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TPS92210 30W Flyback

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
C1	1	0.1uF	CAP, Film, 0.1uF, 305V, +/-20%, TH	13x6x12mm	B32921C3104M	EPCOS Inc		
C2, C3	2	0.22uF	CAP, Film, 0.22uF, 630V, +/-10%, TH	B32922 12.5mm	B32922C3224K	EPCOS Inc		
C4	1	0.01uF	CAP, CERAM, 0.01uF, 1000V, X7R, 10%, 1808	1808	VJ1808Y103KXGAT	Vishay Vitramon	C1808C103KDRACU	Kemet
C5, C13	2	4700pF	CAP, CERAM, 4700pF, 500VAC, Y5U, 20%, Radial 10mm	Radial	VY1472M63Y5UQ63V0	Vishay BC Components	-	-
C6, C7	2	1uF	CAP, CERAM, 1uF, 100V, +/-10%, X7R, 1206	1206	GRM31CR72A105KA01L	MuRata		
C8	1	1000uF	CAP, Aluminum, 1000uF, 63V, +/-20%, Radial	Radial	UPW1J102MHD6	Panasonic Electronic Compon	-	-
C9	1	47uF	CAP, Aluminum, 47uF, 25V, +/-20%, Radial	Radial	EEU-EB1E470S	Panasonic Electronic Compon	-	-
C10, C11	2	0.1uF	CAP, CERAM, 0.1uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E104KA01D	MuRata		
C12	1	2.2uF	CAP, CERAM, 2.2uF, 16V, +/-10%, X7R, 0805	0805	C2012X7R1C225K	TDK		
C14	1	1uF	CAP, CERAM, 1uF, 25V, +/-10%, X5R, 0805	0805	GRM216R61E105KA12D	MuRata		
C15	1	0.33uF	CAP, CERAM, 0.33uF, 16V, +/-10%, X7R, 0603	0603	C0603C33K4RACTU	Kemet		
C16, C17, C18	3	0.01uF	CAP, CERAM, 0.01uF, 100V, +/-10%, X7R, 0603	0603	06031C103KAT2A	AVX		
C19	1	10uF	CAP, CERAM, 10uF, 35V, +/-20%, X7R, 1210	1210	GMK325AB7106MM-T	Taiyo Yuden		
C20	1	330pF	CAP, CERAM, 330pF, 630V, +/-5%, COG/NP0, 1206	1206	C3216C0G1231J	TDK		
D1	1	16V	Diode, Zener, 16V, 500mW, SOD-123	SOD-123	MMSZ4703T1G	ON Semiconductor		
D2	1	12V	Diode, Zener, 12V, 500mW, SOD-123	SOD-123	MMSZ4699-V	Vishay-Semiconductor		
D3	1		DIODE BRIDGE 0.5A 800V 4-SOIC	TO-269AA, 4-BESOP	MB8S	Fairchild Semiconductor		
D4	1	800V	Diode, Ultrafast, 800V, 1A, SMA	SMA	US1K-E3/61T	Vishay Semiconductor Diodes	US1K-13-F	Diodes Inc
D5	1	1.5V @ 1A	Diode, Ultra Fast, 400V, 1A, SMB	DO-214AA, SMB	STTH1R04U	STMicroelectronics	-	-
D6	1	MMBD1204	Diode, Small Signal, 100V, 200 mA	SOT416	MMBD1204	Fairchild		
D7, D8	2	24V	Diode, Zener, 24V, 500mW, SOD-123	SOD-123	MMS2525B-7-F	Diodes Inc.		
D9	1	100V	Diode, Fast, 100V, 200mA, SOD-123	SOD-123	BAV19W-7-F	Diodes Inc	MMSD4148T3G	ON Semiconductor
F1	1	3A	Fuse, 3A, 350VAC, Board Mount	Board Mount	0447003.YXP	Littelfuse Inc	-	-
L1	1	22mH	Common Mode Choke	Vertical, 4 PC Pin	TLF14CB2230R4K1	Taiyo Yuden		
L2	1	2.2mH	Inductor, Shielded, Ferrite, 2.2mH, 0.62A, 2.01 ohm, TH	13.3mm DIA	RFS1317-225KL	Coilcraft		
