


Project: Lighting_70W_PSR_Flyback.PrjPcb													Bill of Materials	
Source Data From:		Lighting_70W_PSR_Flyback.PrjPcb												
Project:		Lighting_70W_PSR_Flyback.PrjPcb												
Variant:		standard_board												
Report Date:		25/October 2019			11:47									
Print Date:		12/11/2019			13:17:23									
#	Designator	Comment	Description	LibRef	SourceLibraryName	Manufacturer	Manufacturer Part Number	Supplier	Supplier Part Number	Supplier 2	Supplier Part Number 2	Quantity		
1.	C1	220 nF	Film X2 capacitor 220 nF 310V PP ± 10 % Würth Electronics	890334025027CS	capacitors.SVNDblib	Würth Elektronik	890334025027CS	Digi-Key	732-5752-ND	Mouser	710-890334025027CS	1		
2.	C2	150 nF	Film X2 capacitor 150nF 310V PP ± 10 % Würth Electronics	890334025022CS	capacitors.SVNDblib	Würth Elektronik	890334025022CS	Digi-Key	732-5750-ND	Mouser	710-890334025022CS	1		
3.	C4	470pF	MLC capacitor 470pF 35V ±10% X7R Würth Elektronik	885342308017	capacitors.SVNDblib	Würth Elektronik	885342308017	Digi-Key	732-12097-1-ND	Mouser	710-885342312017	1		
4.	C6, C7, C8	470 uF	ALU electrolyte capacitor 470uF 63V 20% Würth Elektronik	860808780024	capacitors.SVNDblib	Würth Elektronik	860808780024	Digi-Key	732-9144-1-ND	Mouser	710-860808780024	3		
5.	C9	470 nF	Film X2 capacitor 470nF 630V DC ± 10 % Würth Electronics	890303426008CS	capacitors.SVNDblib	Würth Elektronik	890303426008CS	Digi-Key	732-11852-ND	Mouser	710-890303426008CS	1		
6.	C10	4.7 uF	MLCC capacitor 4.7uF 50V X5R ± 10% TDK	C2012X5R1H475K125AB	capacitors.SVNDblib	TDK	C2012X5R1H475K125AB	Farnell	2346932	Mouser	810-C2012X5R1H475K	1		
7.	C11	1 uF	MLC capacitor 1uF 25V X7R 10% Murata	GRM018R71E105KA991	capacitors.SVNDblib	Murata	GRM018R71E105KA991	Digi-Key	490-6486-1-ND	Mouser	81-GRM018R71E105KA99	1		
8.	C12	68 nF	MLC capacitor 68nF 25V X7R 5% Murata	GRM188R71E683JA01D	capacitors.SVNDblib	Murata	GRM188R71E683JA01D	Murata	GRM188R71E683JA01D			1		
9.	C13	10 nF	MLC capacitor 10nF 50V X7R 5% Murata	GRM018R71H103JA01D	capacitors.SVNDblib	Murata	GRM018R71H103JA01D	Digi-Key	490-9742-1-ND	Mouser	81-GRM018R71H103JA1D	1		
#	C14	330 nF	MLC capacitor 330nF 50V X7R 5% Murata	GRM018R71H334JA88D	capacitors.SVNDblib	Murata	GRM018R71H334JA88D	Mouser	81-GRM018R71H334JA8D	Murata	GRM018R71H334JA88D	1		
#	C15	22 uF	Polymer ALU eco 22uF 35V 35mOhm 20% Würth Elektronik	8702235673001	capacitors.SVNDblib	Würth Elektronik	8702235673001	Digi-Key	732-11918-1-ND	Mouser	710-8702235673001	1		
#	C16	100 nF	MLC capacitor 100nF 100V X7R 5% Murata	GRM018R72A100JAC4L	capacitors.SVNDblib	Murata	GRM018R72A100JAC4L	Murata	GRM018R72A100JAC4L			1		
#	C17	68uF	MLC capacitor 6.8uF 25V NP0 ±0.5pF Würth Electronics	885012006031	capacitors.SVNDblib	