

PMP6024

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB	1		Printed Circuit Board		PMP6024	Any	-	-
C1	1	4700pF	CAP, CERM, 4700pF, 500VAC, Y5U, 20%, Radial 10mm	Radial	VY1472M63Y5UQ63V0	Vishay BC Components	-	-
C2, C13	2	0.33uF	CAP, Film, 0.33uF, 630V, +/-20%, TH	B32922_14.5mm	B32922C3334M	EPCOS Inc	-	-
C3, C42	2	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 1206	1206	GRM319R72A104KA01D	MuRata	-	-
C4	1	0.01uF	CAP, CERM, 0.01uF, 1000V, X7R, 10%, 1808	1808	VJ1808Y103KXGAT	Vishay Vitramon	C1808C103KDRACTU	Kemet
C5	1	1000uF	CAP, Aluminum, 1000uF, 63V, +/-20%, Radial	Radial	UPW1J102MHD6	Panasonic Electronic Compon	-	-
C6, C7, C9, C16, C24, C27	6	1uF	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1206	1206	GRM31CR72A105KA01L	MuRata	-	-
C8, C35, C36	3	2200pF	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	0603	C0603C222K5RACTU	Kemet	-	-
C10	1	DNP	DNP	0603	DNP	MuRata	-	-
C11, C14	2	6800pF	CAP, Safety, 6800pF, 300VAC, Y5U, 20%, Radial, Disc	Radial, Disc	VY2682M59Y5US63V0	Vishay BC Components	-	-
C12	1	0.1uF	CAP, FILM, 0.1uF, 305VAC, Radial	Radial	B32921C3104M	EPCOS Inc	-	-
C15	1	1uF	CAP, CERM, 1uF, 50V, +/-10%, X7R, 1210	1210	GRM32R2R71H105KA01L	MuRata	-	-
C17	1	47uF	CAP, Aluminum, 47uF, 25V, +/-20%, Radial	Radial	EEU-EB1E470S	Panasonic Electronic Compon	-	-
C18, C34	2	470pF	CAP, CERM, 470pF, 100V, +/-5%, COG/NP0, 0603	0603	GRM1885C2A471JA01D	MuRata	-	-
C19	1	0.47uF	CAP, CERM, 0.47uF, 100V, +/-10%, X7R, 1206	1206	GRM31MR72A474KA35L	MuRata	-	-
C20, C23	2	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603	GRM188R71H104KA93D	MuRata	-	-
C21	1	10uF	CAP, CERM, 10uF, 10V, +/-10%, X5R, 1206	1206	GRM31CR71A106KA01L	MuRata	-	-
C22	1	0.22uF	CAP, CERM, 0.22uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E224KA88D	MuRata	-	-
C25	1	22pF	CAP, CERM, 22pF, 100V, +/-5%, COG/NP0, 0603	0603	GRM1885C2A220JA01D	MuRata	-	-
C26	1	1000pF	CAP, CERM, 1000pF, 100V, +/-10%, X7R, 0603	0603	GRM188R72A102KA01D	MuRata	-	-
C40	1	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805	C0805C104K1RACTU	Kemet	-	-
C45	1	47uF	CAP, Alum, 47uF, 50V, +/-20%, Radial	Radial, Can	UPW1H470MED	Nichicon	-	-
C64, C74	2	2.2uF	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210	HMK325B7225KN-T	Taiyo Yuden	-	-
C66, C76	2	1uF	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	0805	GRM21BR71H105KA12L	MuRata	-	-
C68, C78	2	10uF	CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805	0805	GRM21BR61C106KE15L	MuRata	-	-
