

**PMP8955**

| Designator                             | Quantity | Value      | Description                                                              | PackageReference            | PartNumber         | Manufacturer              | Alternate PartNumber | Alternate Manufacturer |
|----------------------------------------|----------|------------|--------------------------------------------------------------------------|-----------------------------|--------------------|---------------------------|----------------------|------------------------|
| IPC81                                  | 1        |            | Printed Circuit Board                                                    |                             | XX###              | Any                       | -                    | -                      |
| C1                                     | 1        | 220pF      | CAP CER 220PF 250VAC X1Y2 RAD                                            | 7.00 Dia mm                 | CS70-B2GA221KYNS   | TDK                       |                      |                        |
| C2                                     | 1        | .01u       | Capacitor, Ceramic, 50V, X7R, 15%                                        | 1206                        | STD                | STD                       |                      |                        |
| C3, C6                                 | 2        | 0.1uF      | CAP .1UF 250/275VAC                                                      | 0.689 x 0.217 inch          | ECQ-U2A104ML       | Panasonic                 |                      |                        |
| C4, C5                                 | 2        | 47uF       | CAP ALUM 47UF 200V 20% RADIAL                                            | 0.492 inch                  | EEU-ED2D470        | Panasonic                 |                      |                        |
| C7                                     | 1        | 1uF        | Capacitor, Ceramic, 50V, X7R, 15%                                        | 1206                        | STD                | STD                       |                      |                        |
| C8                                     | 1        | 680uF      | CAP ALUM 680UF 35V 20% RADIAL                                            | 0.492 inch                  | EKY-350ELL681MK20S | United Chemi-con          |                      |                        |
| C9, C11, C22, C24                      | 4        | 1uF        | Capacitor, Ceramic, 16V, X7R, 10%                                        | 0603                        | STD                | STD                       |                      |                        |
| C10, C12, C18, C21, C23                | 5        | 0.1uF      | Capacitor, Ceramic, 50V, X7R, 10%                                        | 0603                        | STD                | STD                       |                      |                        |
| C13, C20                               | 2        | 100pF      | Capacitor, Ceramic, 50V, C0G, 10%                                        | 0603                        | STD                | STD                       |                      |                        |
| C14                                    | 1        | 33uF       | Capacitor, Alum Electrolytic, 35V, -40 to +85C, ±20%                     |                             | STD                | STD                       |                      |                        |
| C15                                    | 1        | 330pF      | Capacitor, Ceramic, 50V, X7R, 10%                                        | 0603                        | STD                | STD                       |                      |                        |
| C16                                    | 1        | 0.1uF      | Capacitor, Ceramic, 16V, X7R, 10%                                        | 0603                        | STD                | STD                       |                      |                        |
| C17                                    | 1        | 0.01uF     | Capacitor, Ceramic, 50V, X7R, 10%                                        | 0603                        | STD                | STD                       |                      |                        |
| C19                                    | 1        | 100p       | Capacitor, Ceramic, 50V, X7R, 10%                                        | 0603                        | STD                | STD                       |                      |                        |
| D2                                     | 1        | 1V         | Diode, P-N, 420V, 1.5A, RB-15                                            | RB-15                       | RB155-BP           | Micro Commercial Componen |                      |                        |
| D3                                     | 1        | 1.25V      | Diode, Ultrafast, 400V, 1A, SMB                                          | SMB                         | MURS140-13-F       | Diodes Inc.               |                      |                        |
| D4, D6, D8, D9                         | 4        | 1N4148     | Diode, Switching, 100-V, 200-mA, 225-mW,                                 | SOD-123                     | 1N4148W-7-F        | Diodes Inc.               |                      |                        |
| D5                                     | 1        | 12V        | DIODE ZENER 17V 500MW SOD-123                                            | SOD123                      | MMSZ5242BT         | On Semi                   |                      |                        |
| D7                                     | 1        | 15V        | DIODE ZENER 17V 500MW SOD-123                                            | SOD123                      | MMSZ5245BT         | On Semi                   |                      |                        |
| D7                                     | 1        | 43CTQ100-1 | Diode, Dual Schottky, 40A, 60V                                           | TO-220                      | 43CTQ100-1         | IR                        |                      |                        |
| F1                                     | 1        | 1A         | Fuse, Slow Blow, 1A                                                      | 0.335 inch                  | 37211000001        | Wickmann                  |                      |                        |
| FID1, FID2, FID3                       | 3        |            | Fiducial mark. There is nothing to buy or mount.                         | Fiducial                    | N/A                | N/A                       |                      |                        |
| H1, H2, H5, H6                         | 4        |            | Standoff, Hex, 0.5"L #4-40 Nylon                                         | Standoff                    | 1902C              | Keystone                  | -                    | -                      |
