

Bill of Materials for NCP3163 Buck Evaluation Board

ON Semiconductor



4/17/2006

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	Step-up/down/inverting Regulator	3.4 A, 50 kHz - 300 kHz	NA	SOIC16-W, Exposed Pad	ON Semiconductor	NCP3163PWG	No	Yes
D1	1	Schottky Rectifier	2 A, 40 V	NA	SMB	ON Semiconductor	MBRS2040LT3G	No	Yes
L1	1	Inductor	47 μ H, 4.5 A	20%	NA	Coilcraft	DO5022P-473	Yes	Yes
Cin	1	Input Capacitor, Tantalum	47 μ F, 35 V	20%	V (7361-38)	AVX	TPSV476M035R0060	No	No
Cout	1	Output Capacitor, Tantalum	100 μ F, 10 V	20%	E (7343-43)	AVX	TPSE107M010R0200	No	No
R1, Rt	1	Resistor, Timing Resistor	15.0 k Ω , 1/4 W	1%	1206	Vishay/Dale	CRCW120615K0F	Yes	No
R2	1	Resistor	24.9 k Ω , 1/4 W	1%	1206	Vishay/Dale	CRCW120624K9F	Yes	No
Ct	1	Timing Capacitor	270 pF, 50 V	10%	1206	Vishay/Vitramon	VJ1206A271KXAA	Yes	No
Rsc	1	Sense Resistor	80 m Ω , 1W	1%	2512	Vishay/Dale	WSL2512R0800F	Yes	No
Cb	1	Bootstrap Capacitor	4.7 nF	10%	1206	Vishay/Vitramon	VJ1206A472KXAA	Yes	No
Rb	1	Bootstrap Resistor	200 Ω , 1/4 W	1%	1206	Vishay/Dale	CRCW1206200RF	Yes	No
Terminal	2	Input/Output Terminals	NA	NA	2 pin, 156 mil	MOLEX	26-48-1025	Yes	Yes
TP	8	Test Point	NA	NA	100 mil	3M	929450-01-36	Yes	Yes
J	2	Jumper	NA	NA	100 mil	AMP/TYCO	382811-6	Yes	Yes
Feet	4	Stand Off Feet	NA	NA	NA	SPC Technology	2565	Yes	Yes