C70, C80	2	470pF	CAP, CERM, 470pF, 50V, +/-10%, X7R, 0603	0603	GRM188R71H471KA01D	MuRata	-	-
C72, C82	2	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	0603	GRM188R71H103KA01D	MuRata	-	-
C81	1	4.7uF	CAP, CERM, 4.7uF, 16V, +/-10%, X5R, 0805	0805 (2012 Metric)	C2012X5R1C475K125AC	TDK Corporation	-	-
D1, D5, D21	3	400V	Diode, Ultrafas, 400V, 2A, SMA	SMA	MURA140T3G	ON Semiconductor	-	-
D2	1	220V	Diode, TVS, Uni, 600W, 220V, Unidirection, 5%, SMB	SMB	P6SMB220A	Littelfuse Inc	SMBJ220A	Littelfuse Inc
D3	1	800V	Diode, Switching-Bridge, 800V, 2A, SIP	SIP TH	2KBP08M-E4/51	Vishay Semiconductor Diodes	-	-
D4	1	800V	Diode, Ultrafast, 800V, 1A, SMA	SMA	US1K-E3/61T	Vishay Semiconductor Diodes	US1K-13-F	Diodes Inc
D6, D12, D13	3	10V	Diode, Zener, 10V, 500mW, SOD-123	SOD-123	MMSZ5240B-7-F	Diodes Inc.	-	-
D7, D9, D10, D11, D19	5	100V	Diode, Fast, 100V, 200mA, SOD-123	SOD-123	BAV19W-7-F	Diodes Inc	MMSD4148T3G	ON Semiconductor
D8	1	18V	Diode, Zener, 18V, 500mW, SOD-123	SOD-123	MMSZ5248B-7-F	Diodes Inc.	-	-
D14, D17	2	0.63V	Diode, P-N, 70V, 0.2A, SOT-323	SOT-323	BAV99WT1G	Fairchild Semiconductor	-	-
D15, D20	2	4.7V	Diode, Zener, 4.7V, 500mW, SOD-123	SOD-123	MMSZ5230B-7-F	Diodes Inc.	-	-
D16	1	3V	Diode, Zener, 3V, 500mW, SOD-123	SOD-123	MMSZ5225B-7-F	Diodes Inc.	-	-
D18	1	15V	Diode, Zener, 15V, 500mW, SOD-123	SOD-123	MMSZ5245B-7-F	Diodes Inc.	-	-
D30, D32	2	750mV @ 5A	DIODE SCHOTTKY 60V 5A DO214AB	DO-214AB, SMC	CDBC560-G	Comchip Technology	-	-
F1	1	3A	Fuse, 3A, 350VAC, Board Mount	Board Mount	0447003.YXP	Littelfuse Inc	-	-
FID1, FID2, FID3, FID4	4		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A	-	-
H2, H3	2		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply	-	-
H6, H7	2		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
HTSK1	1		HTSK, Aavid P/N 7141DG, TO-220 Vert, PCB mount	Htsk_7141DG	7141DG	Aavid Thermalloy	-	-
J4, J5, J6, J7, J8, J9, J11, J13	8		18 GA WIRE HOLE	NA	NA	NA	-	-
L1	1	560uH	Inductor, 560uH, 1.05A, Radial	Radial	RFB1010-561L	Coilcraft	-	-
L3, L5	2	160	Inductor, Ferrite EMI Chip, 160 Ohm @ 100KHz, 6A, 18m ohm, SMT	1206	HI1206T161R-10	Laird-Signal Integrity Products	-	-
L4	1	5.6mH	Coupled Inductor, 5.6mH, 0.8A, 245m ohm, +/-15%, Through Hole	Horizontal EH Choke	EH20-0.8-02-5M6	Schaffner EMC Inc	-	-
L6, L7	2	150uH	Technology, lmax, DCR	MSS1260	MSS1260-154KL	CoilCraft	-	-
