AC/DC Converter Controller Application Information

IC Product Name	BM1Q001FJ
Control Method	QR
Input	85　Vac　to　265　Vac
Output	24V 3.5A
Type	Isolation
Document Number	W-I-2400350-0000-00
Revision	001

Reference Circuit
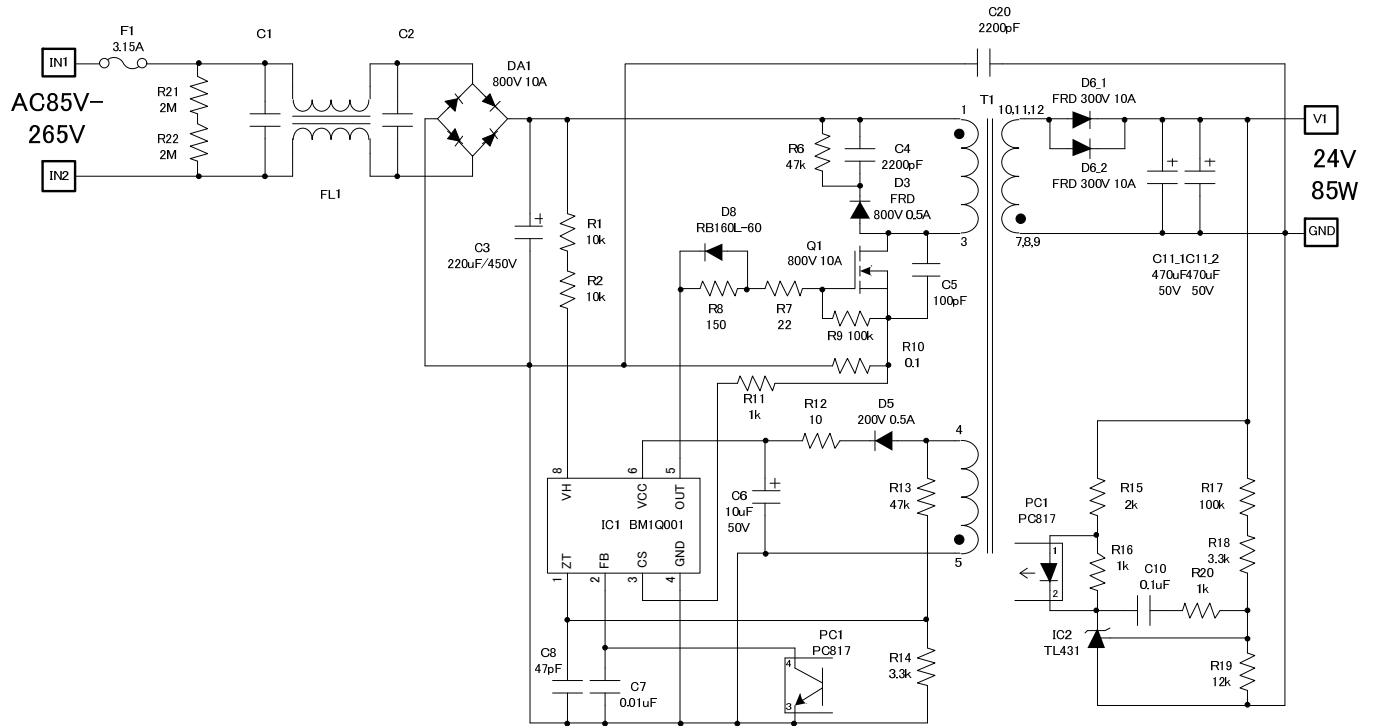
Transformer Specification
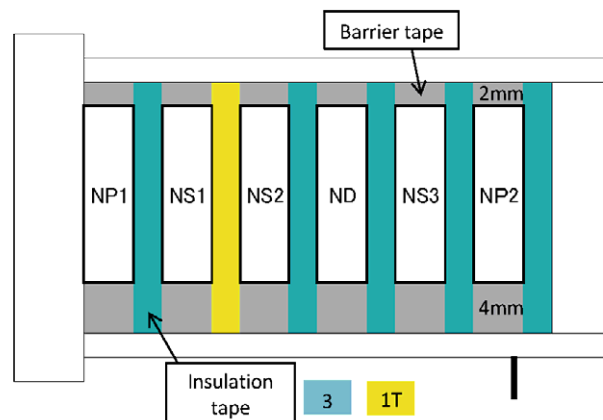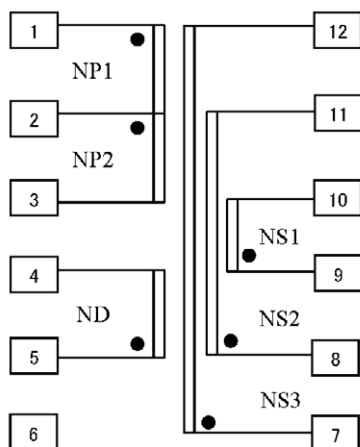
Core: JFE MB3 EE-33K or compatible
Bobbin: JFE BE33MP12 Vertical/Terminal Pins 6-6(12pins) or compatible
AL-Value: 97.5 nH/N^2
Inductance(1-3pin): 0.156 mH±15%

