

ROHM's Online Tool

ROHM AC/DC Designer User's Guide

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From every search engine on ROHM's Home Page

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1. What is ROHM AC/DC Designer?

Outline

The online tool "ROHM AC/DC Designer" is an assistant tool which outputs circuit designs using Rohm's ACDC power source. It can output Reference circuits, Component lists, Trans designs easily by matching the conditions the user entered.

1.2 Language Used

Basically, English is the language used in ROHM AC/DC Designer.

1.3 Products

BM2P091F	BM2P092F	BM2P093F	BM2P094F	BM2P051F	BM2P052F
BM2P053F	BM2P054F	BM2P091	BM2P092	BM2P093	BM2P094
BM2P051	BM2P052	BM2P053	BM2P054	BM2P031	BM2P032
BM2P033	BM2P034	BM2P011	BM2P012	BM2P013	BM2P014
BM1P101FJ	BM1P102FJ	BM1P061FJ	BM1P062FJ		

1.4 Precautions

We have implemented an account register system for the ROHM AC/DC Designer.
After a month of usage, there will be a requirement for an account registration.
If the registration is not completed, the ROHM AC/DC Designer will not operate.

In order to operate ROHM AC/DC Designer, the environment written below will be needed.

- Microsoft Silverlight
- Adobe Reader (a software to open PDF files)

This tool works best with the following browsers: Firefox; Internet Explorer 11.

- Please Read the Exemption clause before using the ROHM AC/DC Designer.
- The specification of the ROHM AC/DC Designer may change without any notice.

1.5 Contact

<https://www.rohm.com/web/global/contactus>

2. How to Access

- ① There is a ROHM AC/DC Designer search tool created on HOME/Power source IC page. Click the search button after the parameter column is entered (Vin Min/Max, Vout, Iout).

The screenshot displays the ROHM website's 'POWER MANAGEMENT' section. The 'ROHM AC/DC Designer' tool is highlighted with a red box. It features a 'Parameters' section with input fields for V_{IN} (Min: 85 V, Max: 264 V), Output V_{OUT} (5 V), and I_{OUT} (1 A). A 'Topology' dropdown is set to 'Flyback'. A red 'Search' button is located at the bottom of the tool. To the right, a 'PRODUCT GROUP / PARAMETRIC SEARCH' sidebar lists various product categories with their counts, such as 'Power Management (3094)' and 'Memory (608)'.

ROHM
SEMICONDUCTOR

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Products Applications Sales & Support Buy or Sample Search ROHM

HOME | **POWER MANAGEMENT**

POWER MANAGEMENT

ROHM's power management IC line-up consists of a variety of products, including linear regulators, switching and voltage regulators, power management switch ICs, battery management and gate drivers.

NEWS PRODUCT HIGHLIGHTS DOCUMENTS FAQ

ISOLATED CONVERTERS (AC/DC, DC/DC) (48)

ROHM's large current external FET controller type switching regulators are compatible with virtually all switching power supply applications due to their wide input voltage range, multi-operation capability (step-up/negative voltage/step-down), and flexible operating frequency.

AC/DC Converters (ICs) (45)
DC/DC Converters (ICs) (3)

ROHM AC/DC Designer

Parameters

V_{IN} Min 85 V Max 264 V

Output V_{OUT} 5 V I_{OUT} 1 A

Topology Flyback

Search

PRODUCT GROUP / PARAMETRIC SEARCH

Power Management (3094)

- Isolated Converters (AC/DC, DC/DC) (48)
- Gate Drivers (6)
- Voltage Detectors (Reset ICs) (1796)
- Linear Regulators (916)
- Switching Regulators (130)
- Switching Regulators (Power Management IC for System) (24)
- Power Management Switch ICs (69)
- IPDs
- LED Drivers (57)
- ()
- Earth Leakage Detector ICs (7)
- Wireless Charging ICs (1)
- Battery Management (7)

Memory (608)

Amplifiers & Linear (254)

Powervation

Clocks & Timers (9)

Switch & Multiplexer & Logic (63)

- ② It will search for the ICs which correspond to the conditions set at ①. By clicking the check box at the function column, it will narrow down the ICs further. Select the IC which best corresponds to the user's selected conditions and then click the D button next to the model name.