| H3, H4, H7, H8                         | 4        |            | Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead                | Screw                       | NY PMS 440 0025 PH | B&F Fastener Supply       | -                    | -                      |
| L1                                     | 1        | 10 mH      | Inductor, Coupled                                                        | 7.5x15 mm                   | 744821110          | WE                        |                      |                        |
| LBL1                                   | 1        |            | Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll | PCB Label 0.650"H x 0.200"W | THT-14-423-10      | Brady                     | -                    | -                      |
| Q1                                     | 1        | BC846B     | TRANS NPN BIPOLAR 65V SOT23-3                                            |                             | BC846B             | Diodes Inc                |                      |                        |
| Q2                                     | 1        | STD        | MOSFET, N-ch, xx-V, yy-A, zz-milliohms                                   | TO-220V                     | SHP8N50D           | STD                       |                      |                        |
| R1, R2, R3, R5                         | 4        | 75k        | Resistor, 1/4 watt, 5%                                                   | 1206                        | STD                | STD                       |                      |                        |
| R4                                     | 1        | 0.4        | Resistor, Chip 1W, 5%                                                    | 2512                        | STD                | STD                       |                      |                        |
| R6, R14                                | 2        | 4.02k      | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R7                                     | 1        | 499        | Resistor, Chip, 1/10W, 5%                                                | 0805                        | STD                | STD                       |                      |                        |
| R8                                     | 1        | 64.9K      | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R9, R20                                | 2        | 10         | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R10                                    | 1        | 1k         | Resistor, Chip, 1/10W, 5%                                                | 0805                        | STD                | STD                       |                      |                        |
| R11, R15, R18, R19, R22, R26, R27, R29 | 8        | 10k        | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R12                                    | 1        | 2k         | Resistor, Chip, 1/10W, 5%                                                | 0805                        | STD                | STD                       |                      |                        |
| R13                                    | 1        | 2.0K       | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R16                                    | 1        | 2.15k      | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R17                                    | 1        | 2.43k      | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R21                                    | 1        | 1k         | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R23                                    | 1        | .25        | Resistor, 1/4 watt, 5%                                                   | 1206                        | STD                | STD                       |                      |                        |
| R24                                    | 1        | 100K       | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R25                                    | 1        | 9.09k      | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| R28                                    | 1        | 28k        | Resistor, Chip, 1/16W, 1%                                                | 0603                        | STD                | STD                       |                      |                        |
| T1                                     | 1        | 300uH      | Transformer, 300uH, TH                                                   | XFMR, 25.5x25.5x24.5mm      | PQ20-149           | Click Technology          |                      |                        |
| TP2, TP3, TP8, TP10                    | 4        | Red        | Test Point, TH, Multipurpose, Red                                        | Keystone5010                | 5010               | Keystone                  |                      |                        |
| TP4                                    | 1        | Black      | Test Point, TH, Miniature, Black                                         | Keystone5001                | 5001               | Keystone                  |                      |                        |
| TP5, TP6                               | 2        | Black      | Test Point, TH, Multipurpose, Black                                      | Keystone5011                | 5011               | Keystone                  |                      |                        |
| TP7, TP9, TP11, TP12, TP13, TP14, TP15 | 7        | Red        | Test Point, TH, Miniature, Red                                           | Keystone5000                | 5000               | Keystone                  |                      |                        |
| U1                                     | 1        | LM317LCD   | IC, 3 Terminal Adjustable Regulator                                      | SO8                         | LM317LCD           | TI                        |                      | None                   |
| U2                                     | 1        | LM4040D41  | IC, Micropower Shunt Voltage Reference 100 ppm/°C, 45µA, 1.225V          | SOT23                       | LM4040D41IDBZR     | TI                        |                      | None                   |
| U3                                     | 1        | LM5023MM   | IC, AC-DC Quasi-Resonant Current Mode PWM Controller                     | MSOP                        | LM5023MM           | TI                        |                      | None                   |
| U4                                     | 1        | LM358D     | IC, Dual Operational Amplifiers                                          | SO8                         | LM358D             | TI                        |                      | None                   |
| U5                                     | 1        | FOD817A    | IC, Optocoupler, 5300-V, 80-160% CTR                                     | DIP-4                       | FOD817A            | Fairchild                 |                      |                        |

Notes:

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