Coil	Terminal	Turns	Wire	Winding Method
NP1	'1-2	20	2UEW 0.45	1 Layer FIT(密)
NS1	'9-10	14	2UEW 0.6	1 Layer FIT(密)
NS2	'8-11	14	2UEW 0.6	1 Layer FIT(密)
ND	'5-4	9	2UEW 0.4	1 Layer SPACE(均等)
NS3	'7-12	14	2UEW 0.6	1 Layer FIT(密)
NP2	'2-3	20	2UEW 0.45	1 Layer FIT(密)

耐圧 P-S :AC3.0KVrms 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 name	Maker
C1	X-Cap		
C2	X-Cap		
C3	220uF/450V		
C4	2200pF/1kV		
C5	100pF/1kV		
C6	10uF/50V		
C7	0.01uF/16V		
C8	47pF/16V		
C10	0.1uF/50V		
C11_1	470uF/50V Low-Z		
C11_2	470uF/50V Low-Z		
C20	2200pF/1kV		
DA1	800V/5A		
D3	FRD 800V/0.5A		
D5	FRD 200V/0.5A	RF05VA2S/RF05VAM2S	Rohm
D6_1	FRD 300V/10A	RF2001T3D/RFN20T2D	Rohm
D6_1	FRD 300V/10A	RF2001T3D/RFN20T2D	Rohm
D8	FRD/SBD 40V/1A	RB160L-60	Rohm
F1	3.15A		
FL1	CMC		
IC1		BM1Q001FJ	Rohm
IC2		TL431	
PC1		PC817	SHARP
Q1	800V/6A	R80ANXR8008ANX	Rohm
R1	10kΩ	MCR18EZPJ104	Rohm
R2	10kΩ	MCR18EZPJ104	Rohm
R6	47kΩ/2W		
R7	22Ω/0.25W	MCR18EZPJ220	Rohm
R8	150Ω	MCR10EZPJ151	Rohm
R9	100kΩ	MCR10EZPJ104	Rohm
R10	0.1Ω/1W		
R11	1kΩ	MCR10EZPJ102	Rohm
R12	10Ω/0.25W	MCR18EZPJ100	Rohm
R13	47kΩ	MCR10EZPJ473	Rohm
R14	3.3kΩ	MCR10EZPJ332	Rohm
R15	2kΩ	MCR10EZPJ202	Rohm
R16	1kΩ	MCR10EZPJ102	Rohm
R17	100kΩ	MCR10EZPF1003	Rohm
R18	3.3kΩ	MCR10EZPF3301	Rohm
R19	12kΩ	MCR10EZPF1202	Rohm
R20	12kΩ	MCR10EZPJ123	Rohm
R21	2MΩ/0.25W	MCR18EZPJ205	Rohm
R22	2MΩ/0.25W	MCR18EZPJ205	Rohm
T1	EE33		

W-I-2400350-0000-00
7.Mar.2014

Revision History

Date	Revision	Changes
7.Mar.2014	001	New Release

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JAPAN	USA	EU	CHINA
CLASSⅢ	CLASSⅢ	CLASS Ⅱ b	CLASSⅢ
CLASSⅣ		CLASSⅢ	

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