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-18Vin to -50Vin to -3.3Vout/2A Negative Buck

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB	1		Printed Circuit Board		PMP9624	Any	-	-
C1	1	10uF	CAP, AL, 10uF, 63V, +/-20%, 1.5 ohm, SMD	SMT Radial D	EEE-FK1J100P	Panasonic		
C2	1	470uF	CAP ALUM 470UF 6.3V 20% RADIAL	RCAP, 5x5mm	ECA-0JM471B	Panasonic		
C3	1	2200pF	CAP, CERM, 2200pF, 100V, +/-10%, X7R, 0603	0603	06031C222KAT2A	AVX		
C4	1	220pF	CAP, CERM, 220pF, 100V, +/-10%, X7R, 0603	0603	06031C221KAT2A	AVX		
C5	1	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	0603	06033C104KAT2A	AVX		
C6	1	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 1206	1206	C3216X7R1C105K/0.85	TDK		
C7	1	0.1uF	CAP, CERM, 0.1uF, 100V, +/-20%, X7R, 1206	1206	12061C104MAT2A	AVX		
C8	1	100pF	CAP, CERM, 100pF, 25V, +/-10%, X7R, 0603	0603	06033C101KAT2A	AVX		
D1	1	60V	DIODE SCHOTTKY 60V 3A DO201AD		SR306-TP	Micro Commercial Co		
L1	1	18uH	INDUCTOR POWER 18UH 2.15A SMD	SDR1307	SDR1006-180ML	Bourns		
Q1	1	60V	MOSFET N CH 60V 14A 8-SOP ADV	SON 5x6mm	TPH14006NHL1Q	Toshiba		None
Q2, Q3	2	0.75V	Transistor, PNP, 40V, 0.6A, SOT-23	SOT-23	MMBT4403	Fairchild Semiconductor		
R1	1	0.039	RES, 039 OHM 1/4W 5% 0805 SMD	0805	RL1220T-R039-J	Susumu		
R2	1	3.32k	RES, 3.32k ohm, 1%, 0.125W, 0805	0805	CRCW08053K32FKEA	Vishay-Dale		
R3	1	10	RES, 10 ohm, 5%, 0.25W, 1206	1206	CRCW120610R0JNEA	Vishay-Dale		
R4	1	374k	RES, 374k ohm, 1%, 0.25W, 1206	1206	CRCW1206374KFKEA	Vishay-Dale		
R5, R102	2	1.0k	RES, 1.0k ohm, 5%, 0.1W, 0603	0603	CRCW06031K00JNEA	Vishay-Dale		
R6	1	100	RES, 100 ohm, 5%, 0.1W, 0603	0603	CRCW0603100RJNEA	Vishay-Dale		
R7	1	20.0k	RES, 20.0k ohm, 1%, 0.1W, 0603	0603	CRCW060320K0FKEA	Vishay-Dale		
R9	1	698	RES, 698 ohm, 1%, 0.1W, 0603	0603	CRCW0603698RFKEA	Vishay-Dale		
R101	1	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale		
TP1, TP3	2	Red	Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone		
TP2, TP4	2	Black	Test Point, TH, Miniature, Black	Keystone5001	5001	Keystone	Equivalent	Any
U1	1		4.5-V TO 52-V INPUT CURRENT MODE BOOST CONTROLLER, DGQ0010D	DGQ0010D	TPS40210DGQ	Texas Instruments		None
R8	0	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale		

Notes:

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

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