

Radial Leaded Aluminum Electrolytic Capacitors

REA Series



FEATURES

- Long Life
- Endurance: 3000 - 5000 hours at 105°C
- RoHS Compliance and Halogen-free

APPLICATIONS

- Communications Equipment
- Industrial Equipment



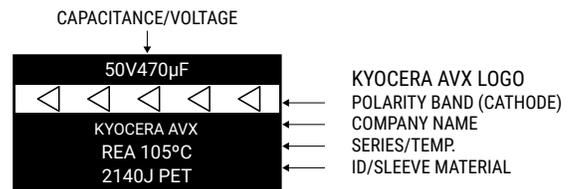
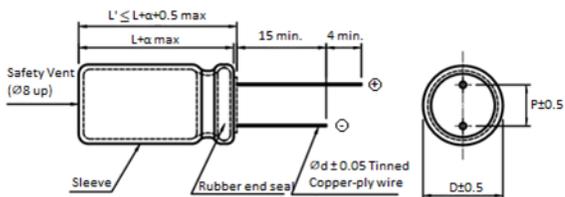
HOW TO ORDER

R	EA	1013	471	M	016	K	-
Product Type	Series Type	Case Size	Capacitance Code	Tolerance	Rated DC Voltage	Packaging	Lead Type
Radial Aluminum		See table below	μF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)	M = ±20%	006 = 6.3Vdc 100 = 100Vdc 010 = 10Vdc 160 = 160Vdc 016 = 16Vdc 200 = 200Vdc 025 = 25Vdc 250 = 250Vdc 035 = 35Vdc 350 = 350Vdc 050 = 50Vdc 400 = 400Vdc 063 = 63Vdc 450 = 450Vdc	K = Ammo Pack B = Bulk Pack	" " empty = Standard long lead "C" = Lead cut only "D" = Lead cut and crimp "F" = Lead cut and form "H" = Lead cut, crimp and form "B" = Forming only "L" = Lead cut and bend (Left) "Z" = Lead cut and bend (Right)

CASE DIMENSIONS millimeters (inches)

Code	D+0.50 (0.020)	L	d±0.05 (0.002)	P±0.50 (0.020)	α	Typical Weight (g)	Code	D+0.50 (0.020)	L	d±0.05 (0.002)	P±0.50 (0.020)	α	Typical Weight (g)
0511	5.00 (0.020)	11.00 (0.433)	0.50 (0.020)	2.00 (0.079)	1.00 (0.039)	0.43	1430	14.50 (0.571)	30.00 (1.181)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	7.62
0611	6.30 (0.248)	11.00 (0.433)	0.50 (0.020)	2.50 (0.098)	1.00 (0.039)	0.60	1440	14.50 (0.571)	40.00 (1.575)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	10.16
0812	8.00 (0.315)	12.00 (0.472)	0.50 (0.020)	3.50 (0.138)	1.00 (0.039)	0.98	1445	14.50 (0.571)	45.00 (1.772)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	13.00
0850	8.00 (0.315)	50.00 (1.969)	0.50 (0.020)	3.50 (0.138)	2.00 (0.079)	4.20	1450	14.50 (0.571)	50.00 (1.969)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	14.00
0861	8.00 (0.315)	61.00 (2.402)	0.50 (0.020)	3.50 (0.138)	2.00 (0.079)	5.20	1622	16.00 (0.630)	22.00 (0.866)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	6.20
1013	10.00 (0.394)	13.00 (0.512)	0.60 (0.024)	5.00 (0.020)	1.00 (0.039)	1.52	1626	16.00 (0.630)	26.00 (1.024)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	8.70
1016	10.00 (0.394)	16.00 (0.630)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	1.80	1632	16.00 (0.630)	32.00 (1.260)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	9.60
1020	10.00 (0.394)	20.00 (0.787)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	2.71	1635	16.00 (0.630)	35.00 (1.378)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	12.38
1040	10.00 (0.394)	40.00 (1.575)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	5.42	1636	16.00 (0.630)	36.00 (1.417)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	12.38
1045	10.00 (0.394)	45.00 (1.772)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	6.08	1640	16.00 (0.630)	40.00 (1.575)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	13.85
1050	10.00 (0.394)	50.00 (1.969)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	6.75	1645	16.00 (0.630)	45.00 (1.772)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	16.25
1060	10.00 (0.394)	60.00 (2.362)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	8.00	1650	16.00 (0.630)	50.00 (1.969)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	16.50
1321	13.00 (0.521)	21.00 (0.827)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	4.59	1825	18.00 (0.709)	25.00 (0.984)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	9.60
1325	13.00 (0.512)	25.00 (0.984)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	5.00	1832	18.00 (0.709)	32.00 (1.260)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	12.00
1330	13.00 (0.512)	30.00 (1.181)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	5.64	1835	18.00 (0.709)	35.00 (1.378)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	12.40
1335	13.00 (0.512)	35.00 (1.378)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	7.20	1840	18.00 (0.709)	40.00 (1.575)	0.80 (0.315)	7.50 (0.295)	2.00 (0.079)	16.00
1340	13.00 (0.512)	40.00 (1.575)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	8.96	2240	22.00 (0.866)	40.00 (1.575)	0.80 (0.315)	10.00 (0.394)	2.00 (0.079)	21.87
1350	13.00 (0.512)	50.00 (1.969)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	10.70	2250	22.00 (0.866)	50.00 (1.969)	0.80 (0.315)	10.00 (0.394)	2.00 (0.079)	23.20
1360	13.00 (0.512)	60.00 (2.362)	0.60 (0.024)	5.00 (0.020)	2.00 (0.079)	14.85	2550	25.00 (0.984)	50.00 (1.969)	1.00 (0.039)	12.50 (0.492)	2.00 (0.079)	34.60

