

Power for TDA3x off Auto Battery

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC81	1		Printed Circuit Board		PMP10411	Any	-	-
C1, C3, C4, C5, C106, C404, C413, C415, C614	9	0.1uF	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X5R, 0402	0402	GRM155R61E104KA87D	MuRata		
C2, C105	2	100pF	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1535C1H101JDD5D	MuRata		
C90	1	47uF	CAP, AL, 47 uF, 50 V, +/- 20%, 0.68 ohm, SMD	6.3x7.7	UUD1H470MCL1GS	Nichicon		
C100, C101	2	10uF	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	1210	GRM32ER71H106KA12L	MuRata		
C102	1	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603	06035C104KAT2A	AVX		
C103	1	0.01uF	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0402	0402	C1005X7R1E103K	TDK		
C104	1	3300pF	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0402	0402	C1005X7R1H332K	TDK		
C107, C108, C109, C405, C406, C407, C408, C412	8	22uF	CAP, CERM, 22 uF, 10 V, +/- 20%, X5R, 0805	0805	GRM21BR61A226ME44	MuRata		
C110	0	DNP	CAP, CERM, 470pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A471JAT2A	AVX		
C200, C201, C202	3	4.7uF	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0603	0603	CGB3B1X5R1A475K055AC	TDK		
C300, C301, C302	3	2.2uF	CAP, CERM, 2.2 uF, 6.3 V, +/- 20%, X5R, 0402	0402	GRM155R60J225ME15D	MuRata		
C400	1	1500pF	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H152KA01D	MuRata		
C401	1	4.7pF	CAP, CERM, 4.7 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1555C1H4R7CA01D	MuRata		
C601	1	22pF	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1555C1H220JA01D	MuRata		
C402	1	330pF	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H331KA01D	MuRata		
C403, C410	2	0.01uF	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H103KA88D	MuRata		
C409	1	4.7uF	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0603	0603	CGB3B1X5R1A475K055AC	TDK		
C414, C500	2	4.7uF	CAP, CERM, 4.7 uF, 6.3 V, +/- 20%, X5R, 0603	0603	GRM188R60J475ME19D	MuRata		
C501, C600, C602, C610, C611, C612, C613, C615	8	10uF	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603	GRM188R60J106ME84	MuRata		
C616	1	1000pF	CAP, CERM, 1000 pF, 16 V, +/- 10%, X5R, 0402	0402	GRM155R61C102KA01D	MuRata		
C900, C901, C902, C903	4	0.1uF	CAP, CERM, 0.1uF, 50V, +/-20%, X7R, 0402	0402	C1005X7R1H104M	TDK		
C904	1	1uF	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402	GRM155R61A105KE15D	MuRata		
D1	1	30V	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323	BAT54HT1G	ON Semiconductor		
D90	1	40V	Diode, Schottky, 40 V, 3 A, SMA	SMA	MBRA340T3G	ON Semiconductor		
D100	1	60V	Diode, Schottky, 60 V, 3 A, SMC	SMC	B360-13-F	Diodes Inc.		
D900	1	30V	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323	BAT54WS-7-F	Diodes Inc.		
