

Filename: PMP9243RevA_Bom.xls
 Variant: 001
 Generated: 2/12/2014 7:22:44 AM
 SVN path: \$URL::
 SVN rev: \$Rev:: \$

\$

176VAC to 576VAC Flyback with BJT switch

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC81	1		Printed Circuit Board		PMP9243	Any	-	-
C1, C6	2	2.2uF	CAP ALUM 2.2UF 450V 20% SMD	SMT Radial E	ULH2W2R2MNL1GS	Nichicon		
C2	1	220uF	CAP ALUM 220UF 25V 20% RADIAL	RCAP 8x11.5mm	EEU-FM1E221	Panasonic		
C3	1	22uF	CAP_CERM, 22uF, 25V, +/-20%, X5R, 1210	1210	12103D226MAT2A	AVX		
C4, C5	2	0.1uF	CAP_CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603	06033C104JAT2A	AVX		
C7	1	1000pF	CAP_CERM, 1000pF, 300V, +/-20%, Y5U, Radial Disc 7.5mm, Is=7.5	Radial Disc 7.5mm, Is=7.5	VY2102M29Y5UG63V7	Vishay-Bccomponents		
C8	1	10uF	CAP_CERM, 10uF, 50V, +/-10%, X7R, 1210	1210	GRM32ER71H106KA12L	MuRata		
D1	1	200V	DIODE SCHOTTKY 200V 1A SMA	SMA	SS1200-LTP	Micro Commercial Componen		
D2	1	200V	DIODE ZENER 200V 3W DO214AC	SMA	3SMAJ5956B	Micro Commercial Co		
D3	1	1000V	Diode, Switching-Bridge, 1000V, 1A, DF-S	DF-S	DF10SA	Vishay-Semiconductor		
D4	1	1.7V	Diode, Ultrafast, 1000V, 1A, SMA	SMA	US1M-13-F	Diodes Inc.		
D5	1		DIODE SWITCH 200V 200MA SOD323	SOD-323	BAS20HT1G			
L1	1	100uH	Inductor, Unshielded Drum Core, Ferrite, 100uH, 0.8A, 0.457 ohm, TH	D6 x 8.5mm	7447462101	Würth Elektronik eiSos		
Line, Neutral, TP1, TP2	4		PCB Pin, Swage Mount, TH	3104-2	3104-2-00-34-00-00-08-0	Mill-Max		
Q1	1	2V	TRANSISTOR NPN 800V 3A I2PAK	TO-126	FJ15603DTU	Fairchild		
R1, R2, R4, R6	4	4.7Meg	RES, 4.7Meg ohm, 5%, 0.25W, 1206	1206	CRCW12064M70JNEA	Vishay-Dale		
R3	1	5.1k	RES, 5.1k ohm, 5%, 0.125W, 0805	0805	CRCW08055K10JNEA	Vishay-Dale		
R5	1	1.00k	RES, 1.00k ohm, 1%, 0.125W, 0805	0805	CRCW08051K00FKEA	Vishay-Dale		
R7	1	2.2	RES, 2.2 ohm, 5%, 0.1W, 0603	0603	CRCW06032R20JNEA	Vishay-Dale		
R8	1	109k	RES, 109k ohm, 0.1%, 0.1W, 0603	0603	RT0603BRD07109KL	Yageo America		
R9	1	750	RES, 750 ohm, 1%, 0.1W, 0603	0603	CRCW0603750RFKFA	Vishay-Dale		
R10	1	3.0	RES, 3.0 ohm, 5%, 0.125W, 0805	0805	CRCW08053R00JNEA	Vishay-Dale		
R11	1	21.5k	RES, 21.5k ohm, 1%, 0.125W, 0805	0805	CRCW080521K5FKFA	Vishay-Dale		
RF1	1	10.0	RES 10.0 OHM 1/8W 5% 1206	1206	1879229-4	TE Connectivity		
T1	1	1mH	Transformer, 1.80mH, TH	20.25x10.16x13.72mm	RLTI-1105	Renco		
U1	1		CONSTANT-VOLTAGE, CONSTANT-CURRENT CONTROLLER WITH PRIMARY SIDE REGULATION, D0007A	D0007A	UCC28720D	Texas Instruments		None
R12	0	100k	RES, 100k ohm, 1%, 0.1W, 0603	0603	CRCW0603100KFKEA	Vishay-Dale		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Buyers") who are developing systems that incorporate TI semiconductor products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products.

TI reference designs have been created using standard laboratory conditions and engineering practices. **TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.** TI may make corrections, enhancements, improvements and other changes to its reference designs.

Buyers are authorized to use TI reference designs with the TI component(s) identified in each particular reference design and to modify the reference design in the development of their end products. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN, including but not limited to any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

TI REFERENCE DESIGNS ARE PROVIDED "AS IS". TI MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. TI DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO TI REFERENCE DESIGNS OR USE THEREOF. TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY BUYERS AGAINST ANY THIRD PARTY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON A COMBINATION OF COMPONENTS PROVIDED IN A TI REFERENCE DESIGN. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING IN ANY WAY OUT OF TI REFERENCE DESIGNS OR BUYER'S USE OF TI REFERENCE DESIGNS.

TI reserves the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques for TI components are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

Reproduction of significant portions of TI information in TI data books, data sheets or reference designs is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in Buyer's safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed an agreement specifically governing such use.

Only those TI components that TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components that have **not** been so designated is solely at Buyer's risk, and Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.