

Replacement Parts List (Electrical)

Notes: *Important safety notice:

 Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

Parts without these indications can be used for all areas.

*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT (S)		D613, 614 Δ	MA185TA	DIODE	[M]
				D615 Δ	MA4051MTA	DIODE	[M]
				D616 Δ	MA4062-H	DIODE	[M]
IC101	LA1832MH-TEL	IC	[M]	D617 Δ	MA4300M	DIODE	[M]
IC102	LC7218M-TE-L	IC	[M]	D618-621 Δ	RL1N4003N02	DIODE	[M]
IC202	NJU7313AMT2	IC	[M]	D622 Δ	MA4039MTA	DIODE	[M]
IC203	M5219FPTA	IC	[M]	D632	MA165	DIODE	[M]
IC204	M5218AFPE3	IC	[M]	D651, 652	MA165	DIODE	[M]
IC302	M62425FPE1	IC	[M]	D653	MA719TA	DIODE	[M]
IC901	M38197MA146F	IC	[M]	D901, 902	MA165	DIODE	[M]
		TRANSISTOR(S)		D910	1SS291TA	DIODE	[M]
				D911	MA165	DIODE	[M]
				D912	1SS291TA	DIODE	[M]
Q101, 102	2SC2787L	TRANSISTOR	[M]	D936	MA165	DIODE	[M]
Q103, 104	2SC2785FE	TRANSISTOR	[M]	D939	MA165	DIODE	[M]
Q106	UN411FTA	TRANSISTOR	[M]	D960	MA165	DIODE	[M]
Q107, 108	2SC3311AR	TRANSISTOR	[M]	D963, 964	MA165	DIODE	[M]
Q309, 310	2SA1309A-R	TRANSISTOR	[M]			COMPONENT COMBINATION (S)	
Q311, 312	2SC3311A-Q	TRANSISTOR	[M]				
Q316	UN4115	TRANSISTOR	[M]	Z101	RLA2Z002M-T	COMPONENT COMBINATION	[M]
Q317, 318	2SC3311A-Q	TRANSISTOR	[M]	Z102	RLI2Z006M-T	COMPONENT COMBINATION	[M]
Q319	UN4115	TRANSISTOR	[M]	Z120	RAL0019	FM FRONT END	[M]
Q501 Δ	2SC3940AQSTA	TRANSISTOR	[M]	Z901	RCDGP1U90XA	REMOTE SENSOR	[M]
Q503 Δ	2SC3940AQSTA	TRANSISTOR	[M]			COIL (S)	
Q601 Δ	2SD2137PQTA	TRANSISTOR	[M]				
Q602 Δ	2SB1417PQTA	TRANSISTOR	[M]	L101	ELESNR68MA	COIL	[M]
Q604	2SD2144S	TRANSISTOR	[M]	L103	ELEXTR47MA9	COIL	[M]
Q605 Δ	2SD2137PQTA	TRANSISTOR	[M]	L105, 106	ELELN822KL	COIL	[M]
Q606 Δ	2SB621A-R	TRANSISTOR	[M]	L151	SLM1B10M-1M	COIL	[M]
Q901	UN4214TA	TRANSISTOR	[M]	L191	ELESNR68MA	COIL	[M]
Q902	DTC143XSTP	TRANSISTOR	[M]	L601	ELEXT1R0KA9	COIL	[M]
Q903, 904	2SC3311A-Q	TRANSISTOR	[M]	L901	RLQA100JT-Y	COIL	[M]
		DIODE (S)		L902	ELEXT1R0KA9	COIL	[M]
						FILTER(S)	
D101 Δ	MA4051MTA	DIODE	[M]	CF201	RLFFETNGD01L	CERAMIC FILTER	[M]
D102	MA165	DIODE	[M]	CF202	RLFFETMGD01L	CERAMIC FILTER	[M]
D301	MA165	DIODE	[M]			OSCILLATOR (S)	
D501, 502 Δ	MA185TA	DIODE	[M]				
D503 Δ	MA4150M	DIODE	[M]	X101	RSX2456K07M	OSCILLATOR	[M]
D504 Δ	MA4082LTA	DIODE	[M]	X102	RLFDGT05DD	OSCILLATOR	[M]
D601-604 Δ	RL1N4003N02	DIODE	[M]	X103	RSXC7M20S05T	OSCILLATOR	[M]
D605	MA165	DIODE	[M]				
D606, 607	MA719TA	DIODE	[M]				
D609, 610 Δ	MA4082LTA	DIODE	[M]				
D611, 612 Δ	RL1N4003N02	DIODE	[M]				