ISOLATED CONVERTERS (AC/DC, DC/DC)

ROHM's large current external FET controller type switching regulators are compatible with virtually all switching power supply applications due to their wide input voltage range, multi-operation capability (step up/negative voltage/step down), and flexible operating frequency.

Parameters

Min Max
 VIN 85 V VIN 264 V VOUT 5 V IOUT 1 A
 [Reset] [Search]

ROHM AC/DC

ROHM AC/DC Designer easily supports circuit designs. It searches items according to the conditions in the Parameter. When the D button is clicked, it draws out the reference circuit, and automatically designs the specification of the Trans.

Table 1: Search Results

Grade	FET	Controller Type	Vin1 (Min.) [V]	Vin1 (Max.) [V]	Start Circuit [V]	SW frequency (Max.) [KHz]	Vcc OVP	BR PIN	On Resistor (MOSFET) [Ω]	Operating Temperature (Min.) [°C]	Operating Temperature (Max.) [°C]	Package	Distribution Inventory
<input type="checkbox"/> Automotive	<input checked="" type="checkbox"/> Integrated	<input type="checkbox"/> PFC + QR	<input type="checkbox"/> 3.0	<input type="checkbox"/> 18.0	<input type="checkbox"/> 650.0	<input type="checkbox"/> 65.0	<input type="checkbox"/> -	<input type="checkbox"/> Yes	<input type="checkbox"/> 1.4	<input type="checkbox"/> 85.0	<input type="checkbox"/> 105.0	<input type="checkbox"/> HTSOP-J8	
<input type="checkbox"/> Industrial		<input type="checkbox"/> PWM	<input type="checkbox"/> 8.0	<input type="checkbox"/> 24.0	<input type="checkbox"/> 100.0	<input type="checkbox"/> 100.0	<input type="checkbox"/> Auto Restart	<input type="checkbox"/> Yes	<input type="checkbox"/> 2.4	<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input type="checkbox"/> SOP-J8	
<input type="checkbox"/> Standard		<input type="checkbox"/> QR	<input type="checkbox"/> 8.5	<input type="checkbox"/> 25.0	<input type="checkbox"/> 120.0	<input type="checkbox"/> 120.0	<input type="checkbox"/> Auto Restart / Latch	<input type="checkbox"/> Yes	<input type="checkbox"/> 4.0	<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input type="checkbox"/> SOP24	
			<input type="checkbox"/> 8.9	<input type="checkbox"/> 26.0	<input type="checkbox"/> 400.0	<input type="checkbox"/> 400.0			<input type="checkbox"/> 8.5	<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input checked="" type="checkbox"/> SOP8	
			<input type="checkbox"/> 15.0	<input type="checkbox"/> 27.5	<input type="checkbox"/> 500.0	<input type="checkbox"/> 500.0				<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input type="checkbox"/> SSOP6	

Table 2: Detailed Search Results

Model	Grade	FET	Controller Type	Vin1 (Min.) [V]	Vin1 (Max.) [V]	Start Circuit [V]	SW frequency (Max.) [KHz]	Vcc OVP	BR PIN	On Resistor (MOSFET) [Ω]	Operating Temperature (Min.) [°C]	Operating Temperature (Max.) [°C]	Package	Distribution Inventory
<input type="checkbox"/> BM2P051E	Standard	Integrated	PWM	8.9	26	650	65	Latch	Yes	4	-40	105	SOP8	Inquiry
<input type="checkbox"/> BM2P052E	Standard	Integrated	PWM	8.9	26	650	65	Auto Restart	Yes	4	-40	105	SOP8	Inquiry
<input type="checkbox"/> BM2P091F	Standard	Integrated	PWM	8.9	26	650	65	Latch	Yes	8.5	-40	105	SOP8	Inquiry
<input type="checkbox"/> BM2P092E	Standard	Integrated	PWM	8.9	26	650	65	Auto Restart	Yes	8.5	-40	105	SOP8	Inquiry

- ③ A pop-up will appear, with the numbers entered in the parameter column, and when the Design button is clicked, the tool will activate.

ISOLATED CONVERTERS (AC/DC, DC/DC)

ROHM's large current external FET controller type switching regulators are compatible with virtually all switching power supply applications due to their wide input voltage range, multi-operation capability (step up/negative voltage/step down), and flexible operating frequency.

