

Bill of Materials for the STK5Q4U362JGEVB Evaluation Board



Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
R1-1 - R1-4	4	Shunt resistor	8mΩ / 2W	±1%	SMD 6432	SUSUMU	KRL3264E-C-R008-F	YES	YES
R2	1	Setting fault clear time / resistor	2MΩ / 0.1W	±1%	SMD 1608	KOA	RK73H1JTDD2004F	YES	YES
R3	1	Setting time constant / resistor	200Ω / 0.1W	±1%	SMD 1608	KOA	RK73H1JTDD2000F	YES	YES
R4 - R6	3	Fault, ENABLE, TH pull-up / resistor	20kΩ / 0.1W	±1%	SMD 1608	KOA	RK73H1JTDD2002F	YES	YES
R7 - R12	6	Signal input low pass filter / resistor	100Ω / 0.1W	±1%	SMD 1608	KOA	RK73H1JTDD1000F	YES	YES
C1, C2	2	Aluminum electrolytic capacitor Plus – Minus	470uF / 450V	±20%	Through-hole	Rubycon	450MXC470MEFCSN35X50	YES	YES
C3	1	Film capacitor, Snubber Plus – Minus	2.2uF / 630V	±5%	Through-hole	PANASONIC	ECQE6225JT	YES	YES
C4	1	Aluminum electrolytic capacitor VDD - VSS	220uF / 35V	±20%	Through-hole	Nippon Chemi-Con	EKMG350ELL221MHB5D	YES	YES
C5 - C7, C11	4	VBx - VSx, VDD – VSS / capacitor	0.1uF / 50V	±10%	SMD 1608	MURATA	GRM188B31H104K	YES	YES
C8 – C10	3	VBx - VSx / capacitor	22uF / 25V	±20%	SMD 3225	MURATA	GRM32ER71E226ME15	YES	YES
C12	1	Setting fault clear time / capacitor	1nF / 50V	±5%	SMD 1608	MURATA	GRM1882C1H102J	YES	YES
C13	1	Setting time constant / capacitor	10nF / 50V	±10%	SMD 1608	MURATA	GRM188B11H103K	YES	YES
C14 – C19	6	Signal input low pass filter / capacitor	100pF / 50V	±5%	SMD 1608	MURATA	GRM1882C1H101J	YES	YES
CN1	1	Header - 18 pin			Through-hole 2.54pitch	HIROSE ELECTRIC	A2-18PA-2.54DSA(71)	YES	YES
VSS, VDD, U-, RCIN, ITRIP, VEXT, TH, ENABLE, FAULT, HIN1-3, LIN1-3, +, -	17	Test pin			Through-hole	Mac8	ST-1-3	YES	YES
U, V, W, +, -	5	Faston terminal (Tab)			Through-hole	-		YES	YES
IC1	1	Inverter IPM for 3-phase Motor Drive			DIP-38	ON Semiconductor	STK5Q4U362J-E	NO	YES