Resistors and Capacitors

Notes: *Capacity values are in microfarads (μ F) unless specified otherwise, P = Pico-farads (pF) F = Farads (F)

*Resistance values are in ohms, unless specified otherwise, 1K = 1,000 (OHM) 1M = 1,000k (OHM)

*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS	R239-244	ERDS2TJ102	1/4W 1K [M]	R637, 638	ERDS2TJ150T	1/4W 15 [M]
			R331, 332	ERDS2TJ102	1/4W 1K [M]	R641, 642	ERDS2TJ471	1/4W 470 [M]
			R333, 334	ERDS2TJ104	1/4W 100K [M]	R656	ERDS2TJ221	1/4W 220 [M]
R103	ERDS2TJ330	1/4W 33 [M]	R335, 336	ERDS2TJ562	1/4W 5.6K [M]	R901	ERDS2TJ821	1/4W 820 [M]
R104	ERDS2TJ103	1/4W 10K [M]	R337, 338	ERDS2TJ123	1/4W 12K [M]	R902	ERDS2TJ102	1/4W 1K [M]
R105	ERDS2TJ471	1/4W 470 [M]	R339, 340	ERDS2TJ471	1/4W 470 [M]	R903	ERDS2TJ122	1/4W 1.2K [M]
R106	ERDS2TJ474	1/4W 470K [M]	R341, 342	ERDS2TJ122	1/4W 1.2K [M]	R904	ERDS2TJ152	1/4W 1.5K [M]
R107	ERDS2TJ331	1/4W 330 [M]	R343, 344	ERDS2TJ224T	1/4W 220K [M]	R905	ERDS2TJ182	1/4W 1.8K [M]
R108	ERDS2TJ474	1/4W 470K [M]	R345-348	ERDS2TJ103	1/4W 10K [M]	R906	ERDS2TJ222	1/4W 2.2K [M]
R109	ERDS2TJ331	1/4W 330 [M]	R349, 350	ERDS2TJ102	1/4W 1K [M]	R907	ERDS2TJ332	1/4W 3.3K [M]
R110	ERDS2TJ102	1/4W 1K [M]	R351	ERDS2TJ182	1/4W 1.8K [M]	R908	ERDS2TJ472	1/4W 4.7K [M]
R112	ERDS2TJ104	1/4W 100K [M]	R352	ERDS2TJ102	1/4W 1K [M]	R909	ERDS2TJ682T	1/4W 6.8K [M]
R113	ERDS2TJ103	1/4W 10K [M]	R353	ERDS2TJ182	1/4W 1.8K [M]	R911	ERDS2TJ473	1/4W 47K [M]
R114	ERDS2TJ562	1/4W 5.6K [M]	R354, 355	ERDS2TJ222	1/4W 2.2K [M]	R916-919	ERDS2TJ103	1/4W 10K [M]
R115	ERDS2TJ561	1/4W 560 [M]	R356-358	ERDS2TJ391	1/4W 390 [M]	R920-922	ERDS2TJ102	1/4W 1K [M]
R116	ERDS2TJ102	1/4W 1K [M]	R361, 362	ERDS2TJ223	1/4W 22K [M]	R923	ERDS2TJ391	1/4W 390 [M]
R117	ERDS2TJ823T	1/4W 82K [M]	R363, 364	ERDS2TJ102	1/4W 1K [M]	R925	ERDS2TJ102	1/4W 1K [M]
R118	ERDS2TJ562	1/4W 5.6K [M]	R365, 366	ERDS2TJ105T	1/4W 1M [M]	R926, 927	ERDS2TJ101	1/4W 100 [M]
R119	ERDS2TJ822	1/4W 8.2K [M]	R372	ERDS2TJ105T	1/4W 1M [M]	R928	ERDS2TJ102	1/4W 1K [M]
R120	ERDS2TJ473	1/4W 47K [M]	R374	ERDS2TJ182	1/4W 1.8K [M]	R929	ERDS2TJ101	1/4W 100 [M]
R121	ERDS2TJ332	1/4W 3.3K [M]	R375, 376	ERDS2TJ102	1/4W 1K [M]	R930-933	ERDS2TJ102	1/4W 1K [M]
R122	ERDS2TJ272T	1/4W 2.7K [M]	R377, 378	ERDS2EJ121	1/4W 120 [M]	R934	ERDS2TJ101	1/4W 100 [M]
R124	ERDS2TJ271	1/4W 270 [M]	R379, 380	ERDS2TJ223	1/4W 22K [M]	R935	ERDS2TJ102	1/4W 1K [M]
R125, 126	ERDS2TJ152	1/4W 1.5K [M]	R381	ERDS2TJ105T	1/4W 1M [M]	R936, 937	ERDS2TJ101	1/4W 100 [M]