Parameters

Min Max
 VIN 85 V VIN 264 V VOUT 5 V IOUT 1 A
 [Reset] [Search]

ROHM AC/DC

ROHM AC/DC Designer easily supports circuit designs. It searches items according to the conditions in the Parameter. When the D button is clicked, it draws out the reference circuit, and automatically designs the specification of the Trans.

Table 3: Search Results

Grade	FET	Controller Type	Vin1 (Min.) [V]	Vin1 (Max.) [V]	Start Circuit [V]	SW frequency (Max.) [KHz]	Vcc OVP	BR PIN	On Resistor (MOSFET) [Ω]	Operating Temperature (Min.) [°C]	Operating Temperature (Max.) [°C]	Package	Distribution Inventory
<input type="checkbox"/> Automotive	<input checked="" type="checkbox"/> Integrated	<input type="checkbox"/> PFC + QR	<input type="checkbox"/> 3.0	<input type="checkbox"/> 18.0	<input type="checkbox"/> 650.0	<input type="checkbox"/> 65.0	<input type="checkbox"/> -	<input type="checkbox"/> Yes	<input type="checkbox"/> 1.4	<input type="checkbox"/> 85.0	<input type="checkbox"/> 105.0	<input type="checkbox"/> HTSOP-J8	
<input type="checkbox"/> Industrial		<input type="checkbox"/> PWM	<input type="checkbox"/> 8.0	<input type="checkbox"/> 24.0	<input type="checkbox"/> 100.0	<input type="checkbox"/> 100.0	<input type="checkbox"/> Auto Restart	<input type="checkbox"/> Yes	<input type="checkbox"/> 2.4	<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input type="checkbox"/> SOP-J8	
<input type="checkbox"/> Standard		<input type="checkbox"/> QR	<input type="checkbox"/> 8.5	<input type="checkbox"/> 25.0	<input type="checkbox"/> 120.0	<input type="checkbox"/> 120.0	<input type="checkbox"/> Auto Restart / Latch	<input type="checkbox"/> Yes	<input type="checkbox"/> 4.0	<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input type="checkbox"/> SOP24	
			<input type="checkbox"/> 8.9	<input type="checkbox"/> 26.0	<input type="checkbox"/> 400.0	<input type="checkbox"/> 400.0			<input type="checkbox"/> 8.5	<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input checked="" type="checkbox"/> SOP8	
			<input type="checkbox"/> 15.0	<input type="checkbox"/> 27.5	<input type="checkbox"/> 500.0	<input type="checkbox"/> 500.0				<input type="checkbox"/> 105.0	<input type="checkbox"/> 125.0	<input type="checkbox"/> SSOP6	

Table 4: Detailed Search Results

Model	Grade	FET	Controller Type	Vin1 (Min.) [V]	Vin1 (Max.) [V]	Start Circuit [V]	SW frequency (Max.) [KHz]	Vcc OVP	BR PIN	On Resistor (MOSFET) [Ω]	Operating Temperature (Min.) [°C]	Operating Temperature (Max.) [°C]	Package	Distribution Inventory
<input type="checkbox"/> BM2P051E	Standard	Integrated	PWM	8.9	26	650	65	Latch	Yes	4	-40	105	SOP8	Inquiry
<input type="checkbox"/> BM2P052E	Standard	Integrated	PWM	8.9	26	650	65	Auto Restart	Yes	4	-40	105	SOP8	Inquiry
<input type="checkbox"/> BM2P091F	Standard	Integrated	PWM	8.9	26	650	65	Latch	Yes	8.5	-40	105	SOP8	Inquiry
<input type="checkbox"/> BM2P092E	Standard	Integrated	PWM	8.9	26	650	65	Auto Restart	Yes	8.5	-40	105	SOP8	Inquiry

ROHM AC/DC Designer

This tool enables to make a design of an AC/DC converter using Rohm's IC regulator.

