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# UCC28720 High-side Buck Converter

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC81	1		Printed Circuit Board		PMP9649	Any	-	-
C1	1	10uF	CAP, AL, 10uF, 35V, +/-20%, TH	CAPPR2-5x11	UVR1V100MDD1TA	Nichicon		
C2	1	22pF	CAP, CERM, 22pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A220JAT2A	AVX		
C3, C4	2	6.8uF	CAP, AL, 6.8uF, 400V, +/-20%, TH	8x11	400AX6R8M8x11	Rubycon		
C5	1	150uF	CAP ALUM 150UF 25V 20% RADIAL	6.3x11.2mm	EEU-FR1E151B	Panasonic		
C6	1	1uF	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	0805	08055C105KAT2A	AVX		
D1	1	100V	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123	1N4148W-7-F	Diodes Inc.		
D2	1	600V	DIODE FAST REC 600V 1A DO214AC	SMA	ES1J-TP	Diodes Inc.		
D3, D5	2	1000V	Diode, P-N, 1000V, 1A, TH	DO-41	1N4007	Fairchild Semiconductor		
D4	1	600V	Diode, Ultrafast, 600V, 1A, SMB	SMB	MURS160-13-F	Diodes Inc.		
L1	1	1mH	Inductor, Unshielded Drum Core, Ferrite, 1mH, 0.25A, 4.38 ohm, TH	D6 x 8.5mm	7447462102	Würth Elektronik eiSos		
L2	1	220uH	INDUCTOR 220UH .64A 8095 RAD	Dia 8x10mm	744772221	Würth Elektronik eiSos		
Q1	1		TRANS SWITCHING FAST HV DPAK	DPAK	FJD5304DTF	Rohm		
R1	1	75.0k	RES, 75.0k ohm, 1%, 0.125W, 0805	0805	CRCW080575K0FKEA	Vishay-Dale		
R2	1	432k	RES, 432k ohm, 1%, 0.25W, 1206	1206	CRCW1206432KFKFA	Vishay-Dale		
R3	1	17.8k	RES, 17.8k ohm, 1%, 0.1W, 0603	0603	CRCW060317K8FKFA	Vishay-Dale		
R4	1	162	RES, 162 ohm, 1%, 0.1W, 0603	0603	CRCW0603162RFKEA	Vishay-Dale		
R5, R7	2	1.00	RES, 1.00 ohm, 1%, 0.125W, 0805	0805	CRCW08051R00FKFA	Vishay-Dale		
R6	1	12k	RES, 12k ohm, 5%, 0.25W, 1206	1206	CRCW120612K0JNEA	Vishay-Dale		
RF1	1	4.7	RES, 4.7 ohm, 5%, 1W, Fusible, TH	Axial resistor	FKN1WSJR-52-4R7	Yageo America		
TP1, TP2	2	Red	Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone		
TP3, TP4	2	Black	Test Point, TH, Miniature, Black	Keystone5001	5001	Keystone	Equivalent	Any
U1	1		CONSTANT-VOLTAGE, CONSTANT-CURRENT CONTROLLER WITH PRIMARY SIDE REGULATION, D0007A	D0007A	UCC28720D	Texas Instruments		None
Q2	0		MOSF NPN 400V 1A SOT-223	SOT-223	STN2580	Diodes Inc.		

Notes:

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

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