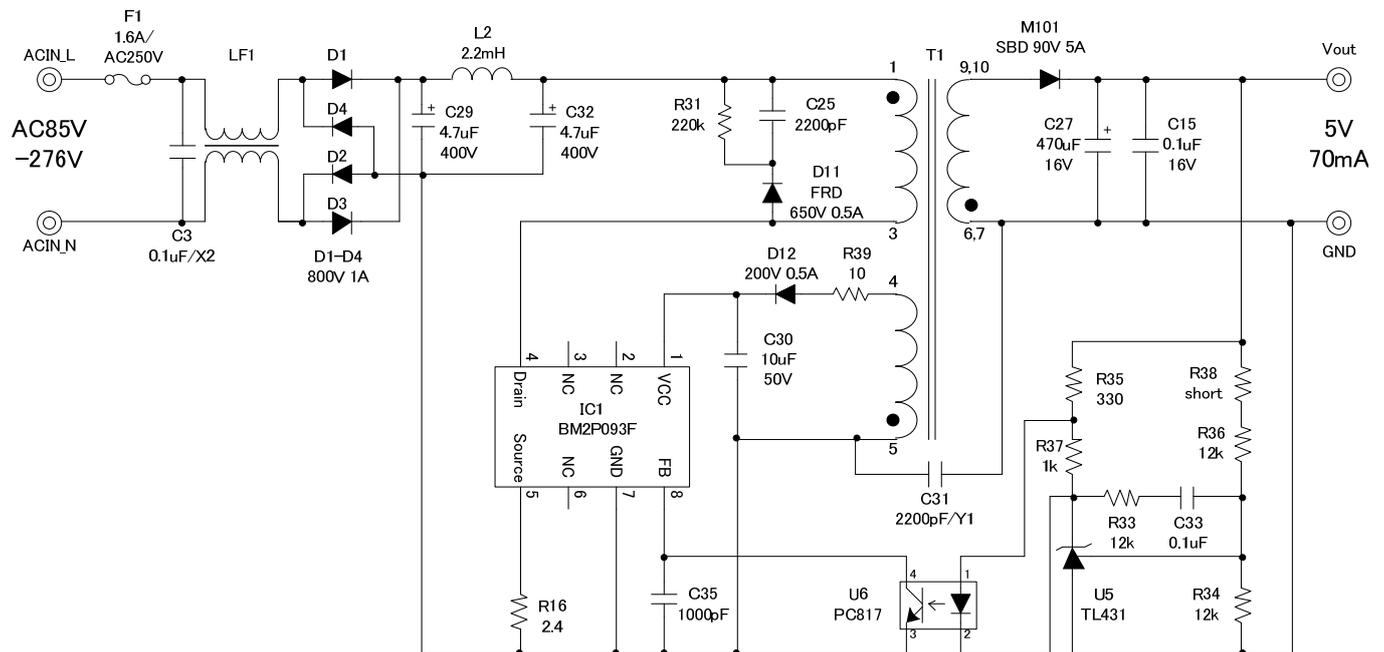


AC/DC Converter Controller

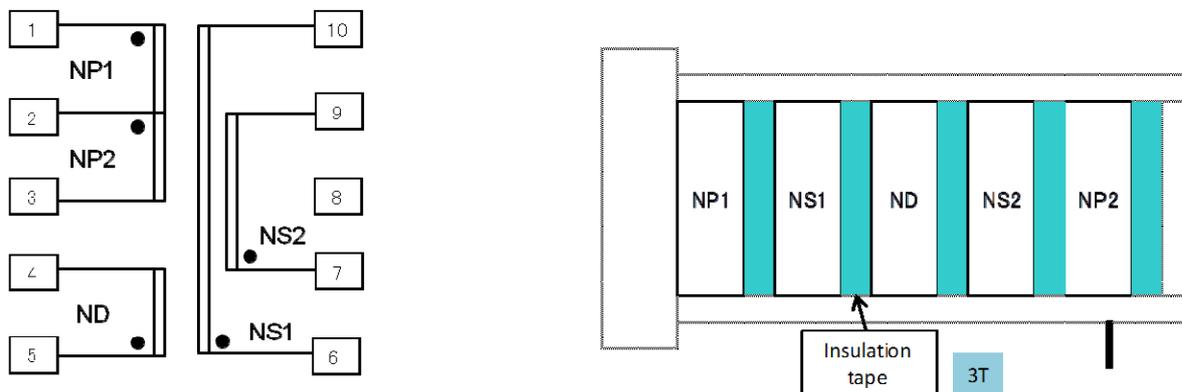
Application Information

IC Product Name	BM2P093F
Control Method	PWM
Input	85 Vac to 276 Vac
Output	5V 0.07A
Type	Isolation
Document Number	W-I-0500007-0000-00
Revision	001

Reference Circuit



Transformer Specification



Core: Tomita 2G8-EE13x12x6.3 or compatible

Bobbin: Tomita TBB347 Vertical/Terminal Pins 5-5(10pins) or compatible

AL-Value: 79.1 nH/N²

Inductance(1-3pin): 1.336 mH±15%

Coil	Terminal	Turns	Wire	Winding Method
NP1	'1-2	65	2UEW 0.2	FIT(密)
NS1	'6-10	11	TEX-E 0.4	1 Layer FIT(密)
ND	'5-4	31	2UEW 0.2	1 Layer FIT(密)
NS2	'7-9	11	TEX-E 0.4	1 Layer FIT(密)
NP2	'2-3	65	2UEW 0.2	FIT(密)

耐圧 P-S : AC3.0kVrms 1MIN. 2mA or AC3.6kVrms 1s 2mA

PS-CORE: AC1.5kVrms 1MIN. 2mA or AC1.8kVrms 1s 2mA

IR : P-S, PS-CORE 100 MΩ MIN. at DC 500V

巻始め : バリアテープ固定

巻終り : 直角引き出し挟み込み処理

巻方向 : 統一

Bill of Materials

Item	Spec	Parts name	Maker
C3	0.1uF/X2		
C15	0.1uF/25V		
C25	2200pF/500V		
C27	Low-Z 470uF/16V		
C29	4.7uF/400V		
C30	10uF/50V		
C31	2200pF/Y1		
C32	4.7uF/400V		
C33	0.1uF/25V		
C35	1000pF/16V		
D1	800V/1A	1N4007	
D2	800V/1A	1N4007	
D3	800V/1A	1N4007	
D4	800V/1A	1N4007	
D11	FRD 650V 0.5A	FFN 1L 7S	Rohm
D12	200V 0.5A	RR264M-400/RR264MM-400	Rohm
F1		1.6A/AC250V	
IC1		BM2P093F	Rohm
L2	2.2mH	2.2mH	
LF1		SU9VF-02100	NEC Tokin
M101	SBD 90V 5A	RB095B-90	Rohm
R16	2.4Ω/0.5W	MCR25JZHFL2R40	Rohm
R31	220kΩ/0.25W	MCR25JZHJ224	Rohm
R33	12kΩ	MCR03EZPF1202	Rohm
R34	12kΩ	MCR03EZPF1202	Rohm
R35	330Ω	MCR03EZPJ331	Rohm
R36	12kΩ	MCR03EZPF1202	Rohm
R37	1kΩ	MCR03EZPJ102	Rohm
R38	0Ω	MCR03EZPJ000	
R39	10Ω	MCR10EZPJ100	Rohm
T1	EE13		Tomita
U5		TL431	
U6		PC817	

Revision History

Date	Revision	Changes
7.Mar.2014	001	New Release

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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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