Input: 85 V, 264 V
 Output: 5 V, 1 A
 [Design] (Agree Disclaimer)

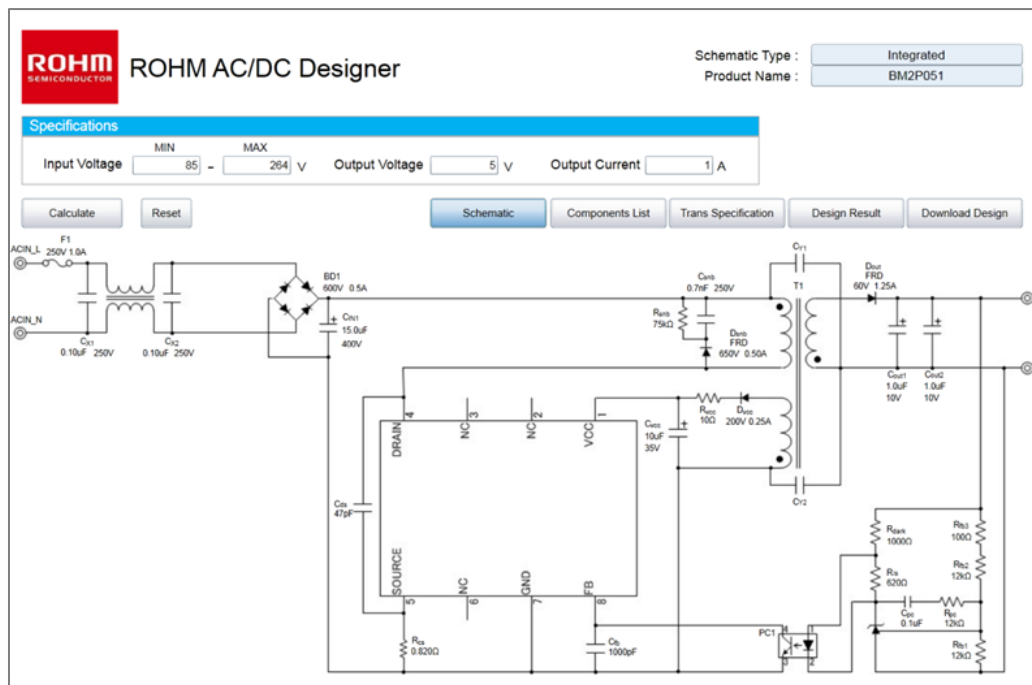
3. How to Use

3.1 Activating ROHM AC/DC Designer ROHM AC/DC Designer

When the Design button is clicked, the browser will start up, and will move on to “Calculation Running” screen.

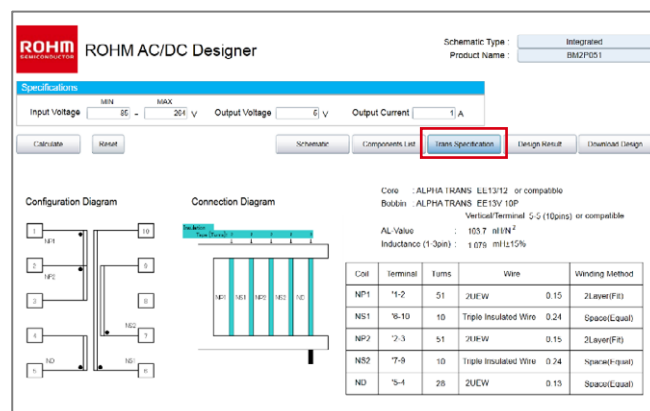
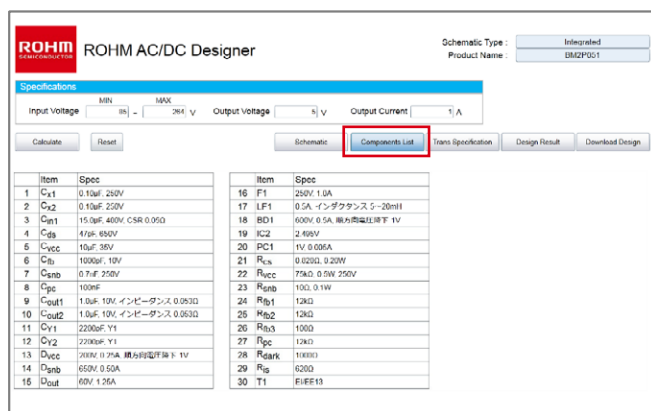
3.2 The initial page for output

When the calculation is finished, the Reference circuit will appear.