D901, D902	2	30V	Diode, Schottky, 30V, 0.5A, SOD-123	SOD-123	MBR0530T1G	ON Semiconductor		
D903	1	Red	LED, Red, SMD	LED_0805	LTST-C170KRKT	Lite-On		
H1, H2, H3, H4	4		Bump, Hemisphere, 0.44 X 0.20, Clear	Transparent Bump	SJ-5303 (CLEAR)	3M		
J90	1		TERMINAL BLOCK 5.08MM VERT 2POS, TH	TERM_BLK, 2pos, 5.08mm	ED120/2DS	On-Shore Technology		
J100, J200, J400, J401, J500	5		Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm	ED555/2DS	On-Shore Technology		
J300, J600	2		Terminal Block, 6A, 3.5mm Pitch, 3-Pos, TH	10.5x8.2x6.5mm	ED555/3DS	On-Shore Technology		
J666	1	1x3	Header, 100mil, 3x1, Gold, TH	PBC03SAAN	PBC03SAAN	Sullins Connector Solutions		
J900	1		Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator	PBC02SAAN	Sullins Connector Solutions		
L100	1	10uH	Inductor, Shielded, Composite, 10 uH, 4.9 A, 0.05 ohm, SMD	XAL5050	XAL5050-103MEB	Coilcraft		
L200	1	4.7uH	Inductor, Shielded, Ferrite, 4.7 uH, 0.86 A, 0.168 ohm, SMD	IND_3x1x2.5mm	VLF302510MT-4R7M	TDK		
L400	1	400nH	Inductor, Shielded, Composite, 400 nH, 12.5 A, 0.01 ohm, SMD	4x2.1x4mm	XAL4020-401MEB	Coilcraft		
L500	1	2.2uH	Inductor, Shielded Drum Core, Ferrite, 2.2 uH, 1.4 A, 0.11 ohm, SMD	LPS3015	LPS3015-222MLB	Coilcraft		
Q900	1	25V	MOSFET, N-CH, 25 V, 60 A, SON 3.3x3.3mm	SON 3.3x3.3mm	CSD16340Q3	Texas Instruments		None
R1, R2, R3, R4, R5, R6, R600	7	100k	RES, 100 k, 1%, 0.063 W, 0402	0402	CRCW0402100KFKED	Vishay-Dale		
R7	1	110k	RES, 110 k, 1%, 0.063 W, 0402	0402	CRCW0402110KFKED	Vishay-Dale		
R8, R9, R101, R103, R402, R404, R405, R407, R610, R611	10	10.0k	RES, 10.0 k, 1%, 0.063 W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R90	1	0.22	RES, 0.22, 1%, 0.1 W, 0603	0603	ERJ-3RQFR22V	Panasonic		
R100	1	340k	RES, 340 k, 1%, 0.063 W, 0402	0402	CRCW0402340KFKED	Vishay-Dale		
R102	1	31.6k	RES, 31.6 k, 1%, 0.063 W, 0402	0402	CRCW040231K6FKED	Vishay-Dale		
R104	0	DNP	RES, 8.06 ohm, 1%, 0.125W, 0805	0805	CRCW08058R06FKEA	Vishay-Dale		

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R200	1	1.82Meg	RES, 1.82 M, 1%, 0.063 W, 0402	0402	CRCW04021M82FKED	Vishay-Dale		
R201	1	200k	RES, 200 k, 1%, 0.063 W, 0402	0402	CRCW0402200KFKED	Vishay-Dale		
R400	1	2.80k	RES, 2.80 k, 1%, 0.063 W, 0402	0402	CRCW04022K80FKED	Vishay-Dale		
R401	1	13.0k	RES, 13.0k ohm, 1%, 0.063W, 0402	0402	CRCW040213K0FKED	Vishay-Dale		
R403	1	84.5k	RES, 84.5 k, 1%, 0.063 W, 0402	0402	CRCW040284K5FKED	Vishay-Dale		
R406	1	12.4k	RES, 12.4 k, 1%, 0.063 W, 0402	0402	CRCW040212K4FKED	Vishay-Dale		
R601	1	392k	RES, 392 k, 1%, 0.063 W, 0402	0402	CRCW0402392KFKED	Vishay-Dale		
R666	1	0	RES, 0.5%, 0.1 W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
R900	1	8.06k	RES, 8.06k ohm, 1%, 0.063W, 0402	0402	CRCW04028K06FKED	Vishay-Dale		
R901	1	10.0k	RES, 10.0k ohm, 1%, 0.063W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R902	1	200k	RES, 200k ohm, 1%, 0.063W, 0402	0402	CRCW0402200KFKED	Vishay-Dale		
R903	0	DNP	RES, 3.3, 5%, 0.5 W, 1210	1210	ERJ-P14J3R3U	Panasonic		
R904	1	0.68	RES, 0.68, 1%, 0.25 W, 1206	1206	ERJ-8RQFR68V	Panasonic		