R127	ERDS2TJ103	1/4W 10K [M]	R382	ERDS2TJ472	1/4W 4.7K [M]	R938	ERDS2TJ102	1/4W 1K [M]
R128	ERDS2TJ820	1/4W 82 [M]	R383	ERDS2TJ223	1/4W 22K [M]	R939	ERDS2TJ101	1/4W 100 [M]
R129	ERDS2TJ473	1/4W 47K [M]	R397, 398	ERQ16NKW2R2E	1/6W 2.2 [M]	R940, 941	ERDS2TJ393	1/4W 39K [M]
R130	ERDS2TJ103	1/4W 10K [M]	R501	ERDS2TJ152	1/4W 1.5K [M]	R942	ERDS2TJ472	1/4W 4.7K [M]
R132	ERDS2TJ103	1/4W 10K [M]	R502	ERDS2TJ221	1/4W 220 [M]	R944	ERDS2TJ473	1/4W 47K [M]
R133-137	ERDS2TJ102	1/4W 1K [M]	R506	ERDS2TJ152	1/4W 1.5K [M]	R945, 946	ERDS2TJ102	1/4W 1K [M]
R138	ERDS2TJ103	1/4W 10K [M]	R507	ERDS2TJ221	1/4W 220 [M]	R947-949	ERDS2TJ103	1/4W 10K [M]
R139, 140	ERDS2TJ272T	1/4W 2.7K [M]	R508, 509	ERDS2TJ223	1/4W 22K [M]	R950	ERDS2TJ102	1/4W 1K [M]
R141, 142	ERDS2TJ102	1/4W 1K [M]	R511, 512	ERDS2TJ472	1/4W 4.7K [M]	R951	ERDS2TJ104	1/4W 100K [M]
R143, 144	ERDS2TJ222	1/4W 2.2K [M]	R601, 602 Δ	ERD2FCVJ4R7T	1/4W 4.7 [M]	R952, 953	ERDS2TJ102	1/4W 1K [M]
R145, 146	ERDS2TJ821	1/4W 820 [M]	R603, 604	ERDS2TJ102	1/4W 1K [M]	R954	ERDS2TJ101	1/4W 100 [M]
R147, 148	ERDS2TJ474	1/4W 470K [M]	R605	ERDS2TJ101	1/4W 100 [M]	R955	ERDS2TJ824	1/4W 820K [M]
R149	ERDS2TJ680T	1/4W 68 [M]	R606	ERDS2TJ393	1/4W 39K [M]	R956	ERDS2TJ101	1/4W 100 [M]
R171, 172	ERDS2TJ102	1/4W 1K [M]	R607	ERDS2TJ153	1/4W 15K [M]	R957	ERDS2TJ102	1/4W 1K [M]
R173	ERDS2TJ471	1/4W 470 [M]	R609 Δ	ERQ16NKW2R2E	1/6W 2.2 [M]	R958	ERDS2TJ471	1/4W 470 [M]
R175	ERDS2TJ102	1/4W 1K [M]	R610	ERDS2TJ222	1/4W 2.2K [M]	R959, 960	ERDS2TJ223	1/4W 22K [M]
R176	ERDS2TJ391	1/4W 390 [M]	R612	ERDS2TJ472	1/4W 4.7K [M]	R961	ERDS2TJ103	1/4W 10K [M]
R205, 206	ERDS2TJ224T	1/4W 220K [M]	R613, 614	ERDS2TJ682T	1/4W 6.8K [M]	R962	ERDS2TJ473	1/4W 47K [M]
R207, 208	ERDS2TJ102	1/4W 1K [M]	R615	ERDS2TJ103	1/4W 10K [M]	R963, 964	ERDS2TJ103	1/4W 10K [M]
R209-212	ERDS2TJ822	1/4W 8.2K [M]	R616 Δ	ERD25FVJ4R7T	1/4W 4.7 [M]	R965	ERDS2TJ472	1/4W 4.7K [M]
R225, 226	ERDS2TJ122	1/4W 1.2K [M]	R621, 622	ERDS2TJ151	1/4W 150 [M]	R966	ERDS2TJ223	1/4W 22K [M]
R229-231	ERDS2TJ222	1/4W 2.2K [M]	R623, 624	ERDS2TJ224T	1/4W 220K [M]	R967	ERDS2TJ472	1/4W 4.7K [M]
R233, 234	ERDS2TJ223	1/4W 22K [M]	R627-630	ERDS2TJ472	1/4W 4.7K [M]	R968, 969	ERDS2TJ152	1/4W 1.5K [M]
R235, 236	ERDS2TJ822	1/4W 8.2K [M]	R631, 632	ERDS2TJ471	1/4W 470 [M]	R970	ERDS2TJ473	1/4W 47K [M]
R237, 238	ERDS2TJ123	1/4W 12K [M]	R635, 636	ERDS2TJ472	1/4W 4.7K [M]	R971	ERDS2TJ104	1/4W 100K [M]