Würth Elektronik	885012006031	Digi-Key	732-7773-1-ND	Mouser	710-885012006031	1		
#	CON1	Green	Pluggable Terminal Blocks WR-TBL Model3137 5mm 3Pin Cls Hztl PCBHdr	691313710003	connectors.SVNDblib	Würth Elektronik	691313710003	Würth Elektronik	691313710003	Mouser	710-691313710003	1		
#	CON2	691 351 500 003	Cable connector series 351 30pins 5.08 mm Würth Elektronik	691351500003	connectors.SVNDblib	Würth Elektronik	691351500003	Würth Elektronik	691351500003			1		
#	CY1, CY2, CY3	2n2	Disc ceramic capacitor 2n2 500 V 0V / 760 V 10 15% 20 % Vishay	VY222M4755U063V0	capacitors.SVNDblib	Vishay	VY222M4755U063V0	Farnell	1902208	Mouser	72-VY222M4755U063V0	3		
#	D1	RURP1560	Ultra fast Schottky diode 600V 15A ON Semiconductor	RURP1560-F085	diodes.SVNDblib	ON Semiconductor	RURP1560-F085	Digi-Key	RURP1560-F085-ND	Mouser	512-RURP1560_F085	1		
#	D2	GBU6K	Bridge Rectifier Diode, Single, 800 V, 6 A, SIP, 1 V, 4 Pins ON Semiconductor	GBU6K	diodes.SVNDblib	ON Semiconductor	GBU6K	Farnell	9549510	Mouser	512-GBU6K	1		
#	D3, D4	U151MFA	Super Fast diode 1000 V 1 A 75 nS SOD123FA ON Semiconductor	U151MFA	diodes.SVNDblib	ON Semiconductor	U151MFA	Digi-Key	U151MFACT-ND	Mouser	512-U151MFA	2		
#	D5	MMS22T1G	Zener Diodes 22V 500mW SOD123 ON Semiconductor	MMS22T1G	diodes.SVNDblib	ON Semiconductor	MMS22T1G	Mouser	863-MMS22T1G	Digi-Key	MMS22T1G050TR-ND	1		
#	F1	2.5 A	Fuse 2.5A 250V AC 10.1mm x 3mm SCHURTER	3403.0170	fuses.SVNDblib	Schurter	3403.0170	Farnell	1221094	Mouser	693-3403.0170.11	1		
#	HS1, HS2	SK 525 20 mm black anodized	Heatsink Fischer Elektronik SK 525 20 mm black anodized	SK525_20_ST	mechanical.SVNDblib	Fischer Elektronik	SK52520ST	Fischer Elektronik	SK 525 20 ST			2		
#	IC1	FL7740MX	Constant-Voltage Primary-Side-Regulation PWM Controller for Power Factor Correction	FL7740MX	ics.SVNDblib	ON Semiconductor	FL7740MX	Mouser	512-FL7740MX	Digi-Key	FL7740MX05CT-ND	1		
#	J1	613 020 243 121	WR-PHD 2.54 mm Angled Dual Socket Header, 2x10 pins	613020243121	connectors.SVNDblib	Würth Elektronik	613020243121	Würth Elektronik	613020243121			1		
#	L1	2 x 2.2 mH	CMC 2 x 2.2mH 2A 2 x 70mOhm, ± 30% Würth Elektronik	744822222	inductors.SVNDblib	Würth Elektronik	744822222	Würth Elektronik	744822222	Mouser	710-744822222	1		
#	L2	2 x 40 mH	CMC 2 x 38mH 1.2A 2 x 696mOhm, ±30/±50% Würth Elektronik	882733P21228001	inductors.SVNDblib	EPCOS/TKD	882733P21228001	Digi-Key	495-5747-ND	Mouser	871-882733P21228001	1		
#	Q1	FCF400N80Z	NMOS 800V 14A 400mOhm ON Semiconductor	FCF400N80Z	transistors.SVNDblib	ON Semiconductor	FCF400N80Z	Digi-Key	FCF400N80Z-ND	Mouser	512-FCF400N80Z	1		
#	R2, R12	320 V	TVS Varistor, 320 V, 420 V, StandarD Series, 840 V, Disc 14mm, Metal Oxide Varistor (MOV) TDK	