

ZDW120 Application PCB Assembly Bill Of Materials #0671G02J

Derived from ZDW120 Application Board Schematic for 2-Wire Dimmer 0671C02K
Last Revised: 10/1/2004

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COMPANY CONFIDENTIAL

MOST RECENT REVISIONS (Made to make unit comply with FCC 15.207)
1 Changed R4, 0 Ohm/0603 to 180K/0603
2 Added C6, 220pF/0603 (already provided for on PCB 0671E02J)
3 Added C2, 100nF/275V leaded (already provided for on PCB 0671E02J)

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Item	Qty	Reference	Value	Description	Preferred Part		Mfr #2	Mfr #2 P/N	For Mfr #1		PCB Footprint
					Mfr #1	Mfr #1 P/N			Vendor	Vendor Part#	
1	1	C2	100nF	Metalized Polypropylene Cap Class X2 275V 20%	BC Components	2222 338 20104			Digi-Key	BC1601-ND	CAPR394-236
1	1	C3	47nF	Metalized Polypropylene Cap 250VDC 10%	BC Components	2222 370 35473	BC Components	2222 470 35473	Mouser	594-222237035473	CAPR200-177
2	1	C4	10uF	1206 Monolithic Ceramic Chip 6.3V X7R 10%	Murata	GRM31CR70J106KA01L	Kemet	C1206C106K9PA CTU	Mouser	81-GRM426X106K6.3L	CC1206
3	1	C5	220uF/35V	Elect Cap 35V 10% Low ESR 105C Long Life	Nichicon	UHE1V221MPD6	Panasonic	EEU-FC1V221	Digi-Key	493-1579-ND	PCAPR200-400
3.2	1	C6	220pF	0603 Monolithic Ceramic Chip 50V COG 5%	Murata	GRM1885C1H221JA01D	Panasonic	ECU-V1H221KCV	Mouser	81-GRM39C221J050	CC0603
4	1	C7	0.1uF	CAP 25V CERAMIC X7R 0603	Panasonic	ECJ-1VB1E104K	Vishay/Vitramon	VJ0603Y104KXX MT	Digi-Key	PCC2277TR-ND	CC0603
5	1	D1	BAV99W	SOT323 Dual Series Switching Diodes VR=70V IF=200mA	ON Semi	BAV99WT1	Diodes, Inc.	BAV99W-7	Digi-Key	BAV99WT1OSCT-ND	BAV99W
6	1	F1	0.5A/125V TIME-LAG	Subminiature Fuse	Wickmann	372 0500	Bel Fuse Inc.	MRT500	Digi-Key	3720500000-ND	TR5
7	1	FWB1	DF04S	400V 1A BRIDGE RECTIFIER	Vishay-Gen Semi	DF04S	Diodes, Inc.	DF04S-T	Digi-Key	DF04SGICT-ND	DFS
8	1	J3	CON6	2mm 6 conductor single row header	Samtek	TW-06-12-T-S-740-185			Samtek	TW-06-12-T-S-740-185	HDR6/2MM
9	1	L1	47uH	High Current Toroidal Inductor	J.W. Miller Magnetics	2209-H	Renco	RL6100-48-S-H3	Digi-Key	M9796-ND	RL6100-H3
10	1	Q1	VN2460N8	600V 0.25A N-Chan Enh MOSFET	Supertex, Inc.	VN2460N8			Mouser	689-VN2460N8	TO-243AA
11	1	Q2	BTA24-600BW	TRIAC 600V 25A TO-220AB	ST Microelectronics	BTA24-600BW			Digi-Key	497-2423-ND	TO-220V
12	1	Q3	MMBT4401	TRANSISTOR GP NPN AMP	Fairchild Semiconductor	MMBT4401	Vishay Semiconductor	MMBT4401	Digi-Key	MMBT4401FSTR-ND	sot-23
13	1	Q4	MMBTA06LT1	TRANSISTOR GP NPN AMP	Fairchild Semiconductor	MMBTA06LT1	Vishay Semiconductor	MMBTA06			sot-23
14	1	R8	1 OHM	1206 Chip Resistor 5% 1/8W	ROHM	MCR18EZHJ1R0	Vishay Dale	MCR18EZHJ1R0			
15	1	R5	1K	1206 Chip Resistor 5% 1/8W	Vishay Dale	CRCW12061K00JKTA	Xicon	263-1K	Mouser	71-CRCW1206J-1K	CR1206
16	2	R1, R2	470	1206 Chip Resistor 5% 1/8W	Vishay Dale	CRCW1206470RJKTA	Xicon	263-470	Mouser	71-CRCW1206J-470	CR1206
17	1	R4	180K	0603 Chip Resistor 5% 1/16W	Yageo	CRCW0805180KJKTA	Panasonic - ECG	ERJ-3GEYJ184V	Digi-Key	71-CRCW0603J-100K	CR0603
18	1	R3	510	0603 Chip Resistor 5% 1/16W	Yageo	9C06031A5100JLHFT	Panasonic - ECG	ERJ-3GEYJ511V	Digi-Key	311-510GCT-ND	CR0603
19	1	R6	1M	1206 Chip Resistor 5% 1/8W	Vishay Dale	CRCW12061M00JKTA	Xicon	263-1M	Mouser	71-CRCW1206J-1M	CR1206
20	1	R7	100K	0805 Chip Resistor 5% 1/10W	Vishay Dale	CRCW0805100KJKTA	Xicon	260-100K	Mouser	71-CRCW0805J-100K	CR0805
21		R8	100K	0603 Chip Resistor 5% 1/10W	Yageo	9C06031A1003JLHFT	Panasonic - ECG	ERJ-3GEYJ104V	Digi-Key	311-100KGCT-ND	CR0603
22	1	SW1	AIR-GAP SWITCH	5A SPDT Slide Switch, Right Angle, Vertical	ITT Shadow (C&K)	1101-M2-S3-AV2-Q-E2	TAIWAY SWITCHES	500-SPDT-S1-M7-Q-2-E, SSP-1	Master Dis	1101M2S3AV2QE2	C&K1101-M2-S3-AV2-QE2
23	1	TVS1	P6KE400CA	Transient Suppressor	General Semiconductor	P6KE400CA	Shanghai Sunrise Electronics Co.	P6KE400CA			AXIAL-0.5
24	1	U1	MOC3023S-M	400V Optoisolator with Triac Output	Fairchild	MOC3023S-M	Lite-On	MOC3023S	Mouser	512-MOC3023SM	DIP6-SM
25	1	U2	SR036SG	SMPS IC	SUPERTEX, INC.	SR036SG			Mouser		SO8-SLUG
26	1	U3	MC14011BDR2	IC CMOS GATE NAND QUAD 14-SOIC	ON Semi	MC14011BDR2	ST Microelectroni	HCF4011BM1	Digi-Key	MC14011BDR2OSCT-ND	SO14
27	7"	J1	LINE1	STRANDED BLACK WIRE 18AWG UL1015	HITACHI	UL1015-LF-18AWG-43/0-16-BK-C305					TPH
	7"	J2	LINE2	STRANDED BLACK WIRE 18AWG UL1015	HITACHI	UL1015-LF-18AWG-43/0-16-BK-C305					TPH
28	1			NYLON CABLE TIE	3M	6224			Mouser	517-41932	
29	1			Heat Sink Pad	Bergquist	HF115-AC-58			Digi-Key	BER168-ND	
30	1	BD2	ACT# 0671E20J	Two-Layer PCB							
		C1	Not Mounted								CAPR394-236
		C2	Not Mounted								CAPR394-236
		C6	Not Mounted								CC0603