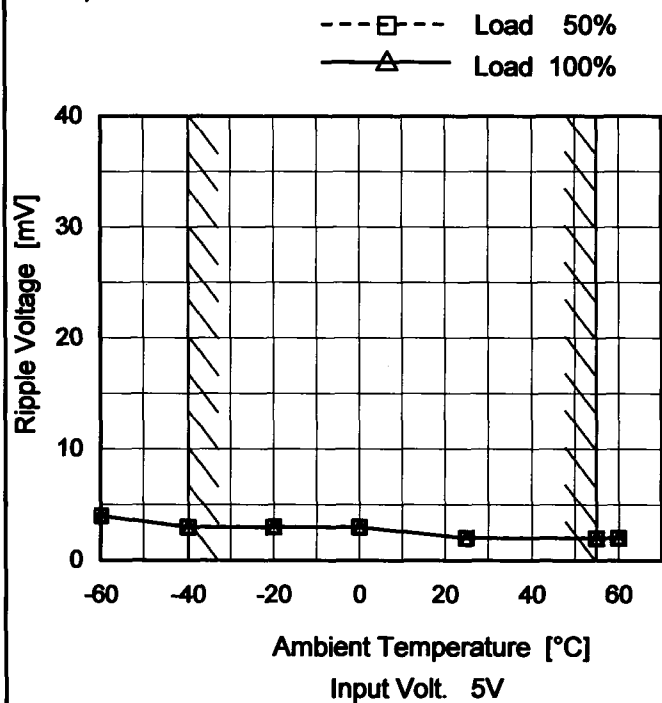
Ripple Voltage (by Ambient Temp.)

Object

+12V0.13A

Testing Circuitry Figure B

1. Graph



Measured by 100 MHz Oscilloscope.

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

2. Values

Ambient Temperature [°C]	Ripple Voltage [mV]	
	Load 50%	Load 100%
-60	4	4
-40	3	3
-20	3	3
0	3	3
25	2	2
55	2	2
60	2	2
—	—	—
—	—	—
—	—	—
—	—	—

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		Testing Circuitry Figure A
Model	SUCS1R50512	
Item	Output Voltage Accuracy	
Object	+12V0.13A	

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 : 4.5 - 9V

Load Current : 0 - 0.13A

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

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

2. Values

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ratio [%]
Maximum Voltage	-20	5	0	11.933	±20	±0.2
Minimum Voltage	55	9	0.13	11.894		

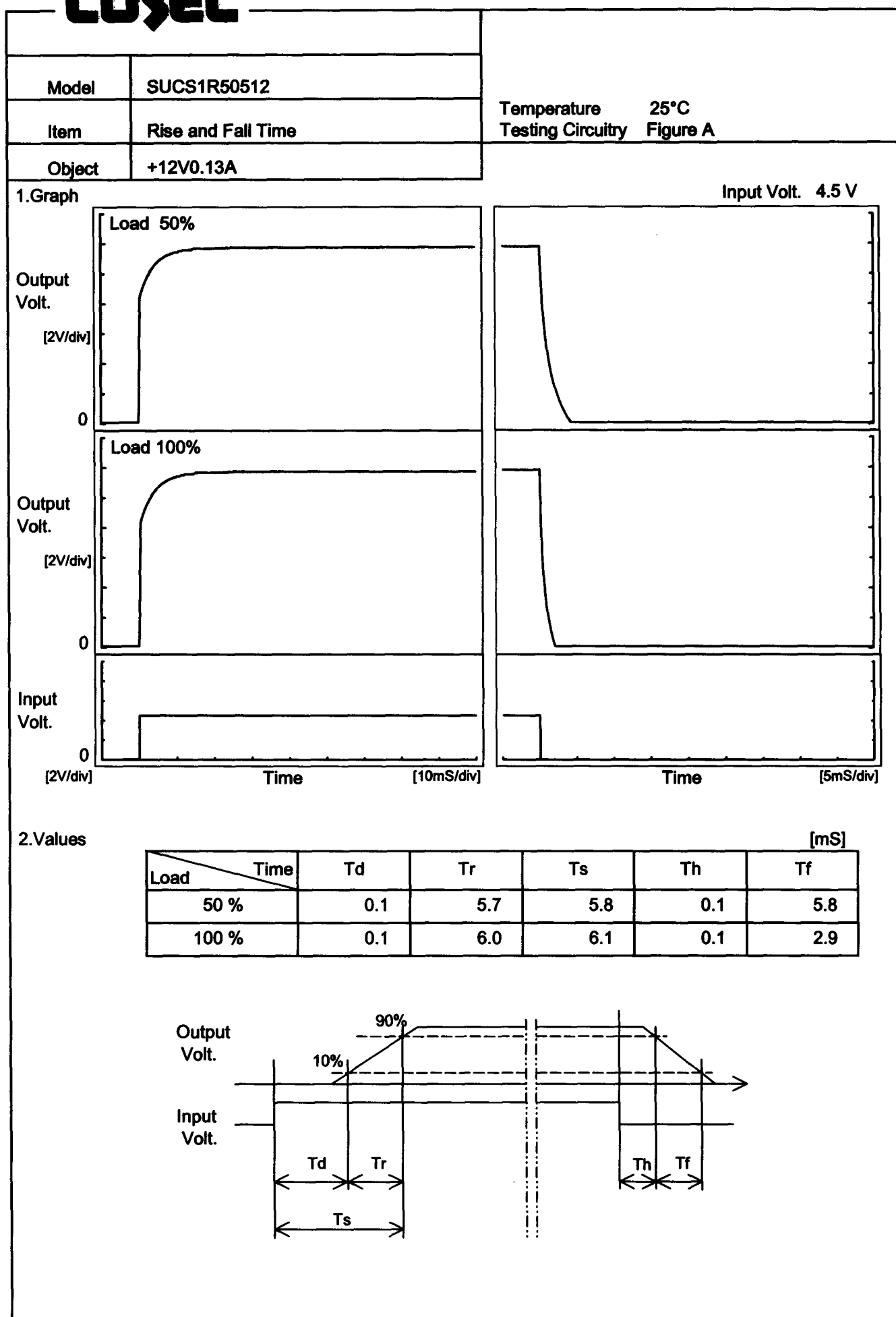
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Model		SUCS1R50512	
Item		Time Lapse Drift	
Object		+12V0.13A	

