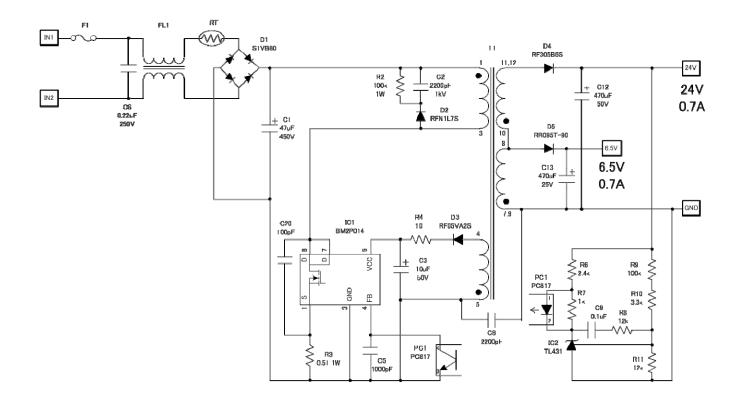


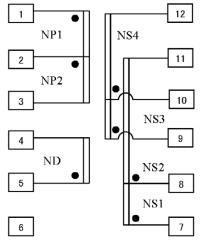
AC/DC Converter Controller Application Information

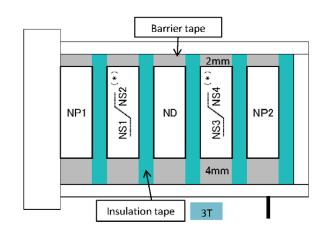
IC Product Name	BM2P014		
Control Method	PWM		
Input	180 Vac to 264 Vac		
Output	24V 0.7A		
Туре	Isolation		
Document Number	2-I-2400070-0000-00		
Revision	001		

Reference Circuit



Transformer Specification





JFE MB3 EER-28.5A or compatible

Bobbin: JFE BER28.5SP12 Vertical/Terminal Pins 6-6(12pins) or compatible

AL-Value: 222.2 nH/N^2 Inductance(1-3pin): $0.800 \text{ mH} \pm 15\%$ (*)NS1/NS2、NS3/NS4巻線は同一層とし、 NS1/NS2、NS3/NS4の仕切り部(破線箇所) をテープで絶縁して下さい。

Coil	Terminal	Turns	Wire	Winding Method	
NP1	' 1−2	30	2UEW 0.3	1 Layer FIT(密)	
NS1	' 7−8	6	2UEW 0.4	1 Layer FIT(密)	
NS2	' 8−11	15	2UEW 0.4	1 Layer FIT(密)	
ND	' 5−4	13	2UEW 0.4	1 Layer SPACE(均等)	
NS3	'9 - 10	6	2UEW 0.4	1 Layer FIT(密)	
NS4	'10 - 12	15	2UEW 0.4	1 Layer FIT(密)	
NP2	'2−3	30	2UEW 0.3	1 Layer FIT(密)	

耐圧 P-S :AC3. OKVrms 1MIN. 2mA or AC3. 6kVrms 1s 2mA

巻始め:バリアテープ固定

PS-CORE: AC1. 5KVrms 1MIN. 2mA or AC1. 8kVrms 1s 2mA 巻終り:直角引き出し挟み込み処理 IR : P-S, PS-CORE 100 MΩ MIN. at DC 500V 巻方向 : 統一

Bill of Materials

Item	Spec	Parts	Maker
C1	450V/47uF	VY 450V 47uF	Nichicon
C2	2200pF/1kV		
C3	10uF/50V	PJ 50V 10uF	Nichicon
C5	1000pF/25V		
C6	0.22uF/X2	LE224	Okaya
C8	2200pF/Y1		
C9	0.1uF/25V		Murata
C12	Low-Z 50V/470uF	HD 50V 470uF	Nichicon
C13	Low-Z 25V/470uF	HD 35V 470uF	Nichicon
C20	100pF/1kV		
D1	800V/1A	S1VB80	Shindengen
D2	FRD 650V/0.1A	RFN1L7S	Rohm
D3	200V/0.1A	RF05VA2S/RF05VAM2S	Rohm
D4	FRD 300V/3A	RF305B6S/RF305BM6S/RFN3BM6S	Rohm
D5	FRD 90V/3A	RB95T-90	Rohm
F1		3.15A	
FL1		HF2318-A503Y0R5	TDK
IC1		BM2P014	Rohm
IC2		TL431	
PC1		PC817	SHARP
R2	100kΩ/1W		
R3	0.51Ω/1W		
R4	10Ω/0.25W	MCR18EZPJ100	Rohm
R6	2.4kΩ	MCR10EZPJ242	Rohm
R7	1kΩ	MCR10EZPJ102	Rohm
R8	1kΩ	MCR10EZPJ102	Rohm
R9	100kΩ	MCR10EZPF1003	Rohm
R10	3.3kΩ	MCR10EZPJ3301	Rohm
R11	12kΩ	MCR10EZPJ1202	Rohm
RT	4Ω	NTPA74R0LBMB0	Murata
T1		EER28	