L8, L9	2	160 ohm	6A Ferrite Bead, 160 ohm @ 100MHz, SMD	1206	HI1206T161R-10	Steward	-	-
Q1	1	600V	MOSFET, N-CH, 600V, 300mA, TO-92	TO-92	FQN1N60CTA	Fairchild Semiconductor	-	-
Q2, Q4, Q5	3	0.2V	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23	MMBT3904	Fairchild Semiconductor	None	None
Q3	1	Value	Transistor, PNP, 80V, SOT23	TO-236-3, SC-59, SOT-23-3	MMBTA56-7-F	Diodes Inc	-	-
Q6	1	800V	MOSFET, N-CH, 800V, 9A, TO-220FP	TO-220FP	STP10NK80ZFP	STMicroelectronics	-	-
Q7	1	0.25V	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23	MMBT3906-7-F	Diodes Inc.	None	None
Q9, Q11	2		MOSFET P-CH 70V 5.7A D PAK	D PAK	ZXMP7A17KTC	Diodes/Zetex	-	-
R1, R4, R21	3	499k	RES, 499k ohm, 1%, 0.25W, 1206	1206	CRCW1206499KFKEA	Vishay-Dale	Equivalent	Any
R2	1	62k	RES, 62k ohm, 5%, 1W, 2512	2512	CRCW251262K0JNEG	Vishay Dale	-	-
R3	1	DNP	DNP	2512	DNP	Vishay Dale	-	-
R5, R16, R26	3	49.9k	RES, 49.9k ohm, 1%, 0.1W, 0603	0603	CRCW060349K9FKEA	Vishay-Dale	Equivalent	Any
R6, R29	2	20.0k	RES, 20.0k ohm, 1%, 0.1W, 0603	0603	CRCW060320K0FKEA	Vishay-Dale	[NoValue], Equivalent	[NoValue], Any
R7	1	200k	RES, 200k ohm, 1%, 0.25W, 1206	1206	CRCW1206200KFKEA	Vishay-Dale	-	-
R8, R12	2	20	RES, 20 ohm, 5%, 0.25W, 1206	1206	CRCW120620R0JNEA	Vishay-Dale	Equivalent	Any
R9	1	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale	-	-
R10, R33, R37	3	2.21k	RES, 2.21k ohm, 1%, 0.1W, 0603	0603	CRCW06032K21FKEA	Vishay-Dale	Equivalent	Any
R11, R75	2	249k	RES, 249k ohm, 1%, 0.1W, 0603	0603	CRCW0603249KFKEA	Vishay-Dale	Equivalent, [NoValue]	Any, [NoValue]
R13, R23, R47, R49, R50	5	100k	RES, 100k ohm, 1%, 0.1W, 0603	0603	CRCW0603100KFKEA	Vishay-Dale	[NoValue], Equivalent, E	[NoValue], Any, Any, Any, [No
R14	1	1.00Meg	RES, 1.00Meg ohm, 1%, 0.1W, 0603	0603	CRCW06031M00FKEA	Vishay-Dale	Equivalent	Any
R15, R77, R87	3	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale	Equivalent	Any
R17, R18, R36	3	1.0k	RES, 1.0k ohm, 5%, 0.1W, 0603	0603	CRCW06031K00JNEA	Vishay-Dale	Equivalent	Any
R19	1	22.1k	RES, 22.1k ohm, 1%, 0.25W, 1206	1206	CRCW120622K1FKEA	Vishay-Dale	Equivalent	Any
R20, R24, R76	3	1.00Meg	RES, 1.00Meg ohm, 1%, 0.25W, 1206	1206	CRCW12061M00FKEA	Vishay-Dale	Equivalent	Any
R22, R28, R40, R44	4	150	RES, 150 ohm, 1%, 0.125W, 0805	0805	CRCW0805150RFKEA	Vishay-Dale	Equivalent	Any
R25	1	681k	RES, 681k ohm, 1%, 0.1W, 0603	0603	CRCW0603681KFKEA	Vishay-Dale	Equivalent	Any
R27	1	10.0	RES, 10.0 ohm, 1%, 0.1W, 0603	0603	CRCW060310R0FKEA	Vishay-Dale	Equivalent	Any