3.3 Switching between pages

The pages will switch, when the Tab button is clicked.



3.4 Recalculation

In “Design Result”, detailed conditions can be changed. The changed numbers will be shown in blue. By clicking the “Calculate” button after the changes, it will recalculate. Regarding the 4 items; Input Voltage (Min/Max), Output Voltage, Output Current, there is no need to move to the “Design Result”, for it could be changed from the Specifications at the top of the page.

ROHM AC/DC Designer

Schematic Type : Integrated
Product Name : BM2P051

Specifications

Input Voltage: MIN 85 - MAX 264 V
Output Voltage: 7 V
Output Current: 1 A

Buttons: Calculate, Reset, Schematic, Components List, Trans Specification, Design Result, Download Design

Power Supply Specification

Summary	Symbol	Value	Units
Typical AC Input Voltage	V _{IN_TYP}	240	Vac
Min AC Input Voltage	V _{IN_MIN}	85	Vac
Max AC Input Voltage	V _{IN_MAX}	264	Vac
Power Supply Frequency	f _{IN}	50	Hz
Output Voltage	V _{OUT}	7	V
Output Current	I _{OUT}	1	A
Output Voltage Accuracy	V _{OUT_TACC}	5	%
Output Voltage Ripple	V _{ripple}	0.2	Vp-p
Switching Frequency	f _{SW}	65000	Hz
Vcc OVP		AutoRestart	
Voltage Margin	V _{Margin}	70	%
Current Margin	I _{Margin}	50	%
Min CTR	CTR _{MIN}	50	%
Light Load Efficiency	η	80	%
Peak Efficiency	η _{PK}	85	%
Brownout		No	

IC Specification

Summary	Symbol	Value	Units
BR pin UVLO Detection Voltage1	V _{BR1}	0.5	V
BR pinUVLO Detection Voltage2	V _{BR2}	0.35	V
Internal Reference Voltage	V _{REF_INT}	4	V
FB pin Pull-up Resistance	R _{FB_INT}	30000	Ω
Max Starting Current	I _{Start_MAX}	0.006	A
Overcurrent Detection Voltage	V _{CS}	0.4	V
Max Vcc OVP Voltage	V _{OVP_MAX}	29	V
Max Output High Voltage	V _{OUTH_MAX}	14.5	V
Max Switching Frequency	f _{SW_MAX}	70000	Hz

Trans Specification

Summary	Symbol	Value	Units
Core Name		EI/EE13	
Core Size		EE13/12	
Bobbin Name		EE13V 10P	
Inductance	L _P	1.079	mH
Primary Side Resistance	R _P	2.909	Ω
Secondary Side Resistance	R _S	0.072	Ω
AL_Value	VoutTacc	103.7	nH/T ²
Primary Side Leakage Inductance	L _{IK}	0.054	mH
Primary Side Peak Current	I _{PPK}	0.486	A
Secondary Side Peak Current	I _{SPK}	4.545	A
ON Duty	Duty	0.45	
Croe Effective Cross Section Area	Ae	17.1	mm ²
Max Magnetic Flux Density	Bm	0.25	T
Current Density		6	A/mf
Bobbin Width		7.3	mm
Bobbin Thickness		2.5	mm

3.5 Design Failure

A design failure may occur depending on the value entered. In that case, it will move on to “Design Result”, and “Design Failure” will be indicated. Recalculate by changing the conditions.

ROHM AC/DC Designer

Schematic Type : Controller
Product Name : BM2P101

Specifications

Input Voltage: MIN 85 - MAX 264 V
Output Voltage: 30 V
Output Current: 1 A

Buttons: Calculate, Reset, Schematic, Components List, Trans Specification, Design Result, Download Design