Revision History

Date	Revision	Changes	
7.Mar.2014	001	New Release	

AC/DC Design Library Disclaimer

- 1. ROHM's site terms and conditions of use on our website shall apply to you and your utilization of this "AC/DC Design Library" ("Tools").
- 2. The Tools attempt to support users who develop products and/or components incorporating ROHM's products, but any information contained in this Tools, including, but not limited to, reference circuit, simulation result and bill of materials ("Information") is solely for the purpose of reference, not for the purpose of exemplification or recommendation. ROHM does not warrant that any Information will meet your input-output specifications, will be suitable for your application, or will operate as shown in the simulation in a real equipment used for particular purposes. ROHM ASSUMES NO LIABILITY FOR ANY DAMAGES WHATSOEVER ARIGING OUT OF THE TOOLS OR INFORMATION CONTAINED IN THE TOOLS.

You are solely responsible for all respects of design, development and production for your own products, including but not limited to: designing a final products or components; verifying and testing such final products or components under actual operating conditions and applicable circumstances; determining the appropriateness of the use of Information in such final products or components; evaluating and determining the applicability of any Information.

- 3. The Tools and Information are provided for use AS-IS basis.

 ROHM SHALL NOT, EXPRESSLY OR IMPLIEDLY, MAKE ANY WARANNTY OF ANY KIND INCLUDING BUT NOT LIMITED TO WARRANTIES OF AVAILABILITY, FUNCTIONALITY, CORRECTNESS, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE.
- 4. While this Tools run a simulation or carry out an operation through public information and specifications, the Information may not be current at the time of simulation.
 ROHM does not warrant the nowness, accuracy and completeness of the Information.
- 5. All Information is for reference only. ROHM does not warrant that the Information will not infringe any intellectual property rights or any other rights of any third party.

 ROHM SHALL NOT BE IN ANY WAY RESPONSIBLE OR LIABLE FOR INFRINGEMENT OF ANT INTELLECTUAL PROPERTY RIGHTS OR OTHER DAMAGES ARISING FROM USE OF SUCH INFORMATION.

 No license, expressly or implied, is granted hereby under any intellectual property rights or other rights of ROHM or any third parties with respect to the Information.
- 6. Except for specific applications as expressly stated in ROHM's data sheet, ROHM's products described in Tools are designed and manufactured for application in ordinary electronic equipments (such as AV equipment, OA equipment, telecommunication equipment, home electronic appliances, amusement equipment, etc.).
 If you intend to use ROHM's products in devices requiring extremely high reliability (such as medical equipment (Note 1), transport equipment, traffic equipment, aircraft/spacecraft, nuclear power controllers, fuel controllers, car equipment including car accessories, safety devices, etc.) and whose malfunction or failure may cause loss of human life, bodily injury or serious damage to property ("Specific Applications"), please consult with ROHM sales representative in advance.

UNLESS OTHERWISE AGREED IN WRITING BY ROHM IN ADVANCE, ROHM SHALL NOT BE IN ANY WAY RESPONSIBLE OR LIABLE FOR ANY DAMAGES, EXPENSES OR LOSSES INCURRED BY YOU OR THIRD PARTIES ARISING FROM THE USE OF ANY ROHM'S PRODUCTS OR INFORMATION FOR SPECIFIC APPLICATIONS.

(Note1) Medical Equipment Classification of the Specific Applications

	toto 1) Modical Equipment Glacemodical of the opening applications				
	JAPAN	USA	EU	CHINA	
Γ	CLASSⅢ	CLASSIII	CLASS II b	CLASSⅢ	
Ī	CLASSIV	CLASSIII	CLASSⅢ	CLASSIII	

- 7. Any system embedding electronic devices can fail or malfunction at a certain rate.

 Please be sure to implement, at your own responsibilities, adequate safety measures including but not limited to fail-safe design against the physical injury, damage to any property, to or for your products, components and applications.
- 8. In no event shall you use in any way whatsoever the products described in the Tools and the Information for any military purposes, including but not limited to, the development of mass-destruction weapons.
- ROHM reserves the right to modify, improve or otherwise change its products and/or Information in Tools, or to cease
 or terminate this web simulation services without prior written notice.
 Before purchasing or using ROHM's products, you must refer to and comply with the latest version of all related
 technical information for products.