

ROHM Semiconductor

PDT001-EVK001A

R1_1

LLC_DC_DC_2.5KW

#	Description	Designator	Comment	PART Description	Package	Quantity	Pins	Total Pins	Manufacturer 1	Manufacturer Part Number 1
1	CAP NP	C100, C101, C102, C105, C106, C107, C114, C115	10nF	CAP NP,TH,Film,10nF,1KV,±5%,[TH_18x10x10_15P],MPP	[TH_18x10x10_15P]	8	2	16	KEMET	R76QI2100404J
2	CAP NP	C103, C104, C116, C117	150pF	CAP NP,TH,Film,150pF,2KV,±10%,[TH_8.5x4_7_5P],Y5P	[TH_8.5x4_7_5P]	4	2	8	Vishay / BC Components	S151K25Y5PP6TK7R
3	CAP NP	C109, C110, C111, C112	4.7uF	CAP NP,SMD,Film,4.7uF,100V,±5%,[TH_13x32x25_27.5P],MPP	[TH_13x32x25_27.5P]	4	2	8	KEMET	R75GR44705030J
4	CAP NP	C113, C123, C124	10uF	CAP NP,SMD,Ceramic,10uF,100V,±20%,[5750],X7S	[5750]	3	2	6	KEMET	C5750X7S2A106M230KB
5	CAP NP	C118	4.7nF	CAP NP,TH,Film,4.7nF,630V,±5%,[TH-13x4x9_10P],-	[TH-13x4x9_10P]	1	2	2	KEMET	R75PF1470AA01J
6	CAP NP	C200, C201, C204, C205, C318	10uF	CAP NP,SMD,Ceramic,10uF,25V,±10%,[1206],X7R	[1206]	5	2	10	YAGEO	CC1206KX7R8BB106
7	CAP NP	C202, C203, C206, C207, C208, C210, C400, C401, C402, C403, C404, C405	1uF	CAP NP,SMD,Ceramic,1uF,35V,±10%,[1206],X7R	[1206]	12	2	24	Murata	C1206C105K6RACTU
8	CAP NP	C209, C211, C317	10uF	CAP NP,SMD,Ceramic,10uF,35V,±10%,[1206],X5R	[1206]	3	2	6	Murata	GRT31CC8YA106KE01L
9	CAP NP	C300, C301, C302, C304, C315, C319, C320, C406	100nF	CAP NP,SMD,Ceramic,100nF,50V,±10%,[0805],X7R	[0805]	8	2	16	Murata	GCD21BR71H104KA01L
10	CAP NP	C303	1pF	CAP NP,SMD,Ceramic,1pF,50V,±10%,[0805],X7R	[0805]	1	2	2	YAGEO	CC0805CRNP09BN1R0
11	CAP POL	C108	470uF	CAP POL,TH,Electrolytic,470uF,100V,±20%,TH_16X33_7P5,3.86A-135°C	TH_16X33_7P5	1	2	2	Nichicon	UBY2A471MHL
12	CAP POL	C119, C120, C121	470uF	CAP POL,TH,Electrolytic,470uF,450V,±20%,TH_35x50_10P,1.85 A-105°C	TH_35x50_10P	3	2	6	Nichicon	LGU2W471MELC
13	CAP POL	C122	4.7uF	CAP POL,TH,Electrolytic,4.7uF,100V,±20%,TH_5X12.5_5P,3.86A-105°C	TH_5X12.5_5P	1	2	2	Nichicon	UPW2A4R7MDD1TA
14	Connector	J104	CON_HDR_8x2	Connector,...CON_HDR_8x2,...,[TH]	[TH]	1	16	16	Samtech	SSW-108-01-G-D
15	Connector	J105, J106, J107, J108	CON_HDR_3x2	Connector,...CON_HDR_3x2,...,[TH]	[TH]	4	6	24	Samtech	SSW-103-01-G-D
16	Connector	J201	CON_HDR_8x2	Connector,...CON_HDR_8x2,...,[TH]	[TH]	1	16	16	Samtech	TSW-108-22-G-D-RA