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R978-993	ERDS2TJ104	1/4W 100K [M]	C237, 238	ECBT1H470J5	50V 47P [M]	C907	ECBT1H104ZF5	50V 0.1U [M]
R994	ERDS2TJ102	1/4W 1K [M]	C321, 322	ECBT1E103ZF	25V 0.01U [M]	C908	ECBT1E103ZF	25V 0.01U [M]
R997-999	ERDS2TJ102	1/4W 1K [M]	C323, 324	ECBT1H102KB5	50V 1000P [M]	C909	ECEA1HKA2R2B	50V 2.2U [M]
		CAPACITORS	C325, 326	ECBT1H101KB5	50V 100P [M]	C910	RCE1CKA100BG	16V 10U [M]
			C327, 328	RCE1AKA470BG	10V 47U [M]	C911	ECBT1H270JU5	50V 27P [M]
			C333, 334	ECBT1H221KB5	50V 220P [M]	C912	ECBT1H220GC5	50V 22P [M]
C101	ECBT1C103NS5	16V 0.01U [M]	C335, 336	RCE1CKA100BG	16V 10U [M]	C913	ECEA1VKA470B	35V 47U [M]
C103	ECBT1C103NS5	16V 0.01U [M]	C337, 338	ECEA1CKA220B	16V 22U [M]	C915	ECBT1E103ZF	25V 0.01U [M]
C104, 105	ECBT1H102KB5	50V 1000P [M]	C339, 340	RCE1CKA100BG	16V 10U [M]	C916, 917	ECEA1HKA010B	50V 1U [M]
C106	ECBT1C103NS5	16V 0.01U [M]	C341, 342	ECEA1AKN100B	10V 10U [M]	C918	ECBT1C105ZF5	16V 1U [M]
C107	ECBT1H473ZF5	50V 0.047U [M]	C343	RCE1CKA100BG	16V 10U [M]	C919	RCE0JU102BV	6.3V 1000U [M]
C108	ECBT1H8R2KC5	50V 8.2P [M]	C344, 345	ECBT1H470J5	50V 47P [M]	C920	ECBT1E103ZF	25V 0.01U [M]
C109, 110	ECBT1C103NS5	16V 0.01U [M]	C348	ECEA1CKA330B	16V 33U [M]	C922	ECEA0JKA221B	6.3V 220U [M]
C111	ECEA1EKA4R7B	25V 4.7U [M]	C350	ECEA0JKA470B	6.3V 47U [M]	C923	ECBT1H101KB5	50V 100P [M]
C112	ECBT1C103NS5	16V 0.01U [M]	C351, 352	RCE1CKA100BG	16V 10U [M]	C924	ECBT1H102KB5	50V 1000P [M]
C113	ECBT1H102KB5	50V 1000P [M]	C355	ECEA1CKA330B	16V 33U [M]	C954-957	ECBT1H101KB5	50V 100P [M]
C114	RCE1HKA3R3BG	50V 3.3U [M]	C356	ECBT1H104ZF5	50V 0.1U [M]			
C115	ECEA1EKA4R7B	25V 4.7U [M]	C357	RCE1AKA101BG	10V 100U [M]			
C116	ECBT1C822KS5	16V 8200P [M]	C365	ECEA0JKA470B	6.3V 47U [M]			
C117	ECQP1391JZ	100V 390P [M]	C391, 392	ECEA1CKA101B	16V 100U [M]			
C118, 119	ECFR1C103KR	16V 0.01U [M]	C393, 394	ECBT1H102KB5	50V 1000P [M]			
C120, 121	ECEA1HKA010B	50V 1U [M]	C501	ECEA1EKA101B	25V 100U [M]			
C122	ECEA1HKA2R2B	50V 2.2U [M]	C502	ECA1VM101B	35V 100U [M]			
