



Bill of Materials for the NCP1351 Printer Evaluation Board

7/26/2007

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1, C4, C15, C18, C21	5	SMD capacitor	100 nF / 50 V	5%	SOD-1206	Vishay	VJ1206Y104KXAA	No	Yes
C3	1	electrolytic capacitor	4.7 μ F / 50 V	20%	radial - OD 5mm	Panasonic	ECEA1HN100U	No	Yes
C6	1	SMD capacitor	180 pF / 50 V	5%	SOD-1206	Vishay	VJ1206A181KXAA	No	Yes
C7	1	electrolytic capacitor	47 μ F / 50 V	20%	radial - OD 5mm	Panasonic	ECA1HM470	No	Yes
C8	1	SMD capacitor	10 nF / 50 V	5%	SOD-1206	Vishay	VJ1206Y103KXAA	No	Yes
C10	1	SMD capacitor	1.5 μ F	10%	SOD-1206	Murata	GRM31MR71C155K	No	Yes
C12	1	Film capacitor	10 nF / 630V	5%	radial	Epcos	B32521N8103J	No	Yes
C13	1	electrolytic capacitor	100 μ F / 400 V	20%	radial - OD 20mm	United chemicon	EKXG401ELL101MMN3S	No	Yes
C14	1	x2 capacitor	330 nF / 250 Vac	20%	radial	Epcos	B32923A2334M	No	Yes
C16	1	electrolytic capacitor	1000 μ F / 50 V	20%	radial - OD 12.5mm	Panasonic	ECA1HHG102	No	Yes
C17	1	electrolytic capacitor	100 μ F / 50 V	20%	radial - OD 10mm	Panasonic	EEUEB1H101S	No	Yes
C19	1	electrolytic capacitor	1000 μ F / 25 V	20%	radial - OD 12.5mm	Panasonic	ECA1EHG102	No	Yes
C20	1	electrolytic capacitor	100 μ F / 25 V	20%	radial - OD 10mm	Panasonic	EEUEB1E101	No	Yes
C23	1	y1 capacitor	2.2 nF / 250 Vac	20%	radial	TDK	CD12-E2GA222MYNS	No	Yes
D1	1	SMD resistor	0 Ω / 0.25 W	5%	SOD-1206	-	-	No	Yes
D3	1	High-voltage switching diode	200 mA / 200 V	-	SOT-23	ON Semiconductor	BAS20LT1G	No	Yes
D4	1	Fast-recovery rectifier	1 A / 600 V	-	axial	ON Semiconductor	1N4937G	No	Yes
D5, D7	2	Schottky rectifier	20 A / 100 V	-	TO-220	ON Semiconductor	MBR20100CTG	No	Yes
D9	1	Zener diode	17 V / 0.5 W	5%	SOD-123	ON Semiconductor	MMSZ5247BT1G	No	Yes
D10	1	Zener diode	60 V / 0.5 W	5%	SOD-123	ON Semiconductor	MMSZ5264BT1G	No	Yes
D11	1	Switching diode	200 mA / 75 V	-	SOD-123	ON Semiconductor	MMSD4148T1G	No	Yes
D12	1	Zener diode	6.2 V / 0.5 W	5%	SOD-123	ON Semiconductor	MMSZ5234BT1G	No	Yes
D13	1	Standard rectifier	1 A / 1000 V	-	axial	ON Semiconductor	1N4007G	No	Yes
HS1	1	Heatsink	13.4 $^{\circ}$ C / W	-	radial	Aavid Thermalloy	531002B02500G	No	Yes
HS2, HS3	2	TO-220 heatsink	24 $^{\circ}$ C / W	-	-	Aavid Thermalloy	577202B00000G	No	Yes
U1	1	Rectifier bridge	1A / 600 V	-	DIP-4	Micro Commercial Co.	DB105-BP	No	Yes
U2	1	CMOS IC	-	-	SOIC-8	ON Semiconductor	NCP1351CDR2G	No	Yes
X4	1	Optocoupler	-	-	DIP-4	CEL-NEC	PS2501-1-H-A	No	Yes
X6	1	Common-mode choke	2 * 15 mH / 1 A	-	radial	Panasonic	ELF-25F108A	No	Yes
X10	1	shunt regulator	2.5 - 36 V	5%	TO-92	ON Semiconductor	TL431CLPG	No	Yes
X11	1	Power MOSFET N-Channel	3 A / 600 V	-	TO-220	Rohm	2SK2792	No	Yes
T1	1	Transformer	-	-	radial	Coilcraft	GA0007-AL	No	Yes
J1	1	connector	230 Vac	-	radial	Qualtek	771W-X2/02	No	Yes
F1	1	Fuse	2 A / 250 Vac	T	radial	Wickmann	37212000411	No	Yes
L1	1	SMD inductor	10 μ H	-	SMD	Coilcraft	DO1605T-ML	No	Yes
L2, L3	1	inductor	4.7 μ H / 4.3 A	20%	radial	API Delevan Inc.	4554-4R7M	No	Yes
R1	1	SMD resistor	15 Ω / 0.25 W	5%	SOD-1206	Vishay	-	No	Yes
R2	1	resistor	4.7 M Ω / 0.33 W	5%	axial	Vishay	-	No	Yes
R5, R6	2	SMD resistor	330 k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R7	1	SMD resistor	0 Ω / 0.25 W	5%	SOD-1206	Vishay	-	No	Yes
R8, R19	2	SMD resistor	2.7 k Ω / 0.25 W	5%	SOD-1206	Vishay	-	No	Yes
R9, R12	2	SMD resistor	0 Ω / 0.25 W	5%	SOD-1206	Vishay	-	No	Yes
R10, R11, R18	3	SMD resistor	1 k Ω / 0.25 W	5%	SOD-1206	Vishay	-	No	Yes
R13	1	SMD resistor	3.4k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R14	1	SMD resistor	0.33 Ω / 0.5 W	1%	SOD-1206	Vishay	-	No	Yes
R15	1	resistor	150 k Ω / 2 W	5%	axial	Vishay	-	No	Yes
R20	1	SMD resistor	100 k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R21	1	SMD resistor	56 k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R22	1	SMD resistor	10 k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R23, R24	2	SMD resistor	3.3 M Ω / 0.25 W	5%	SOD-1206	Vishay	-	No	Yes
R26	1	SMD resistor	0 Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R28	1	SMD resistor	8.2 k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R30	1	SMD resistor	47 k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes
R31	1	SMD resistor	180 k Ω / 0.25 W	1%	SOD-1206	Vishay	-	No	Yes