17	Connector	J205, J206, J207, J208	CON_HDR_3x2	Connector,...CON_HDR_3x2,...,[TH]	[TH]	4	6	24	Samtech	TSW-103-22-G-D-RA
18	Connector	J400	DIP 5.08x2N	Connector,...DIP 5.08x2N,...		1	2	2	Molex	395316002
19	Connector	J401	CON_HDR_14x2	Connector,TH,...CON_HDR_14x2,...		1	28	28	Samtech	SSW-114-01-G-D
20	Connector	J403, J406, J408	CON_HDR_4x2	Connector,...CON_HDR_4x2,...		3	8	24	Samtech	SSW-104-01-G-D
21	Connector	J404	CON_HDR_6x2	Connector,...CON_HDR_6x2,...		1	12	12	Samtech	SSW-106-01-G-D
22	Connector	J407	CON_HDR_5x2	Connector,...CON_HDR_5x2,...		1	10	10	Samtech	SSW-105-01-G-D
23	Diode	D100, D101, D300	RR2LAM6STR	Diode,SMD,Rectifier,RR2LAM6STR,600V,-,[SOD-128],2A,-,150°C	[SOD-128]	3	2	6	ROHM	RR2LAM6STR
24	Diode	D102, D103	APT100S20BG	Diode,SMD,RECT,APT100S20BG,200V,-,[TO-247],120A,-,-	[TO-247]	2	2	4	Microsemi	APT100S20BG
25	Diode	D104, D105, D106, D107, D204, D205	RB560VM-40	Diode,SMD,SIGNAL,RB560VM-40,40V,-,[SOD323],500mA,-,-	[SOD323]	6	2	12	ROHM	RB560VM-40
26	Diode	D200, D202	RFN2LAM6S	Diode,SMD,Fast Recovery,RFN2LAM6S,600V,-,[SOD-128],1.5A,-,150°C	[SOD-128]	2	2	4	ROHM	RFN2LAM6S
27	Diode	LED401, LED402, LED403, LED404, LED405	3mm	LED,TH,LED,3mm,2V,-,Radial,-,-,-	Radial	5	2	10	Everlight	204-10SURD/S530-A3
28	Diode	Z100	KDZVTF12B	Diode,SMD,ZENER,KDZVTF12B,12V,-,[SOD123],-,-,-	[SOD123]	1	2	2	ROHM	KDZVTF12B
29	Diode	Z101, Z102, Z103, Z104, Z200, Z201	UFZVFH18B	Diode,SMD,ZENER,UFZVFH18B,18V,-,[SOD-323],-,-,-	[SOD-323]	6	2	12	ROHM	UFZVFH18B
30	Diode	Z300, Z301, Z303, Z304, Z400	RB160MM-40TR	Diode,SMD,Schottky,RB160MM-40TR,40V,-,[SOD123FL],1A,-,-	[SOD123FL]	5	2	10	ROHM	RB160MM-40TR
31	Diode	Z302	UDZVTE-173.3B	Diode,SMD,ZENER,UDZVTE-173.3B,3.3V,-,[SOD-323],20mA,200mW,-55°C ~ 150°C	[SOD-323]	1	2	2	ROHM	YFZVFH3.3B
32	FUSE	F100	60A	FUSE,TH,Slow Blow,60A,58V,[TH_29.21 x 8.85x21.59_30P],-	[TH_29.21 x 8.85x21.59_30P]	1	2	2	Little fuse	0999060.ZXN
33	GATE DRIVER	U200, U201, U202, U203	BM61M41RFV	GATE DRIVER,SMD,IC,BM61M41RFV,-,SSOP-B10W,4A	SSOP-B10W	4	10	40	ROHM	BM61M41RFV
34	GATE DRIVER	U204, U205	BD2310G	GATE DRIVER,SMD,IC,BD2310G,-,SOIC-8,4A,	SOIC-8	2	5	10	ROHM	BD2310G
35	Inductor	L100	3.3uH	Inductor,TH,,3.3uH,-,20%,TH_36x21.5x35,75A-40°C ~ +125°C	TH_36x21.5x35	1	2	2	Würth Electronics	7.44376E+12
36	Inductor	L101	22.5uH	Inductor,TH,PQ2620,Horizontal,22.5uH,-,PQ3230_12pin,...	PQ3230_12pin	1	6	6	Custom	RSM0010