Power Supply Specification

Summary	Symbol	Value	Units
Typical AC Input Voltage	V _{IN_TYP}	240	Vac
Min AC Input Voltage	V _{IN_MIN}	85	Vac
Max AC Input Voltage	V _{IN_MAX}	264	Vac
Power Supply Frequency	f _{IN}	50	Hz
Output Voltage	V _{OUT}	30	V
Output Current	I _{OUT}	1	A
Output Voltage Accuracy	V _{OUT_TACC}	5	%
Output Voltage Ripple	V _{ripple}	0.2	Vp-p
Switching Frequency	f _{SW}	100	kHz
Vcc OVP		AutoRestart	
Voltage Margin	V _{Margin}	70	%
Current Margin	I _{Margin}	50	%
Min CTR	CTR _{MIN}	50	%
Light Load Efficiency	η	80	%
Peak Efficiency	η _{PK}	85	%
Brownout		Yes	
Starting Voltage	V _{start}	75	Vac
Brownout Circuit Current	I _{BR}	2.5E-05	A

IC Specification

Summary	Symbol	Value	Units
BR pin UVLO Detection Voltage1	V _{BR1}	1	V
BR pinUVLO Detection Voltage2	V _{BR2}	0.7	V
Internal Reference Voltage	V _{REF_INT}	4	V
FB pin Pull-up Resistance	R _{FB_INT}	30000	Ω
Max Starting Current	I _{Start_MAX}	0.006	A
Overcurrent Detection Voltage	V _{CS}	0.4	V
Max Vcc OVP Voltage	V _{OVP_MAX}	29	V
Max Output High Voltage	V _{OUTH_MAX}	14.5	V
Max Switching Frequency	f _{SW_MAX}	70000	Hz

Trans Specification

Summary	Symbol	Value	Units
Core Name		EI/EE22	
Core Size		EE13/12	
Bobbin Name		EE13V 10P	
Inductance	L _P	0.713	mH
Primary Side Resistance	R _P	0.244	Ω
Secondary Side Resistance	R _S	0.124	Ω
AL_Value		137.6	nH/T ²
Primary Side Leakage Inductance	L _{IK}	0.036	mH
Primary Side Peak Current	I _{PPK}	2.545	A
Secondary Side Peak Current	I _{SPK}	4.545	A
ON Duty	Duty	0.45	
Croe Effective Cross Section Area	Ae	37	mm ²
Max Magnetic Flux Density	Bm	0.25	T
Current Density		6	A/mf
Bobbin Width		8.3	mm
Bobbin Thickness		4	mm

Design Failure
Exceeded the maximum output power:
maximum output power is 20 W
Please change the value

3.6 Reset

When the Reset button is clicked, the conditions will reset to when the ROHM AC/DC Designer was first activated.

ROHM AC/DC Designer

Schematic Type : Integrated
Product Name : BM2P051

Specifications

Input Voltage MIN 85 - MAX 264 V Output Voltage 5 V Output Current 1 A

Calculate Reset Schematic Components List Trans Specification Design Result Download Design

Power Supply Specification

Summary	Symbol	Value	Units
Typical AC Input Voltage	V_{IN_TYP}	240	Vac
Min AC Input Voltage	V_{IN_MIN}	85	Vac
Max AC Input Voltage	V_{IN_MAX}	264	Vac
Power Supply Frequency	f_{IN}	50	Hz
Output Voltage	V_{OUT}	5	V
Output Current	I_{OUT}	1	A
Output Voltage Accuracy	V_{OUT_TACC}	5	%
Output Voltage Ripple	V_{ripple}	0.2	Vp-p
Switching Frequency	f_{SW}	65000	Hz
Vcc OVP		AutoRestart	
Voltage Margin	V_{margin}	70	%
Current Margin	I_{margin}	50	%
Min CTR	CTR_{MIN}	50	%
Light Load Efficiency	η	80	%
Peak Efficiency	η_{PK}	85	%
Brownout		No	

IC Specification

Summary	Symbol	Value	Units
BR pin UVLO Detection Voltage1	V_{BR1}	0.5	V
BR pin UVLO Detection Voltage2	V_{BR2}	0.35	V
Internal Reference Voltage	V_{REF_INT}	4	V
FB pin Pull-up Resistance	R_{FB_PU}	30000	Ω
Max Starting Current	I_{SM_MAX}	0.006	A
Overcurrent Detection Voltage	V_{OS}	0.4	V
Max Vcc OVP Voltage	V_{OVP_MAX}	29	V
Max Output High Voltage	V_{OUTH_MAX}	14.5	V
Max Switching Frequency	f_{SW_MAX}	70000	Hz

