

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm(inches)
1	IC1,IC2, IC7,IC8, IC13,IC14	6	-	TC7SZ14F	TOSHIBA	Buffer	SMV	2.9×2.8
2	IC3,IC9, IC15	3	-	OPA237	Texas Instruments	Op Amp	8SOIC	6x4.9
3	IC4,IC5, IC10,IC11, IC16,IC17	6	-	TLP5214A	TOSHIBA	Photocoupler	SO16L	10.3× 10.0
4	IC6,IC12, IC18	3	-	TLP7820	TOSHIBA	Isolation Amplifier	SO8L	11x5.8
5	IC19	1	-	MCU	-	MCU	-	-
6	Q1,Q2,Q3, Q4,Q5,Q6	6	-	GT30J341	TOSHIBA	IGBT	TO-3P(N)	20x15.5
7	D1,D6,D7, D8,D13, D14,D15, D20,D21	9	-	CMF05	TOSHIBA	Diode	M-FLAT	2.4×4.7
8	D2,D3,D9, D10,D16, D17	6	-	CUZ8V2	TOSHIBA	Zener Diode	USC	2.5×1.25
9	D4,D5, D11,D12, D18,D19	6	-	CUS05F30	TOSHIBA	Diode	USC	2.5×1.25
10	R1,R2,R20, R23,R24, R42,R45, R46,R64	9	10kΩ			100mW, ±5%	1608	1.6 x 0.8 (0603)
11	R3,R8,R9, R10,R25, R30,R31, R32,R47, R52,R53, R54	12	10kΩ			100mW, ±0.5%	1608	1.6 x 0.8 (0603)
12	R4,R5,R6, R7,R26, R27,R28, R29,R48, R49,R50, R51	12	160Ω			100mW, ±5%	1608	1.6 x 0.8 (0603)
13	R11,R12, R33,R34, R55,R56	6	1kΩ			100mW, ±0.5%	1608	1.6 x 0.8 (0603)

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14	R13,R16, R17,R35, R38,R39, R57,R60, R61	9	100Ω			250mW, ±5%	2012	2.0 x 1.2 (0805)
15	R14,R15, R36,R37, R58,R59	6	10Ω			100mW, ±5%	1608	1.6 x 0.8 (0603)
16	R18,R19, R40,R41, R62,R63	6	1kΩ			100mW, ±1%	1608	1.6 x 0.8 (0603)
17	R21,R43, R65	3	10kΩ			100mW, ±1%	1608	1.6 x 0.8 (0603)
18	R22,R44, R66	3	20m Ω	WSHP2818R 0200FEB	Vishay	10W, ±1%	-	7.1 x 4.6
19	C1,C2,C3, C6,C7,C10, C18,C22, C23,C24, C27,C28, C31,C39, C43,C44, C45,C48, C49,C52, C60	21	100n F			Ceramic, 50V, ±10%	1608	1.6 x 0.8 (0603)
20	C4,C21, C25,C42, C46,C63	6	1nF			Ceramic, 50V, ±10%	1608	1.6 x 0.8 (0603)
21	C5,C8,C26, C29,C47, C50	6	68pF			Ceramic, 50V, ±10%	1005	1.0 x 0.5 (0402)
22	C9,C30, C51	3	10μF			Ceramic, 25V, ±10%	1608	1.6 x 0.8 (0603)
23	C11,C12, C14,C15, C32,C33, C35,C36, C53,C54, C56,C57	12	1μF			Ceramic, 50V, ±10%	2012	2.0 x 1.2 (0805)
24	C13,C34, C55	3	10μF			Ceramic, 6.3V, ±10%	2012	2.0 x 1.2 (0805)
25	C19,C20, C40,C41, C61,C62	6	120p F			Ceramic, 50V, ±10%	1608	1.6 x 0.8 (0603)

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