37	Isolator	U300	Si8621BC-B-IS	Isolator,SMD,IC,Si8621BC-B-IS,,SOIC-8,,-40°C ~-125°C	SOIC-8	1	8	8	Silicon Labs	Si8621BC-B-IS
38	LDO	U306	BA17805FP-E2	LDO,SMD,IC,BA17805FP-E2,5V,,[DPAK],1A,1W,-40°C ~ 85°C	[DPAK]	1	3	3	ROHM	BA17805FP-E2
39	MosFET	Q100, Q101, Q102, Q103	R6042JNZ	MosFET,TH,NCH,R6042JNZ,600V,,TO-247G,42A,495W,-55°C ~ 150°C (TJ)	TO-247G	4	3	12	ROHM	R6042JNZ4C13
40	MosFET	Q107, Q108	FDB1D7N10CL7	MosFET,SMD,N CH,FDB1D7N10CL7,100V,,D2PAK7,268A,250W,-40°C ~ 175°C (TJ)	D2PAK7	2	7	14	ONsemi	FDB1D7N10CL7
41	MosFET	Q300, Q400	RQ5E065AJTCL	MosFET,SMD,NCH,RQ5E065AJTCL,30V,,SOT346,6.5A,1W,-55°C ~ 150°C (TJ)	SOT346	2	3	6	ROHM	RQ5E065AJTCL
42	OPAMP	U302	LM2903BIDR	Comparator,SMD,,LM2903BIDR,36V,,SO-8,	SO-8	1	8	8	TI	LM2903BIDR
43	OPAMP	U304	TLV271SN2T1G	OPAMP,SMD,,TLV271SN2T1G,16V,,[SSOP-5],	[SSOP-5]	1	5	5	Onsemi	TLV271SN2T1G
44	Optoisolator	ISO300	PC817	Optoisolator,SMD,IC,PC817,80V,,4-SMD, Gull Wing,50mA,-30°C ~ 100°C	4-SMD, Gull Wing	1	4	4	Sharp	PC81710NP1B
45	Resistor	R100	10K	Resistor,[TH],10K,-,1%,,		1	2	2	Ohmite	TWM7J10KE
46	Resistor	R101, R102, R105, R106	50R	Resistor,SMD,50R,-,5%,[TH],3W	[TH]	4	2	8	Vishay	AC0300005009JAC00
47	Resistor	R103, R104, R120, R121, R129, R134, R224, R225, R226, R227, R303, R304, R327, R328, R406, R407, R409, R414, R415	10K	Resistor,SMD,10K,-,1%,[0805],1/8W	[0805]	20	2	40	ROHM	SFR10EZPF1002
48	Resistor	R107, R133	200mR x 3	Resistor,SMD,200mR x 3,-,1%,[2512],-	[2512]	2	2	4	ROHM	MCR100ZJHFLR200
49	Resistor	R108, R109, R112, R113	33mR or 100mR x 3	Resistor,SMD,,33mR or 100mR x 3,-,1%,[2512],7W	[2512]	4	2	8	ROHM	GMR100HTBFMR033
50	Resistor	R110, R204, R205, R212, R213, R301, R302, R305, R311, R326, R402, R403, R404, R405, R409, R410	1K	Resistor,SMD,1K,-,1%,[0805],1/8W	[0805]	16	2	32	ROHM	SFR10EZPF1001
51	Resistor	R111, R130, R131, R132, R200, R201, R208, R209, R216, R217, R228, R324, R325, R413	0R	Resistor,SMD,0R,-,1%,[0805],1/8W	[0805]	14	2	28	ROHM	SFR10EZPJ000
52	Resistor	R114, R115, R118, R119, R122, R123, R126, R127	10R	Resistor,SMD,10R,-,1%,[0805],1/8W	[0805]	8	2	16	ROHM	ESR10EZPF10R0
53	Resistor	R136, R137, R138	220K	Resistor,SMD,220K,200V,1%,[1206],2/5W	[1206]	3	2	6	ROHM Semiconductor	ESR18EZPF2203
54	Resistor	R206, R207, R214, R215	4.7K	Resistor,SMD,4.7K,-,1%,[0805],1/8W	[0805]	4	2	8	ROHM	SFR10EZPF4702
55	Resistor	R218, R219	47R	Resistor,SMD,47R,-,1%,[0805],1/8W	[0805]	2	2	4	ROHM	MCR10EZPF47R0
56	Resistor	R220, R221	100R	Resistor,SMD,100R,-,1%,[0805],1/8W	[0805]	2	2	4	ROHM	SFR10EZPF1000
57	Resistor	R222, R223	12R	Resistor,SMD,12R,-,1%,[0805],1/8W	[0805]	2	2	4	ROHM	MCR10EZPF12R0
58	Resistor	R300	383K	Resistor,SMD,383K,-,1%,[0805],1/8W	[0805]	1	2	2	YAGEO	RC0805FR-07383KL
59	Resistor	R307, R308	100K	Resistor,SMD,100K,-,1%,[0805],1/8W	[0805]	2	2	4	ROHM	SFR10EZPF1003
60	Resistor	R310, R330	20K	Resistor,SMD,20K,-,1%,[0805],1/8W	[0805]	2	2	4	ROHM	SFR10EZPF2002
61	Resistor	R400, R401	10R	Resistor,SMD,10R,-,1%,[TH],2W	[TH]	2	2	4	Stackpole Electronics Inc	RSMF2JT10R0
62	Transformer	T100	90uH	Transformer,TH,ETD54, Vertical,90uH,-,ETD54_10pin,	ETD54_10pin	1	15	15	Custom	RSM0011
63	Transistor	Q401, Q402, Q403, Q404, Q405	2SD1484KT146	Transistor,SMD,NPN,2SD1484KT146,50V,-,SOT346,500mA200mW-55°C ~ 150°C	SOT346	5	3	15	Rohm	2SD1484KT146

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