Trans Specification

Summary	Symbol	Value	Units
Core Name		EE13/12	
Core Size		EE13V 10P	
Bobbin Name			
Inductance	L_P	1.079	mH
Primary Side Resistance	R_P	2.909	Ω
Secondary Side Resistance	R_S	0.072	Ω
AL Value	$V_{outTacc}$	103.7	nH/T ²
Primary Side Leakage Inductance	L_{LK}	0.054	mH
Primary Side Peak Current	I_{PK}	0.486	A
Secondary Side Peak Current	I_{SPK}	4.545	A
ON Duty	Duty	0.45	
Cro Effective Cross Section Area	A_e	17.1	mm ²
Max Magnetic Flux Density	B_m	0.25	T
Current Density		6	A/mf
Bobbin Width		7.3	mm
Bobbin Thickness		2.5	mm

3.7 Download the material for the designing

When "Download Design" is clicked, it will move on to creating a PDF file of the output results.

When it finishes creating the PDF file, a PDF name will be shown, and by clicking the Download button the PDF file could be downloaded.

ROHM AC/DC Designer

Schematic Type : Integrated
Product Name : BM2P051

Calculate Reset Schematic Components List Trans Specification Design Result Download Design

BM2P051_5_1_151225.pdf

Download

ROHM AC/DC Designer

Product Name : BM1P061FJ
Topology : FlyBack
Type : Controller

1. Design Result

Power Supply Specification

Symbol	Value	Units
V_{IN_TYP}	240	Vac
V_{IN_MIN}	85	Vac
V_{IN_MAX}	264	Vac
f_{IN}	50	Hz
V_{OUT}	5	V
I_{OUT}	1	A
V_{OUT_TACC}	5	%
V_{ripple}	0.2	Vp-p
f_{SW}	65000	Hz
Vcc OVP	AutoRestart	
V_{margin}	70	%
I_{margin}	50	%
CTR_{MIN}	50	%
η	80	%
η_{PK}	85	%
Brownout	No	
Starting Voltage	32.4	V
Minimum Output Current	0.00000	A

IC Specification

Symbol	Value	Units
V_{BR1}	0.5	V
V_{BR2}	0.35	V
V_{REF_INT}	4	V
R_{FB_PU}	30000	Ω
I_{SM_MAX}	0.006	A
V_{OS}	0.4	V
V_{OVP_MAX}	29	V
V_{OUTH_MAX}	14.5	V
f_{SW_MAX}	70000	Hz

Trans Specification

Symbol	Value	Units
Core Name	EE13/12	
Core Size	EE13V 10P	
Bobbin Name		
Inductance	1.079	mH
Primary Side Resistance	2.909	Ω
Secondary Side Resistance	0.072	Ω
AL Value	103.7	nH/T ²
Primary Side Leakage Inductance	0.054	mH
Primary Side Peak Current	0.486	A
Secondary Side Peak Current	4.545	A
ON Duty	0.45	
Cro Effective Cross Section Area	17.1	mm ²
Max Magnetic Flux Density	0.25	T
Current Density	6	A/mf
Bobbin Width	7.3	mm
Bobbin Thickness	2.5	mm

2. Schematic

Schematic diagram showing the power supply circuit components and connections.

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ROHM AC/DC Designer

3. Components List

Component	Value	Unit
1. Core	EE13/12	
2. Core Size	EE13V 10P	
3. Bobbin Name		
4. Inductance	1.079	mH
5. Primary Side Resistance	2.909	Ω
6. Secondary Side Resistance	0.072	Ω
7. AL Value	103.7	nH/T ²
8. Primary Side Leakage Inductance	0.054	mH
9. Primary Side Peak Current	0.486	A
10. Secondary Side Peak Current	4.545	A
11. ON Duty	0.45	
12. Cro Effective Cross Section Area	17.1	mm ²
13. Max Magnetic Flux Density	0.25	T
14. Current Density	6	A/mf
15. Bobbin Width	7.3	mm
16. Bobbin Thickness	2.5	mm

4. Trans Specification

Configuration Diagram

Connection Diagram

Core : ALUMINA TRANS (EE13/12) or compatible
Bobbin : ALUMINA TRANS (EE13V 10P) or compatible
V_{outTacc} : 103.7 nH/T² or compatible
AL Value : 103.7 nH/T² or compatible
Inductance (L_P) : 1.079 mH or compatible

