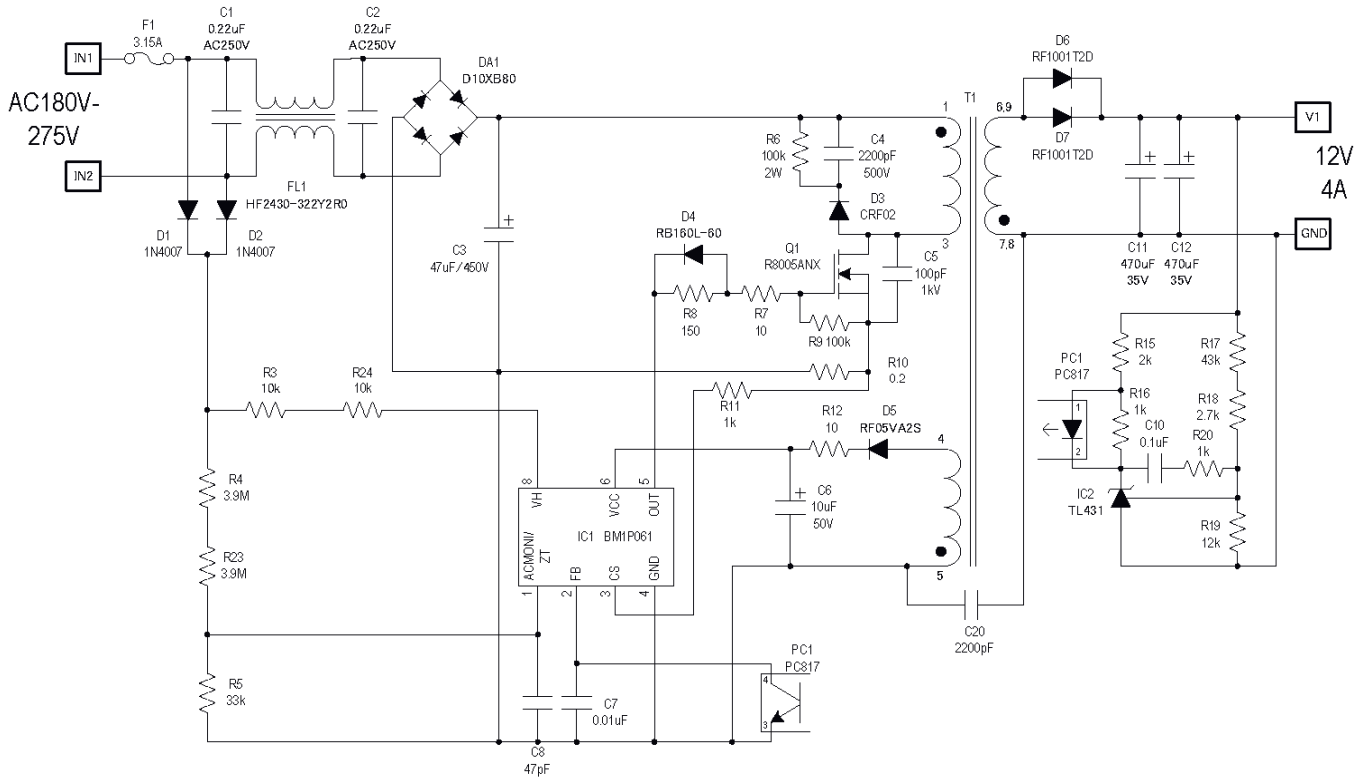


# AC/DC Converter Controller

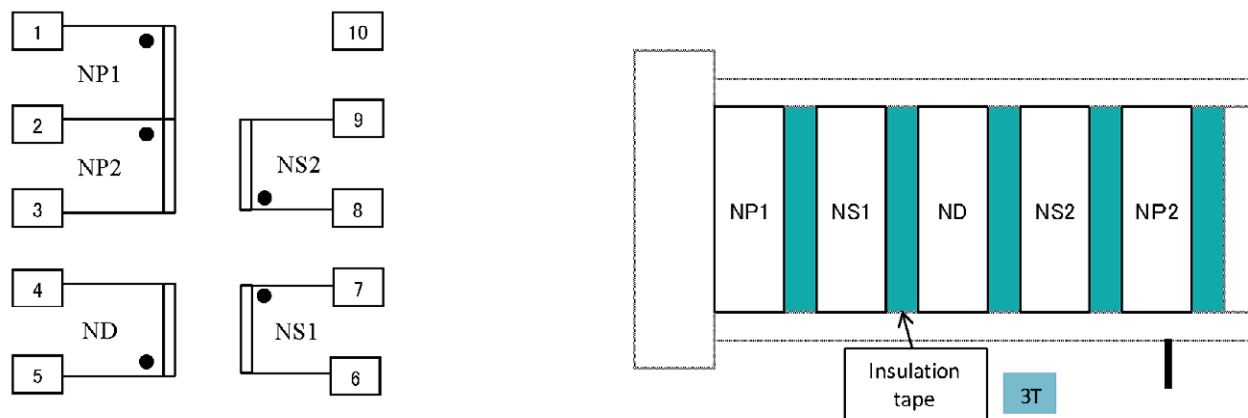
## Application Information

IC Product Name	BM1P061FJ
Control Method	PWM
Input	180 Vac to 275 Vac
Output	12V 4A
Type	Isolation
Document Number	2-I-1200400-0000-00
Revision	001

# Reference Circuit



## Transformer Specification



Core: JFE MB3 EI-28 or compatible

Bobbin: JFE BE28PP10 Vertical/Terminal Pins 5-5(10pins) or compatible

AL-Value: 173.1 nH/N<sup>2</sup>

Inductance(1-3pin): 0.250 mH±15%

Coil	Terminal	Turns	Wire	Winding Method
NP1	'1-2	19	2UEW 0.45	1 Layer FIT(密)
NS1	'7-6	7	TEX-E 0.45 X2	1 Layer FIT(密)
ND	'5-4	9	2UEW 0.45×1	1 Layer SPACE(均等)
NS2	'8-9	7	TEX-E 0.45 X2	1 Layer FIT(密)
NP2	'2-3	19	2UEW 0.45	1 Layer 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
C1	0.22uF/AC250V X-Cap	LE224	Okaya
C2	0.22uF/AC250V X-Cap	LE224	Okaya
C3	47uF/450V	KXJ 47uF 450V	Nippon Chemi-con
C4	2200pF/1kV	CK45-B3AD222KY*N	TDK
C5	100pF/1kV	CC45SL3AD101JY*N	TDK
C6	10uF/50V	PM 10uF 50V	Nichicon
C7	0.01F/16V	GRM219B711H103K	Murata
C8	47pF/16V	GRM219B711H470K	Murata
C10	0.1uF/50V	GRM21BB11H104KA01B	Murata
