

**PMP7174RevB\_BOM**

COUNT	RefDes	Value	Description	Size	Part Number	MFR
1	C3	470n	Capacitor, Metallized Polyester Film, 275V, ±20%	7.5 x 18 mm	R46 KI 3470 - - 02	Arcotronics
1	C4	82u	Capacitor, 350V, Temp.-20 to +125°C, ±20%	18 x 20 mm	350 BXF 82 M	Rubycon
1	C5	100p	Capacitor, Ceramic Chip, COG, 200V, ±10%	0805	STD	STD
1	C6	10n	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD
1	C8	100n	Capacitor, Ceramic, 50V, X7R, 10%	1206	STD	STD
1	C9	6.8u	Capacitor, Ceramic, 50V, X5R, 10%	1812	STD	TDK
1	C11	220p	Capacitor, Ceramic Chip, 200V, ±10%	1206	STD	STD
1	C12	1u	Capacitor, Ceramic Chip, 50V, ±10%	0805	STD	STD
1	C13	22u	Capacitor, Aluminum Electrolytic, 50V, 20%	0.197 inch	50ZL22MEFC5x11	Rubycon
1	C14	220n	Capacitor, Ceramic, 16V, X7R, 10%	0603	STD	STD
1	C15	150pF	Capacitor, Ceramic, 50V, COG, 10%	0603	STD	STD
1	C17	1uF	Capacitor, Ceramic, 16V, X7R, 20%	0603	STD	STD
1	C18	1n	Capacitor, Ceramic, 500V, COG, 10%	1206	STD	STD
1	C20	1u	Capacitor, Ceramic Chip, 16V, ±10%	0603	STD	STD
1	C21	DNP	Capacitor, Ceramic, 16V, X7R, 10%	0603	STD	STD
1	C23	100p	Capacitor, Ceramic, 50V, COG, 10%	0603	STD	STD
1	C24	1n	Capacitor, Ceramic, 50V, COG, 10%	0603	STD	STD
1	C25	1n	Capacitor, Ceramic, 16V, X7R, 10%	0603	STD	STD
2	C1-2	2200p	Capacitor, Ceramic Chip, 250V, ±10%	1812	STD	STD
2	C16 C19	100n	Capacitor, Ceramic Chip, 50V, ±10%	0603	STD	STD
2	C7 C10	220u	Capacitor, Electrolyt, 35V, 105C, 20%	8x11.5 mm	EKZH350E221M	Nippon
1	D1	US1G	Diode, Rectifier, 1A, 400V	SMA	US1G	Diodes Inc
1	D3	DF06S	Bridge Rectifier, 600V, 1.5A, Glass Passivated, SMD	DF-S	DF06S	Diodes
1	D4	20CTQ150	Diode, Dual Schottky, 20A, 150V	TO-220	20CTQ150	IR
1	D5	BZX585-C27	Diode, Zener, 250mW, 27V	SOD-523	BZX585-C27	Philips
1	D6	ES1D	Diode, Rectifier, 1A, 200V	SMA	ES1D	Diodes Inc
1	D7	BZX585-C10	Diode, Zener, 250mW, 10V	SOD-523	BZX585-C10	Philips
1	D8	TS4148 RZ	Diode, Hi-Speed Switching, 0.35A, 100V	0603	TS4148 RZ	Fairchild
1	D9	BZX585-C15	Diode, Zener, 250mW, 15V	SOD-523	BZX585-C15	Philips
1	D10	TLV431BDBZ	IC, Low-Voltage Adjustable Shunt Regulator	SOT23-3	TLV431CDBZx	TI
1	HS1	TBD	Heatsink, Custom	1.200 x 0.530 inch	TBD	TBD
1	J1	DNP	Header, Top Entry 2-pin, 312 mil spacing,	0.465 X 0.370 inch	B2P3-VH	EH
1	J2	DNP	Terminal Block, 3-pin, 6-A, 3.5mm	0.41 x 0.25 inch	ED555/3DS	OST
1	L1	10mH	Inductor, Coupled, 10mH, 0.7A, ±30%	8x15 mm	744 821 110	WE
1	L2	1uH	Inductor, TH axial, LBC series	0.162 x 0.400 inch	B82144A2102K00	Epcos
1	Q1	BSS127	MOSFET, Nch, 600V, 7 mA, 700 Ohm	SOT23	BSS127	Infineon
1	Q4	STP11NK40ZFP	MOSFET, Nch, 400V, 10A, 0.55 Ohms	TO-220	STP11NK40ZFP	ST
1	Q5	BSS138	MOSFET, Nch, 50V, 0.22A, 3.5 Ohm	SOT23	BSS138	Fairchild
2	Q2-3	MMBT2222A	TRANSISTOR, NPN, HIGH-PERFORMANCE, 500mA	SOT-23	MMBT2222A	Fairchild
1	R2	10k	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
1	R3	S10K175E2K1	Varistor, 175Vac, Clamping Max.455V, 25A	0.472 x 0.213 inch	B72210P2171K101	Epcos
1	R4	2.5	NTC Thermistor, 15mm	0.472 x 0.213 inch	B57237S0259M0	Epcos
1	R6	100	Resistor, Chip 1/4 watt, ± 5%	1206	STD	STD
1	R7	10	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
1	R8	2	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
1	R9	100k	Resistor, Chip, 1/2W, 0.1%	1210	STD	STD
1	R10	47k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R12	22k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R14	13k	Resistor, Chip, 1/10W, ±5%	0805	STD	STD
1	R16	4.7	Resistor, Chip, 1/10W, 1%	0805	STD	STD
1	R17	22.1k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R19	49.9	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R21	tbid	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R23	0.2	Resistor, Chip 1/4 watt, ±1%	1206	WLS1206R2000F	Vishay
1	R24	43.2k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R25	69.8k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R26	4.7k	Resistor, Chip, 1/10W, 1%	0805	STD	STD
1	R28	6.34k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R30	21k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R32	221k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R33	76.8k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R34	24.3k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
2	R1 R5	1.5M	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
2	R15 R27	100k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
3	R20 R22 R31	100	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	T1	85 uH	Transformer, 85uH, ± 5%	22X26 mm	064028-a	Kaschke
2	TP10-11	STD	Test Point, 0.032 Hole	0.100 x 0.100 inch	STD	STD
11	TP1-9 TP12-13	STD	Test Point, 0.025" 0.100 x 0.100 inch"	STD	STD	STD
1	U1	LM5021-2	IC, AC-DC Current Mode PWM Controller	MSOP	LM5021MMX-2	TI
1	U3	OPA170AIDBV	IC, 36V, Single-Supply, Op Amp	SOT-23	OPA170AIDBV	TI
1	U4	CNY17F-3M	IC, Optocoupler, 70 Vceo, Viso 5000Vrms, Wide Lead Space	DIP6 [400mil wide]	CNY17F-3M	Fairchild

- Notes:
1. These assemblies are ESD sensitive, ESD precautions shall be observed.
  2. These assemblies must be clean and free from flux and all contaminants.  
Use of no clean flux is not acceptable.
  3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.
  4. Ref designators marked with an asterisk ("\*\*") cannot be substituted.  
All other components can be substituted with equivalent MFG's components.

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