R905	0	DNP	RES, 10.0, 1%, 0.25 W, 1206	1206	CRCW120610R0FKEA	Vishay-Dale		
R906, R907	2	1.00k	RES, 1.00 k, 1%, 0.1 W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale		
R908	1	330	RES, 330 ohm, 5%, 0.063W, 0402	0402	CRCW0402330RJNED	Vishay-Dale		
SH-J666, SH-J900	2	1x2	Shunt, 100mil, Gold plated, Black	Shunt	969102-0000-DA	3M	SNT-100-BK-G	Samtec
TP1, TP2, TP90, TP402, TP404	5	White	Test Point, Miniature, White, TH	White Miniature Testpoint	5002	Keystone		
TP91, TP101, TP201, TP300, TP401, TP405, TP501, TP601, TP610, TP612, TP900	11	Red	Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone		
TP92, TP102, TP202, TP302, TP403, TP406, TP502, TP602, TP611	9	Black	Test Point, Miniature, Black, TH	Black Miniature Testpoint	5001	Keystone		
TP100, TP200, TP400, TP500	4	SMT	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature	5015	Keystone		
TP301	1	Yellow	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint	5004	Keystone		
U1, U3	2		Power Sequencer, 6-pin SOT-23	MF06A	LM3880QMF-1AA/NOPB	National Semiconductor		
U2	1		Single 2-Input Positive-OR Gate, DCK0005A	DCK0005A	SN74AHC1G32TDCKRQ1	Texas Instruments		Texas Instruments
U4	1		Single 2-Input Positive-AND Gate, DRL0005A	DRL0005A	SN74AHC1G08DRL	Texas Instruments		None
U5	1		Low Quiescent Current, Programmable-Delay Supervisory Circuit, DBV0006A	DBV0006A	TPS3808G01QDBVRQ1	Texas Instruments		Texas Instruments
U100	1		Buck Inverting Buck-Boost Step Down Regulator with 3.5 to 42 V Input and 0.8 to 39 V Output, -40 to 150 degC, 10-Pin MSOP-PowerPAD (DGQ), Green (RoHS & no Sb/Br)	DGQ0010D	TPS54240QDGQRQ1	Texas Instruments	Equivalent	None
U200	1		90% Efficient Synchronous Boost Converter with 600-mA Switch, DDC0006A	DDC0006A	TPS61071TDDCRQ1	Texas Instruments		None
U300	1		TPS22968QDMGTQ1, DMG0010A	DMG0010A	TPS22968QDMGTQ1	Texas Instruments		Texas Instruments
U400	1		Dual-Output, 3-A, Quiet Supply with Integrated DC-DC Converter and Low-Noise LDO, RHL0024A	RHL0024A	TPS54122QRHLRQ1	Texas Instruments		Texas Instruments
U500	1		Buck Step Down Regulator with 2 to 6 V Input and 1.2 V Output, -40 to 85 degC, 6-Pin SON (DRV), Green (RoHS & no Sb/Br)	DRV0006A	TPS62262DRVRQ1	Texas Instruments	Equivalent	None
U600	1		Single Output High PSRR LDO, 200 mA, Adjustable 1.2 to 6.5 V Output, 2.7 to 6.5 V Input, with Low IQ, 6-pin SON (DRV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRV0006A	TPS79901QDRVRQ1	Texas Instruments	Equivalent	None
U610	1		Single Output Automotive LDO, 3 A, 2.3 to 3.5 V Input, with DDR Termination, 10-pin SON (DRC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRC0010A	TPS51200QDRCRQ1	Texas Instruments	Equivalent	None
U900	1		LinCMOS Timer, D0008A	D0008A	TLC555CD	Texas Instruments		Texas Instruments
U901	1		DUAL 4-A PEAK HIGH SPEED LOW-SIDE POWER MOSFET DRIVERS, D0008A	D0008A	UCC27324D	Texas Instruments		Texas Instruments
FID1, FID2, FID3	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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