Q1	1	950V	MOSFET, N-CH, 950V, 12A, TO-220FP	TO-220FP	STF15N95K5	STMicroelectronics	-	-
Q2, Q3	2	40V	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23	MMBT3904	Fairchild Semiconductor	None	None
Q4	1	40V	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23	MMBT3906-7-F	Diodes Inc.		
R1, R2, R22, R23	4	549k	RES, 549k ohm, 1%, 0.25W, 1206	1206	CRCW1206549KFKEA	Vishay-Dale		
R3	1	4.99	RES, 4.99 ohm, 1%, 0.1W, 0603	0603	CRCW06034R99KFKEA	Vishay-Dale		
R4	1	100k	RES, 820 ohm, 5%, 1W, 2512	2512	CRCW2512820RJNEG	Vishay-Dale		
R5	1	3.01	RES, 3.01 ohm, 1%, 0.1W, 0603	0603	CRCW06033R01KFKEA	Vishay-Dale		
R6	1	115k	RES, 115k ohm, 1%, 0.1W, 0603	0603	CRCW0603115KFKEA	Vishay-Dale		
R7	1	100k	RES, 100k ohm, 1%, 0.1W, 0603	0603	CRCW0603100KFKEA	Vishay-Dale		
R8	1	23.2k	RES, 23.2k ohm, 1%, 0.1W, 0603	0603	CRCW060323K2KFKEA	Vishay-Dale		
R9, R21	2	49.9k	RES, 49.9k ohm, 1%, 0.1W, 0603	0603	CRCW060349K9KFKEA	Vishay-Dale	[NoValue], Equivalent	[NoValue], Any
R10	1	49.9	RES, 49.9 ohm, 1%, 0.25W, 1206	1206	CRCW1206499KFKEA	Vishay-Dale		
R11, R13, R17, R18, R26	5	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0KFKEA	Vishay-Dale		
R12	1	0.33	RES, 0.33 ohm, 1%, 0.5W, 1210	1210	MCR25JZHLR330	Rohm		
R14	1	100k	RES, 100k ohm, 5%, 0.25W, 1206	1206	CRCW1206100KJNEA	Vishay-Dale		
R15	1	2.00k	RES, 2.00k ohm, 1%, 0.1W, 0603	0603	CRCW06032K00KFKEA	Vishay-Dale		
R16	1	20.0k	RES, 20.0k ohm, 1%, 0.1W, 0603	0603	CRCW060320K0KFKEA	Vishay-Dale		
R19	1	34.0k	RES, 34.0k ohm, 1%, 0.1W, 0603	0603	CRCW060334K0KFKEA	Vishay-Dale		
R20	1	1.5Meg	RES, 1.0Meg ohm, 5%, 0.1W, 0603	0603	CRCW06031M00JNEA	Vishay-Dale		
R24	1	66.5k	RES, 66.5k ohm, 1%, 0.1W, 0603	0603	CRCW060366K5KFKEA	Vishay-Dale		
RV1	1	320VAC	Varistor, 320VAC, 420VDC, 150J, 14mm, Disc	Disc 14mm	S14K320E2K1	EPCOS Inc	-	-
T1	1			ER28	750811693	Würth Elektronik	-	-
U1	1		High Efficiency, Offline LED Lighting Driver Controller with Current Mode Control, -40 to +125 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A	TPS92210D	Texas Instruments	Equivalent	None
U2	1		Optocoupler, 5kV RMS, SMT	DIP-4L Gullwing	FOD817DS	Fairchild Semiconductor		
U3	1		Precision Micropower Shunt Voltage Reference, 3-pin SOT-23	MF03A	LM4040AIM3X-5.0	National Semiconductor		
U4	1	LM321MF	Low Power Single Op Amp	MF05A_L	LM321MF	National Semiconductor		
U5	1		Module, DaughterBd	eg: 0603, used in PnP report	N/A	TI	-	-

Notes:

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

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