87722450321K101	resistors.SVNDblib	TDK	87722450321K101	Farnell	1004318	Mouser	871-8772245321K101	2		
#	R6	OR	SMD Chip Resistor, 0 ohm, ER8G Series, 200 V, Thick Film, 1206 [3216 Metric], 250 mW Panasonic	ERJ8GEY0R00V	resistors.SVNDblib	Panasonic	ERJ8GEY0R00V	Digi-Key	P0-0ECT-ND	Mouser	667-ERJ-8GEY0R00V	1		
#	R7	22k	PTH resistor 22k 2.5mm 10.2mm pitch 5% 1W WELWYN	MFP1-47R1J	resistors.SVNDblib	Welwyn	MFP1-47R1J	Farnell	1565365	Mouser	756-MFP1-47R1J	1		
#	R8, R9, R10	100k	SMD Chip Resistor, 100 kohm, MCWR Series, 200 V, Thick Film, 1206 [3216 Metric], 250 mW Multicomp	MCWR12X1003FTL	resistors.SVNDblib	Multicomp	MCWR12X1003FTL	Farnell	2447453			3		
#	R13, R16	15k	SMD Chip Resistor, 15 kohm, ER8E Series, 200 V, Thick Film, 1206 [3216 Metric], 250 mW	ERJ8ENF1502V	resistors.SVNDblib	Panasonic	ERJ8ENF1502V	Farnell	2307410	Mouser	667-ERJ-8ENF1502V	2		
#	R14, R15	1k	SMD thick film resistor 1k 0805 1% 125 mW Panasonic	ERJ6ENF1001V	resistors.SVNDblib	Panasonic	ERJ6ENF1001V	Digi-Key	P1-00KCCT-ND	Mouser	667-ERJ-6ENF1001V	1		
#	R17	118k	SMD Chip Resistor, 118 kohm, ER8E Series, 200 V, Thick Film, 1206 [3216 Metric], 250 mW Panasonic	ERJ8ENF1183V	resistors.SVNDblib	Panasonic	ERJ8ENF1183V	Farnell	2307338RL	Mouser	667-ERJ-8ENF1183V	1		
#	R18	220k	SMD thick film resistor 220k 0805 1% 125 mW Panasonic	ERJ6ENF2203V	resistors.SVNDblib	Panasonic	ERJ6ENF2203V	Digi-Key	P220KCCT-ND	Mouser	667-ERJ-6ENF2203V	1		
#	R19	2R2	SMD Chip Resistor, 2.2 ohm, ER8G Series, 200 V, Thick Film, 1206 [3216 Metric], 250 mW Panasonic	ERJ8GEY2R2V	resistors.SVNDblib	Panasonic	ERJ8GEY2R2V	Farnell	2057794	Mouser	667-ERJ-8GEY2R2V	1		
#	R20	OR	SMD thick film resistor 0R 0805 2A Panasonic	ERJ6GEY0R00V	resistors.SVNDblib	Panasonic	ERJ6GEY0R00V	Farnell	2057661	Mouser	667-ERJ-6GEY0R00V	1		
#	R21	150k	SMD thick film resistor 150k 0805 1% 125 mW Panasonic	ERJ6ENF1503V	resistors.SVNDblib	Panasonic	ERJ6ENF1503V	Digi-Key	P150KCCT-ND	Mouser	667-ERJ-6ENF1503V	1		
#	R22	280k	SMD thick film resistor 280k 0805 1% 125 mW Panasonic	ERJ6ENF2803V	resistors.SVNDblib	Panasonic	ERJ6ENF2803V	Digi-Key	P280KCCT-ND	Mouser	667-ERJ-6ENF2803V	1		
#	R23	28k7	SMD thick film resistor 28k7 0805 1% 125 mW Panasonic	ERJ6ENF2872V	resistors.SVNDblib	Panasonic	ERJ6ENF2872V	Digi-Key	P28.7KCCT-ND	Mouser	667-ERJ-6ENF2872V	1		
#	R24, R25	0R4	SMD Current Sense Resistor, 0.4 ohm, WSL Series, 2512 [6432 Metric], 1 W, ± 1%, Metal Strip	WSL2512R4000FEA	resistors.SVNDblib	Vishay	WSL2512R4000FEA	Farnell	1107414	Mouser	71-WSL2512R4000FEA	2		
#	T1	750318486	Transformer for AC-DC (FL7740 flyback) converter 750318486 Würth Elektronik	750318486	transformers.SVNDblib	Würth Elektronik	750318486	Würth Elektronik	750318486			1		