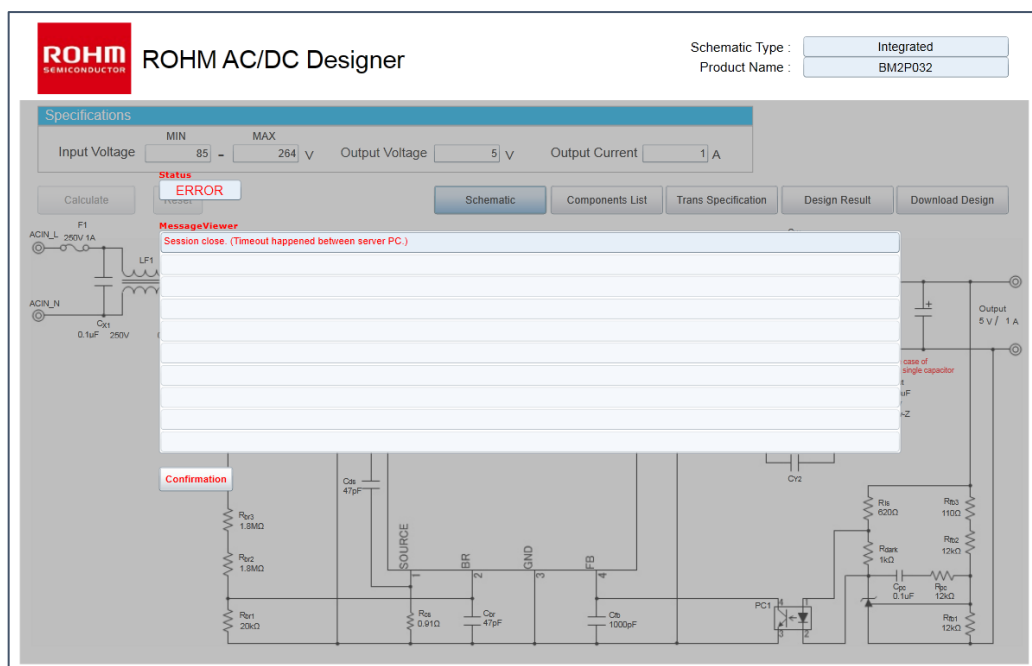
Core	Turns	Wire	Winding
1. Core	1.0	24 AWG 0.08	Speed (mm)
2. Core	1.0	24 AWG 0.08	Speed (mm)
3. Core	1.0	24 AWG 0.08	Speed (mm)
4. Core	1.0	24 AWG 0.08	Speed (mm)
5. Core	1.0	24 AWG 0.08	Speed (mm)

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4. Troubleshooting

When an error occurs during the operation of the ROHM AC/DC Designer, an error page will be shown. By clicking the "Confirmation" button, the error page will close.

Error page



■ Error List

Type	Error Message	Method of dealing
ERROR	The channel for the simulation doesn't remain.	The access number to the ROHM DC/DC Designer has exceeded the limit. Please access again after giving it a little while.
ERROR	Session close. (Timeout happened between server PC.)	This is a condition when there was no action operated for a fixed time. Please reload the browser, or attempt to access the page again.
ERROR	URL is incorrect	The Login information was not effective, and the URL is incorrect. Please Login again.
Warning	Setting has been changed. Please run the simulation.	This occurs when performing "Download Design" instead of "Simulate" after changing the value. Please perform "Simulate".

5. Exemption Clause

Please read the exemption clause before using the ROHM DC/DC Designer. The exemption clause can be seen by clicking the URL below.

http://rohmfs.rohm.com/en/products/databook/disclimer/ic/tech_info/disclaimer_for_lsiwebtool-e.pdf

6. Supplementary Note

■ When using the proxy search engine, please enable the web browser setting to HTTP1.1.
When using Windows Internet Explorer, please enable all HTTP1.1, from Menu Bar>Tools>Internet Option>Advanced Settings.

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(Note1) Medical Equipment Classification of the Specific Applications

JAPAN	USA	EU	CHINA
CLASS III	CLASS III	CLASS II b	CLASS III
CLASS IV		CLASS III	
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