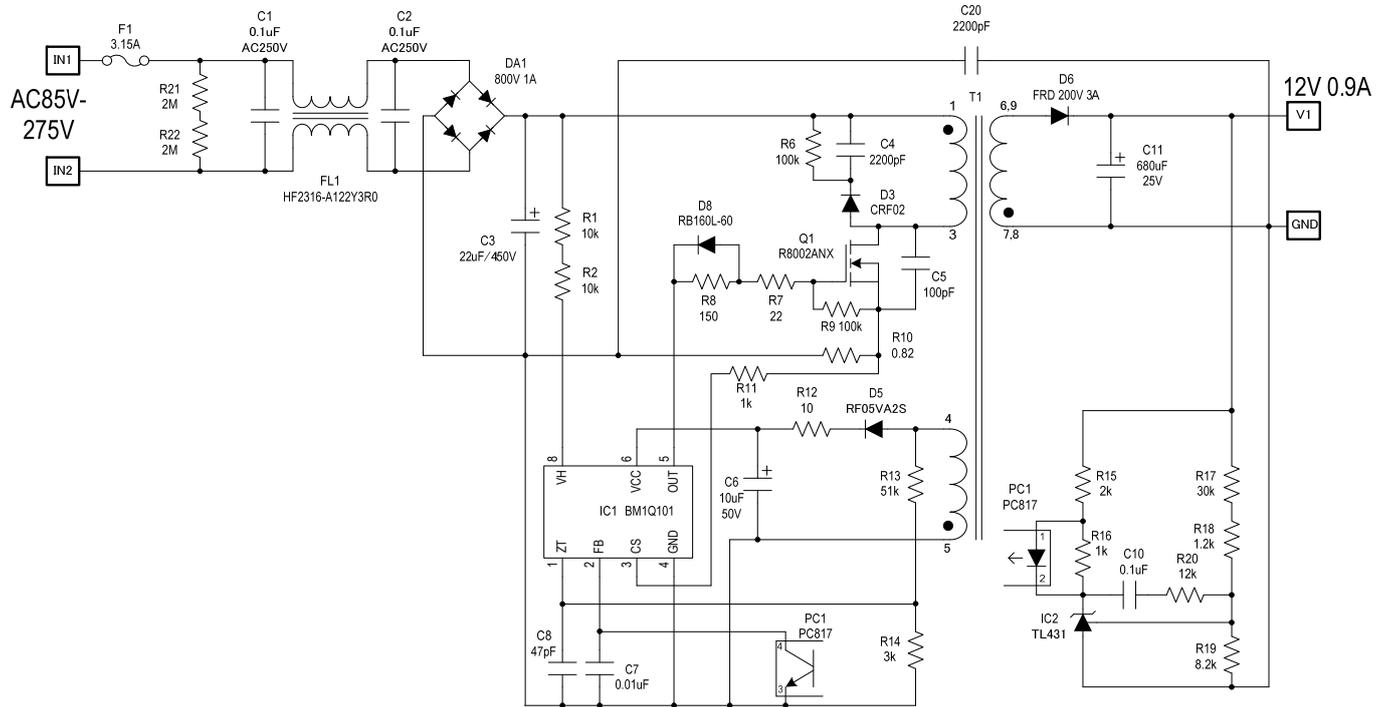


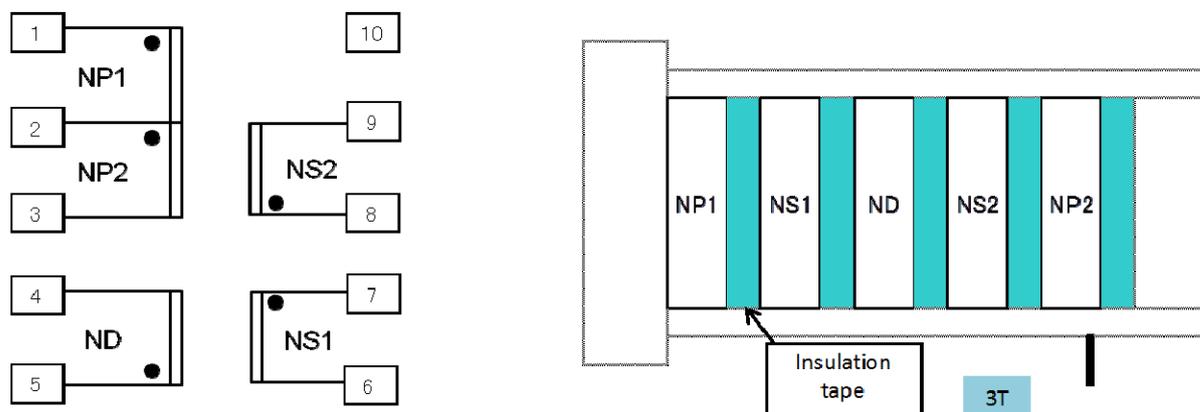
AC/DC Converter Controller Application Information

