



Bill of Materials for the NCP1071SOTGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
D3, D4	2	Ultra-fast rectifier	1A, 600V	-	SMA	ON Semiconductor	MURA160	No	Yes
D1	1	Diode - 60 Hz,	1A, 800V	-	SMA	ON Semiconductor	MRA4007	No	Yes
D2	1	Signal diode	100mA, 100V	-	SOD-123	ON Semiconductor	MMSD4148A	No	Yes
Z1	1	Zener diode	12V	-	SOD-123	ON Semiconductor	MMSZ5242B	No	Yes
Z2	1	Zener diode	15V/1W	-	Axial lead	Fairchild, Vishay	1N4744A or equiv.	Yes	Yes
U1	1	Controller - NCP1071	100 kHz	-	SOT223	ON Semiconductor	NCP1071STBT3G	No	Yes
Q1	1	NPN transistor	60V, 500 mA	-	SOT23	ON Semiconductor	MMBT406T1G/MMBT2222A	No	Yes
C1	1	"X" cap, box type	100nF, X2	-	LS = 10 mm	Rifa, Wima	TBD	Yes	Yes
C7	1	Ceramic cap, monolythic	10 nF, 50V	10%	0805	AVX, Murata	TBD	Yes	Yes
C4, C6	2	Ceramic cap, monolythic	100nF, 50V	10%	0805	AVX, Murata	TBD	Yes	Yes
C2	1	Electrolytic cap	10uF, 400 or 450V	10%	LS=5mm, 12 x 15.5mm	UCC	TBD	Yes	Yes
C5, C8	2	Electrolytic cap	22uF, 50Vdc	10%	LS=2.5mm, D=5mm	Panasonic - ECG	TBD	Yes	Yes
C3	1	Electrolytic cap	470uF, 25V	10%	7.5x15mm, LS=3.5mm	UCC, Panasonic	TBD	Yes	Yes
R2	1	Resistor, 1/8W SMD	4.7 ohms	5%	SMD 0805	AVX, Vishay, Dale	TBD	Yes	Yes
R3	1	Resistor, 1/8W SMD	470 ohms	5%	SMD 0805	AVX, Vishay, Dale	TBD	Yes	Yes
R4	1	Resistor, 1/8W SMD	100 ohms	5%	SMD 0805	AVX, Vishay, Dale	TBD	Yes	Yes
R1, R5	2	Resistor, 1/8W SMD	2K	5%	SMD 0805	AVX, Vishay, Dale	TBD	Yes	Yes
L1	1	Inductor (EMI choke)	820 uH or 1 mH	-	LS=5mm, Dia=7.5mm	Würth Magnetics	7447728215	Yes	Yes
L2	1	Output inductor	1.5 mH, 500mA	-	12mm x 12mm SMD	Würth	7687709152	Yes	Yes