

Bill of Materials

VIN = 12V, VOUT = 5.0V, IOUT = 5A, fsw = 400kHz						
Reference	Count	Part Number	Value	Description	Package	Manufacturer
U1	1	RTQ6365GQW	RTQ6365GQW	Step-Down Converter	WDFN-10L 4x4	RICHTEK
C1, C2, C3, C4	4	GRM31CR72A225KA73L	2.2μF	Capacitor, Ceramic, 100V, X7R	1206	MURATA
C5	1	0603B822K500CT	8.2nF	Capacitor, Ceramic, 50V, X7R	0603	WALSIN
C6	1	0603N101J500CT	100pF	Capacitor, Ceramic, 50V, NPO	0603	WALSIN
C7, C8, C9	3	GRM32ER61C476KE15L	47μF	Capacitor, Ceramic, 16V, X5R	1210	MURATA
C11	1	0603B104K500CT	0.1μF	Capacitor, Ceramic, 50V, X7R	0603	WALSIN
CBOOT	1	0603B104K500CT	0.1μF	Capacitor, Ceramic, 50V, X7R	0603	WALSIN
CSS	1	C1608X7R1H103KT000N	10nF	Capacitor, Ceramic, 50V, X7R	0603	TDK
D1	1	SS5P6	Schottky Diode, 60V/5A	Schottky Diode, 60V/5A	TO-277A	VISHAY
L1	1	VCHA075D-6R8MS6	6.8μH	Inductor, Isat = 10.2A, 24.2mΩ		Cyntec
R1	1	WR06X5232FTL	52.3k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R2, R8	2	WR06X1002FTL	10k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R3	1	WR06X1052FTL	10.5k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R7, RBOOT	2	WR06X000 PTL	0	Resistor, Chip, 1/10W, 1%	0603	WALSIN
RT	1	WR06X2493FTL	249k	Resistor, Chip, 1/10W, 1%	0603	WALSIN

More Information

For more information, please find the related datasheet or application notes from Richtek website
<http://www.richtek.com>.

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