Bill of Materials for the NCP51705SMDGEVB Evaluation Board

ON Semiconductor®

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1 C10	2	CAP, SMD, CERAMIC, 50V, X7R	2.2uF		805	TDK		YES	YES
C2	1	CAP, SMD, CERAMIC, 50V, X7R	100nF		402	TDK		YES	YES
C3	1	CAP, SMD, CERAMIC,25V, X7R	47nF		402	STD		YES	YES
C4-6	3	CAP, SMD, CERAMIC, 25V, X5R	470nF		402	STD		YES	YES
C7 C9 C12	3	CAP, SMD, CERAMIC, 10V, X7R	100nF		603	STD		YES	YES
C8	1	CAP, SMD, CERAMIC, 10V, X7R	2.2µF		603	STD		YES	YES
C11	1	CAP, SMD, CERAMIC, 50V, NPO	10pF		402	STD		YES	YES
C13	1	CAP, SMD, CERAMIC, 25V, X7R	100nF		603	TDK		YES	YES
D1	1	Diode, Fast, 1A, 1000V, Std. Rec.			SOD123F	Vishay	RS1MWF	NO	YES
D2	1	Diode, Shottky, 40V, 500mA, 510mV			SOD-123	ON Semiconductor	MBR0540	NO	YES
J1	1	DNI			Thru-Hole	Molex	90122-0762	NO	YES
J2	1	DNI			Thru-Hole	Molex	10081031	NO	YES
J3	1	DNI			Thru-Hole	Wurth	61300311121	NO	YES
Q1	1	MOSFET, N-CH, 600V, 20A, 190mOhm	DNI		TO-247	ON Semiconductor		YES	YES
R1 R5 R9-10	4	RES, SMD, 1/10W	0		603	STD		YES	YES
R2	1	RES, SMD, 1/16W	91k		402	STD		YES	YES
R3	1	RES, SMD, 1/8W	3k		805	STD		YES	YES
R4	1	RES, SMD, 1/8W	1		805	STD		YES	YES
R6-8	3	RES, SMD, 1/10W	DNI		603	STD		YES	YES
R11	1	RES, SMD, 1/8W	5.1k		805	STD		YES	YES
R12	1	RES, SMD, 1/8W	10k		805	STD		YES	YES
U1	1	SiC Driver, Single, 6A, Single, MLP4x4-24			MLP	On Semiconductor	NCP51705	NO	YES
U2	1	Digital Isolator, RF, 4-Channel			QSOP-16	Analog Devices	ADuM142E1WBRQZ	NO	YES