C123	ECEA1HKA010B	50V 1U [M]	C503	ECBT1E103ZF	25V 0.01U [M]			
C124	ECBT1H102KB5	50V 1000P [M]	C504	ECEA1EKA101B	25V 100U [M]			
C125	ECBT1H150JC5	50V 15P [M]	C509	ECBT1E103ZF	25V 0.01U [M]			
C126	ECBT1H473ZF5	50V 0.047U [M]	C510	RCE1AKA101BG	10V 100U [M]			
C127	ECEA1CKA220B	16V 22U [M]	C513-515	ECBT1H102KB5	50V 1000P [M]			
C128	ECBT1H102KB5	50V 1000P [M]	C601, 602	ECCT1H223ZF	50V 0.022U [M]			
C129, 130	ECEA0JKA101B	6.3V 100U [M]	C603△	ECA1EM102B	25V 1000U [M]			
C132	ECBT1H102KB5	50V 1000P [M]	C604△	RCE1EM471BV	25V 470U [M]			
C133, 134	ECBT1H270JU5	50V 27P [M]	C605, 606	ECBT1E103ZF	25V 0.01U [M]			
C135, 136	ECBT1C103KS5	16V 0.01U [M]	C607, 608	RCE1AKA470BG	10V 47U [M]			
C137, 138	ECBT1H561KB5	50V 560P [M]	C609	ECBT1H102KB5	50V 1000P [M]			
C139, 140	ECBT1C682KR5	16V 6800P [M]	C610, 611	ECBT1H104ZF5	50V 0.1U [M]			
C141-144	ECEA1HKA010B	50V 1U [M]	C612	RCE1EM471BV	25V 470U [M]			
C145	ECBT1H220JC5	50V 22P [M]	C613	ECBT1E103ZF	25V 0.01U [M]			
C148	ECBT1C103NS5	16V 0.01U [M]	C614	RCE1AKA470BG	10V 47U [M]			
C149	ECBT1H104ZF5	50V 0.1U [M]	C615	ECEA1EKA101B	25V 100U [M]			
C171, 172	ECBT1H102KB5	50V 1000P [M]	C616	ECA1HM470B	50V 47U [M]			
C173	ECEA1CKA220B	16V 22U [M]	C617△	ECA1HM470B	50V 47U [M]			
C174	RCE1CKA100BG	16V 10U [M]	C618△	ECA2AM470B	100V 47U [M]			
C181	ECBT1H471KB5	50V 470P [M]	C619	ECR1H103ZF5	50V 0.01U [M]			
C196	ECBT1H102KB5	50V 1000P [M]	C620	RCE1VKA100BG	35V 10U [M]			
C205-208	ECBT1H101KB5	50V 100P [M]	C623	RCE1AKA101BG	10V 100U [M]			
C209, 210	ECBT1H180J5	50V 18P [M]	C624	ECEA1VKA470B	35V 47U [M]			
C211	ECBT1H102KB5	50V 1000P [M]	C631-636	ECBT1H101KB5	50V 100P [M]			
C223, 224	ECBT1H104ZF5	50V 0.1U [M]	C651, 652	ECBT1H104ZF5	50V 0.1U [M]			
C225-227	ECBT1H470J5	50V 47P [M]	C655	ECQV1H224JM3	50V 0.22U [M]			
C231, 232	ECBT1E103ZF	25V 0.01U [M]	C656	ECQV1H474JM3	50V 0.47U [M]			
C233, 234	ECBT1H102KB5	50V 1000P [M]	C901-904	ECBT1H471KB5	50V 470P [M]			
C235, 236	ECBT1H101KB5	50V 100P [M]	C905, 906	ECBT1H102KB5	50V 1000P [M]			