IC Product Name	BM1Q101FJ
Control Method	QR
Input	85 Vac to 275 Vac
Output	12V 0.9A
Type	Isolation
Document Number	W-I-1200090-0000-00
Revision	001

Reference Circuit



Transformer Specification



Core: Tomita 2G8-EI-22 or compatible

Bobbin: Tomita TBB248 Vertical/Terminal Pins 5-5(10pins) or compatible

AL-Value: 159.2 nH/N²

Inductance(1-3pin): 0.780 mH±15%

Coil	Terminal	Turns	Wire	Winding Method
NP1	'1-2	35	2UEW 0.2	1 Layer FIT
NS1	'9-8	13	TEX-E 0.4	1 Layer FIT
ND	'5-4	16	2UEW 0.4	1 Layer 均等
NS2	'7-12	13	TEX-E 0.4	1 Layer FIT
NP2	'2-3	35	2UEW 0.2	1 Layer FIT

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	0.1uF/AC250V X-Cap	LE104	Okaya
C2	0.1uF/AC250V X-Cap	LE104	Okaya
C3	22uF/450V	VY 22uF 450V	Nichicon
C4	2200pF/1kV	CK45-B3AD222KY*N	TDK
C5	100pF/1kV	CC45SL3AD101JY*N	TDK
C6	10uF/50V	PJ 33uF 50V	Nichicon
C7	0.01uF/16V	GRM219B711H103K	Murata
C8	47pF/16V	GRM219B711H470K	Murata
C10	0.1uF/50V	GRM21BB11H104KA01B	Murata
C11	680uF/25V Low-Z	KZM 680uF 25V	Nippon Chemi-con
C20	2200pF/1kV	CS11-E2GA222MYNS	TDK
DA1	800V/1A	S1VB80	Shindengen
D3	FRD 700V/0.5A	RFN1L7S	Rohm
D5	FRD 200V/0.5A	RF05VA2S/RF05VAM2S	Rohm
D6	FRD 200V/3A	RF601B2D/RF601BM2D	Rohm
D8	FRD/SBD 40V/1A	RB160L-60	Rohm
F1	3.15A		
FL1		HF2316-A122Y3R0	TDK
IC1		BM1Q101FJ	Rohm
IC2		TL431	
PC1		PC817	SHARP
Q1	800V/2A	R8002ANX	Rohm
R1	10kΩ	MCR18EZPJ104	Rohm
R2	10kΩ	MCR18EZPJ104	Rohm
R6	100kΩ/2W		
R7	22Ω/0.25W	MCR18EZPJ220	Rohm
R8	150Ω	MCR10EZPJ151	Rohm
R9	100kΩ	MCR10EZPJ104	Rohm
R10	0.82Ω/1W		
R11	1kΩ	MCR10EZPJ102	Rohm
R12	10Ω/0.25W	MCR18EZPJ100	Rohm
R13	51kΩ	MCR10EZPJ513	Rohm
R14	3kΩ	MCR10EZPJ302	Rohm
R15	2kΩ	MCR10EZPJ202	Rohm
R16	1kΩ	MCR10EZPJ102	Rohm
R17	30kΩ	MCR10EZPF3002	Rohm
R18	1.2kΩ	MCR10EZPF1201	Rohm
R19	8.2kΩ	MCR10EZPF8201	Rohm
R20	12kΩ	MCR10EZPJ123	Rohm
R21	2MΩ/0.25W	MCR18EZPJ205	Rohm
R22	2MΩ/0.25W	MCR18EZPJ205	Rohm
T1	EI22		Tomita

Revision History

Date	Revision	Changes
20.Jan.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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