

Bill of Materials for the NCP1351 Printer Power Supply Evaluation Board

ON Semiconductor



5/22/2007

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Lead Free	Digi-Key Part Number
C1, C4, C15, C18,	5	SMD capacitor	100 nF / 50 V	5%	SMD 1206	Vishay	VJ1206Y104KXAA	Yes	
C3	1	electrolytic capacitor	4.7 μ F / 50 V	20%	dial - OD 5m	Panasonic	ECEA1HN100U	Yes	P1280-ND
C6	1	SMD capacitor	180 pF / 50 V	5%	SMD 1206	Vishay	VJ1206A181KXAA	Yes	
C7	1	electrolytic capacitor	47 μ F / 50 V	20%	dial - OD 5m	Panasonic	ECA1HM470	Yes	P5181-ND
C8	1	SMD capacitor	10 nF / 50 V	5%	SMD 1206	Vishay	VJ1206Y103KXAA	Yes	
C10	1	SMD capacitor	1.5 μ F	10%	SMD 1206	Murata	GRM31MR71C155K	Yes	490-1797-1-ND
C12	1	Film capacitor	10 nF / 630V	5%	radial	Epcos	B32521N8103J	Yes	495-1261-ND
C13	1	electrolytic capacitor	100 μ F / 400 V	20%	dial - OD 20m	United chemicon	EKXG401ELL101MMN3S	Yes	565-1469-ND
C14	1	x2 capacitor	330 nF / 250 Vac	20%	radial	Epcos	B32923A2334M	Yes	495-1621-ND
C16	1	electrolytic capacitor	1000 μ F / 50 V	20%	dial - OD 12.5	Panasonic	ECA1HHG102	Yes	P5575-ND
C17	1	electrolytic capacitor	100 μ F / 50 V	20%	dial - OD 10m	Panasonic	EEUEB1H101S	Yes	P13459-ND
C19	1	electrolytic capacitor	1000 μ F / 25 V	20%	dial - OD 12.5	Panasonic	ECA1EHG102	Yes	P5544-ND
C20	1	electrolytic capacitor	100 μ F / 25 V	20%	dial - OD 10m	Panasonic	EEUEB1E101	Yes	P13122-ND
C23	1	y1 capacitor	2.2 nF / 250 Vac	20%	radial	TDK	CD12-E2GA222MYNS	Yes	445-2411-ND
D1	1	SMD resistor	0 Ω / 0.25 W	5%	SMD 1206	-	-	Yes	
D3	1	High-voltage switching diode	200 mA / 200 V	-	SOT-23	ON Semiconductor	BAS20LT1G	Yes	-
D4	1	Fast-recovery rectifier	1 A / 600 V	-	axial	ON Semiconductor	1N4937G	Yes	-
D5, D7	2	Schottky rectifier	20 A / 100 V	-	TO-220	ON Semiconductor	MBR20100CTG	Yes	-
D9	1	Zener diode	17 V / 0.5 W	5%	SOD-123	ON Semiconductor	MMSZ5247BT1G	Yes	-
D10	1	Zener diode	60 V / 0.5 W	5%	SOD-123	ON Semiconductor	MMSZ5264BT1G	Yes	-
D11	1	Switching diode	200 mA / 75 V	-	SOD-123	ON Semiconductor	MMSD4148T1G	Yes	-
D12	1	Zener diode	6.2 V / 0.5 W	5%	SOD-123	ON Semiconductor	MMSZ5234BT1G	Yes	-
D13	1	Standard rectifier	1 A / 1000 V	-	axial	ON Semiconductor	1N4007G	Yes	-
HS1	1	Heatsink	13.4 °C / W	-	radial	Aavid Thermalloy	531002B02500G	Yes	HS190-ND
HS2, HS3	2	TO-220 heatsink	24 °C / W	-	-	Aavid Thermalloy	577202B00000G	Yes	HS107-ND
U1	1	Rectifier bridge	1A / 600 V	-	DIP-4	Micro Commercial Co	DB105-BP	Yes	DB105-BPMS-ND
U2	1	CMOS IC	-	-	SOIC-8	ON Semiconductor	NCP1351CDR2G	Yes	-
X4	1	Optocoupler	-	-	DIP-4	CEL-NEC	PS2501-1-H-A	Yes	PS2501-1-H-A-ND
X6	1	Common-mode choke	2 * 15 mH/ 1 A	-	radial	Panasonic	ELF-25F108A	Yes	PLK1054-ND
X10	1	shunt regulator	2.5 - 36 V	5%	TO-92	ON Semiconductor	TL431CLPG	Yes	-
X11	1	Power MOSFET N-Channel	3 A / 600 V	-	TO-220	Rohm	2SK2792	Yes	2SK2792-ND
T1	1	Transformer	-	-	radial	Coilcraft	GA0007-AL	Yes	-
J1	1	connector	230 Vac	-	radial	Qualtek	771W-X2/02	Yes	Q277-ND
F1	1	Fuse	2 A / 250 Vac	T	radial	Wickmann	37212000411	Yes	WK4257BK-ND
L1	1	SMD inductor	10 μ H	-	SMD	Coilcraft	DO1605T-ML	Yes	-
L2, L3	1	inductor	4.7 μ H / 4.3 A	20%	radial	API Delevan Inc.	4554-4R7M	Yes	4554-4R7M-ND
R1	1	SMD resistor	15 Ω / 0.25 W	5%	SMD 1206	-	-	Yes	-
R2	1	resistor	4.7 M Ω / 0.33 W	5%	axial	-	-	Yes	-
R5, R6	2	SMD resistor	330 k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R7	1	SMD resistor	0 Ω / 0.25 W	5%	SMD 1206	-	-	Yes	-
R8, R19	2	SMD resistor	2.7 k Ω / 0.25 W	5%	SMD 1206	-	-	Yes	-
R9, R12	2	SMD resistor	0 Ω / 0.25 W	5%	SMD 1206	-	-	Yes	-
R10, R11, R1	3	SMD resistor	1 k Ω / 0.25 W	5%	SMD 1206	-	-	Yes	-
R13	1	SMD resistor	3.4k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R14	1	SMD resistor	0.33 Ω / 0.5 W	1%	SMD 2010	-	-	Yes	-
R15	1	resistor	150 k Ω / 2 W	5%	axial	-	-	Yes	-
R20	1	SMD resistor	100 k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R21	1	SMD resistor	56 k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R22	1	SMD resistor	10 k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R23, R24	2	SMD resistor	3.3 M Ω / 0.25 W	5%	SMD 1206	-	-	Yes	-
R26	1	SMD resistor	0 Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R28	1	SMD resistor	8.2 k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R30	1	SMD resistor	47 k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-
R31	1	SMD resistor	180 k Ω / 0.25 W	1%	SMD 1206	-	-	Yes	-