R30	1	20.0	RES, 20.0 ohm, 1%, 0.1W, 0603	0603	CRCW060320R0FKEA	Vishay-Dale	-	-
R31, R32	2	47.5k	RES, 47.5k ohm, 1%, 0.1W, 0603	0603	CRCW060347K5FKEA	Vishay-Dale	Equivalent	Any
R34, R35	2	75.0k	RES, 75.0k ohm, 1%, 0.1W, 0603	0603	CRCW060375K0FKEA	Vishay-Dale	Equivalent	Any
R38, R39	2	0.47	RES, 0.47 ohm, 1%, 0.5W, 1210	1210	MCR25JZHFLR470	Rohm	Equivalent	Any
R41	1	12.7k	RES, 12.7k ohm, 1%, 0.1W, 0603	0603	CRCW060312K7FKEA	Vishay-Dale	Equivalent	Any
R42	1	14.3k	RES, 14.3 k, 1%, 0.1 W, 0603	0603	CRCW060314K3FKEA	Vishay-Dale	-	-
R43	1	4.99k	RES, 4.99k ohm, 1%, 0.1W, 0603	0603	CRCW06034K99FKEA	Vishay-Dale	Equivalent	Any
R45	1	12.1k	RES, 12.1k ohm, 1%, 0.1W, 0603	0603	CRCW060312K1FKEA	Vishay-Dale	Equivalent	Any
R46, R48	2	2.87k	RES, 2.87 k, 1%, 0.1 W, 0603	0603	CRCW06032K87FKEA	Vishay-Dale	-	-

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
R51	1	0	RES, 0 ohm, 5%, 0.25W, 1206	1206	CRCW1206000Z0EA	Vishay-Dale		
R52, R53	2	280k	RES, 280k ohm, 1%, 0.25W, 1206	1206	CRCW1206280KFKEA	Vishay-Dale		
R79, R89	2	0.18	RES .18 OHM 1W 5% 2512 SMD	2512	ERJ-1TRSJR18U	Panasonic -ECG		
R81, R91	2	6.98k	RES, 6.98k ohm, 1%, 0.1W, 0603	0603	CRCW06036K98FKEA	Vishay-Dale		
R82, R92	2	64.9k	RES, 64.9k ohm, 1%, 0.1W, 0603	0603	CRCW060364K9FKEA	Vishay-Dale		
R85	1	200k	RES, 200k ohm, 1%, 0.1W, 0603	0603	CRCW0603200KFKEA	Vishay-Dale		
R150, R151	2	6.8	RES, 6.8 ohm, 5%, 0.1W, 0603	0603	CRCW06036R80JNEA	Vishay-Dale		
RV1	1	320VAC	Varistor, 320VAC, 420VDC, 84J, 14mm, Disc	Disc 14mm	S14K320E2K1	EPCOS Inc	-	-
RV2	1	320VAC	Varistor, 320VAC, 420VDC, 150J, 14mm, Disc	Disc 14mm	S14K320E2K1	EPCOS Inc	-	-
T1	1	450uH	Xfmr, ETD Core, 450uH, 64 Np, 26 Ns, 8 Na1, 10 Na2, ETD29/16/10	ETD29 14 Pin Vertical		Würth/Midcom		
U1, U4	2		Adjustable Precision Zener Shunt Regulator, 3-pin SOT-23	MF03A	LM431BIM3	Texas Instruments		
U2	1		Optoisolator, Phototrans Out, 4-SMD	4-SMD	FOD817ASD	Fairchild Semiconductor	-	-
U3	1		Low-Voltage (1.24V) Adjustable Precision Shunt Regulators, 5-pin SOT-23	MF05A	LMV431AIM5X	Texas Instruments		
U5	1		LED Lighting Power Controller, -40 to +105 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A	UCC28811DR	Texas Instruments	Equivalent	None
U13, U15	2		PFET Buck Controller for High Power LED Drives, 10-pin eMSOP, Pb-Free	MUC10A	LM3409HVMY/NOPB	Texas Instruments		

Notes:

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

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