1.Graph

Output Voltage [V]

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		Testing Circuitry Figure A																																																														
Model	SUCS1R50512																																																															
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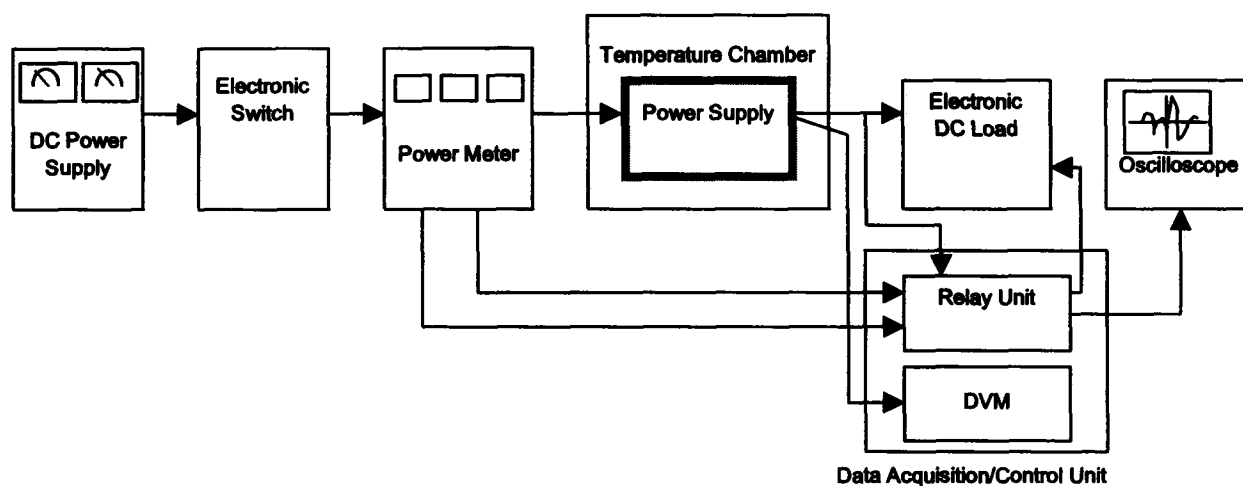


Figure A

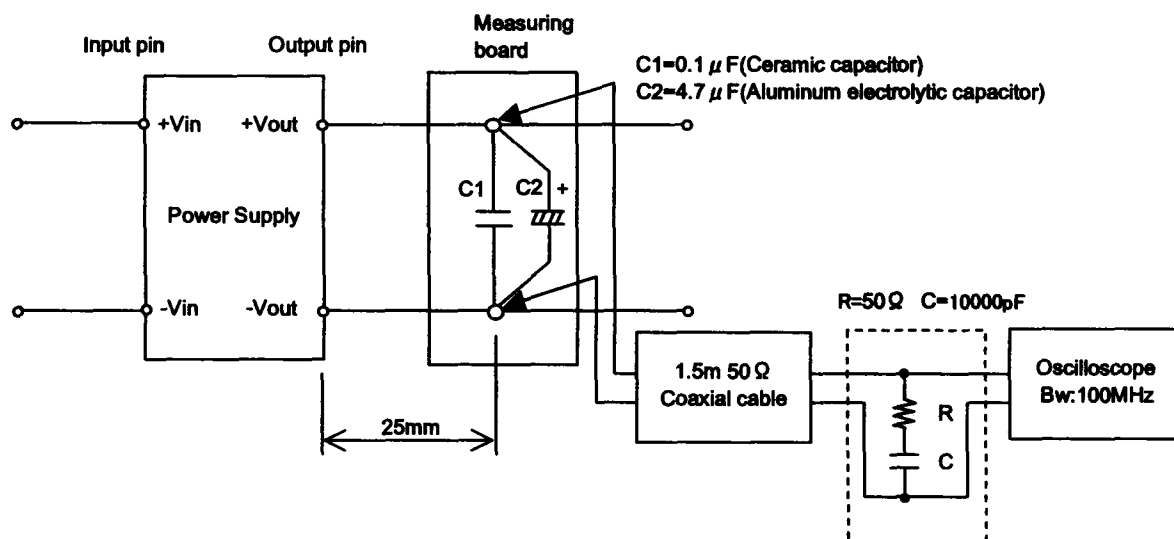


Figure B (Ripple and Ripple noise Characteristic)