C11	470uF/35V Low-Z	HD 470uF 35V	Nichicon
C12	470uF/35V Low-Z	HD 470uF 35V	Nichicon
C20	2200pF/1kV	CS11-E2GA222MYNS	TDK
DA1	800V/10A	D10XB80	Shindengen
D1	800V/1A	1N4007	
D2	800V/1A	1N4007	
D3	FRD 800V/0.5A	RFN1L7S	Rohm
D4	30V/1A	RB160L-60	Rohm
D5	FRD 200V/0.5A	RF05VA2S/RF05VAM2S	Rohm
D6	FRD 200V/10A	RF1001T2D/RFN10T2D	Rohm
D7	FRD 200V/10A	RF1001T2D/RFN10T2D	Rohm
F1		3.15A	
FL1		HF2430-332Y2R0	TDK
IC1		BM1P061FJ	Rohm
IC2		TL431	
PC1		PC817	SHARP
Q1	800V/5A	R8005ANX	Rohm
R3	10kΩ	MCR18EZPJ104	Rohm
R4	3.9MΩ/0.25W	MCR18EZPJ395	Rohm
R5	33kΩ	MCR10EZPJ333	Rohm
R6	100kΩ/2W		
R7	10Ω/0.25W	MCR18EZPJ100	Rohm
R8	150Ω	MCR10EZPJ151	Rohm
R9	100kΩ	MCR10EZPJ104	Rohm
R10	0.2Ω/1W	0.1Ω+0.1Ω	
R11	1kΩ	MCR10EZPJ102	Rohm
R12	10Ω/0.25W	MCR18EZPJ100	Rohm
R15	2kΩ	MCR10EZPJ202	Rohm
R16	1kΩ	MCR10EZPJ102	Rohm
R17	43kΩ	MCR10EZPF4302	Rohm
R18	2.7kΩ	MCR10EZPF2701	Rohm
R19	12kΩ	MCR10EZPF1202	Rohm
R20	1kΩ	MCR10EZPJ102	Rohm
R23	3.9MΩ/0.25W	MCR18EZPJ395	Rohm
R24	10kΩ	MCR18EZPJ104	Rohm
T1	EI28		

## Revision History

Date	Revision	Changes
7.Mar.2014	001	New Release

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

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