MARKING



*If different rubber seal is needed, please contact your sales representative.

Radial Leaded Aluminum Electrolytic Capacitors

REA Series



TECHNICAL SPECIFICATIONS

Category Temperature Range:	-40°C to +105°C (6.3-250V), -25°C to +105°C (350-450V)		
Capacitance Range	At 25°C, 120Hz	0.47μF – 22,000μF	
Capacitance Tolerance:	At 25°C, 120Hz	±20%	
Dissipation Factor (%)	Measurement Frequency: 120Hz at 25°C	Please see the ratings and part number reference table below	
Leakage Current:	After 2 minutes (6.3-100V), 3 minutes (160-250V) at rated working voltage at 25°C*	6.3-100V	160-450V
		≤0.01CV or 3μA, whichever is greater	≤0.03CV + 20μA, whichever is greater

* Note: In the case of an anomalous reading, re-measure the leakage current after following voltage treatment: Voltage treatment: DC rated voltage to be applied to the capacitors for 120 minutes at 105°C.

CAPACITANCE AND RATED VOLTAGE RANGE (FIGURES DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V _R)													
μF	Code	6.3V	10V	16V	25V	35V	50V	63V	100V	160V	200V	250V	350V	400V	450V
0.47	R47						0511								
1.0	1R0						0511								
2.2	2R2						0511		0511	0611	0611	0812	0812	0812	1013
3.3	3R3						0511		0511	0812	0812	0812	0812	0812	1013
4.7	4R7						0511		0511	0812	1013	0812	1013	1013	1016
10	100				0511	0511	0511	0511	0611	1013	1016	1016	1020	1020	1321
22	220				0511	0611	0611	0611	0812	1016	1020	1321	1321	0850 1325	1040 1622
33	330				0611	0611	0812	0812	1013	1020	1321	1321	1040 1325	0861 1040 1622	1050 1335 1626
39	390								1013	1020	1321	1325	1040 1330 1622	0861 1045 1335 1626	0861 1050 1340 1632
47	470			0511	0611	0812	0812	1013	1016	1321	1321	1325	1040 1335 1430 1626	1050 1340 1440 1632	1060 1350 1440 1825
53	530												1335	1350	1060
68	680								1020	1325	1325	1622	1060 1340 1626 1635	1350 1445 1635 1825	1360 1450 1640 1832
82	820								1321	1622	1626	1632	1350 1635 1825	1445 1640 1832	1450 1645 1835
100	101	0511	0511	0611	0812	0812	1013	1016	1321	1626	1632	1636	1640 1832	1450 1645 1835	1650 1840
120	121												1835	1840	
220	221	0611	0611	0812	1013	1013	1016	1020	1626	1835	1840				
330	331	0812	0812	0812	1013	1016	1020	1321	1626						
470	471	0812	0812	1013	1020	1321	1321	1626	1632						
560	561									2240	2250				
680	681									2250	2550				
820	821										2550				
1000	102	1013	1016	1020	1321	1325	1626	1632							
2200	222	1020	1321	1325	1626	1632	1835								
3300	332	1321	1325	1626	1632	1835	1840								
4700	472	1325	1626	1632	1835	1840									
6800	682	1626	1632	1835	1840										
10,000	103	1632	1835	1840											
15,000	153	1835	1840												
22,000	223	1840													

Released ratings

Radial Leaded Aluminum Electrolytic Capacitors

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RATINGS & PART NUMBER REFERENCE

Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL Max. (μA)	DF Max. (%)	120Hz RMS Current (mA) / 105°C	MSL
6.3 Volt							
REA0511101M006*	0511	100	6.3	6.3	24	120	1
REA0611221M006*	0611	220	6.3	13.86	24	170	1
REA0812331M006*	0812	330	6.3	20.79	24	250	1
REA0812471M006*	0812	470	6.3	29.61	24	290	1
REA1013102M006*	1013	1000	6.3	63	24	490	1
REA1020222M006*	1020	2200	6.3	138.6	24	830	1
REA1321332M006*	1321	3300	6.3	207.9	24	1060	1
REA1325472M006*	1325	4700	6.3	296.1	24	1310	1
REA1626682M006B	1626	6800	6.3	428.4	24	1430	1
REA1632103M006B	1632	10000	6.3	630	24	1790	1
REA1835153M006B	1835	15000	6.3	945	24	1980	1
REA1840223M006B	1840	22000	6.3	1386	24	2290	1
10 Volt							
REA0511101M010*	0511	100	10	10	20	130	1
REA0611221M010*	0611	220	10	22	20	190	1
REA0812331M010*	0812	330	10	33	20	280	1
REA0812471M010*	0812	470	10	47	20	330	1
REA1016102M010*	1016	1000	10	100	20	580	1
REA1321222M010*	1321	2200	10	220	20	970	1
REA1325332M010*	1325	3300	10	330	20	1250	1
REA1626472M010B	1626	4700	10	470	20	1400	1
REA1632682M010B	1632	6800	10	680	20	1690	1
REA1835103M010B	1835	10000	10	1000	20	2010	1
REA1840153M010B	1840	15000	10	1500	20	2260	1
16 Volt							
REA0511470M016*	0511	47	16	7.52	17	85	1
REA0611101M016*	0611	100	16	16	17	140	1
REA0812221M016*	0812	220	16	35.2	17	240	1
REA0812331M016*	0812	330	16	52.8	17	310	1
REA1013471M016*	1013	470	16	75.2	17	380	1
REA1020102M016*	1020	1000	16	160	17	670	1
REA1325222M016*	1325	2200	16	352	17	1130	1
REA1626332M016B	1626	3300	16	528	17	1350	1
REA1632472M016B	1632	4700	16	752	17	1570	1
REA1835682M016B	1835	6800	16	1088	17	1930	1
REA1840103M016B	1840	10000	16	1600	17	2190	1
25 Volt							
REA0511100M025*	0511	10	25	2.5	15	45	1
REA0511220M025*	0511	22	25	5.5	15	60	1
REA0611330M025*	0611	33	25	8.25	15	90	1
REA0611470M025*	0611	47	25	11.75	15	105	1
REA0812101M025*	0812	100	25	25	15	185	1
REA1013221M025*	1013	220	25	55	15	290	1
REA1013331M025*	1013	330	25	82.5	15	350	1
REA1020471M025*	1020	470	25	117.5	15	465	1
REA1321102M025*	1321	1000	25	250	15	830	1
REA1626222M025B	1626	2200	25	550	15	1210	1
REA1632332M025B	1632	3300	25	825	15	1540	1
REA1835472M025B	1835	4700	25	1175	15	1870	1
REA1840682M025B	1840	6800	25	1700	15	2120	1
35 Volt							
REA0511100M035*	0511	10	35	3.5	12	48	1
REA0611220M035*	0611	22	35	7.7	12	78	1
REA0611330M035*	0611	33	35	11.55	12	100	1
REA0812470M035*	0812	47	35	16.45	12	130	1
REA0812101M035*	0812	100	35	35	12	190	1
REA1013221M035*	1013	220	35	77	12	320	1
REA1016331M035*	1016	330	35	115.5	12	420	1
REA1321471M035*	1321	470	35	164.5	12	580	1
REA1325102M035*	1325	1000	35	350	12	1000	1
REA1632222M035B	1632	2200	35	770	12	1450	1

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REA Series



Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL Max. (µA)	DF Max. (%)	120Hz RMS Current (mA) / 105°C	MSL
REA1835332M035B	1835	3300	35	1155	12	1830	1
REA1840472M035B	1840	4700	35	1645	12	2150	1
50 Volt							
REA0511R47M050*	0511	0.47	50	0.235	10	8	1
REA05111R0M050*	0511	1	50	0.5	10	17	1
REA05112R2M050*	0511	2.2	50	1.1	10	23	1
REA05113R3M050*	0511	3.3	50	1.65	10	31	1
REA05114R7M050*	0511	4.7	50	2.35	10	35	1
REA0511100M050*	0511	10	50	5	10	51	1
REA0611220M050*	0611	22	50	11	10	85	1
REA0812330M050*	0812	33	50	16.5	10	102	1
REA0812470M050*	0812	47	50	23.5	10	141	1
REA1013101M050*	1013	100	50	50	10	231	1
REA1016221M050*	1016	220	50	110	10	368	1
REA1020331M050*	1020	330	50	165	10	490	1
REA1321471M050*	1321	470	50	235	10	665	1
REA1626102M050B	1626	1000	50	500	10	1080	1
REA1835222M050B	1835	2200	50	1100	10	1695	1
REA1840332M050B	1840	3300	50	1650	10	2070	1
63 Volt							
REA0511100M063*	0511	10	63	6.3	9	56	1
REA0611220M063*	0611	22	63	13.86	9	95	1
REA0812330M063*	0812	33	63	20.79	9	122	1
REA1013470M063*	1013	47	63	29.61	9	152	1
REA1016101M063*	1016	100	63	63	9	250	1
REA1020221M063*	1020	220	63	138.6	9	415	1
REA1321331M063*	1321	330	63	207.9	9	550	1
REA1626471M063B	1626	470	63	296.1	9	725	1
REA1632102M063B	1632	1000	63	630	9	1135	1
100 Volt							
REA05112R2M100*	0511	2.2	100	2.2	8	28	1
REA05113R3M100*	0511	3.3	100	3.3	8	34	1
REA05114R7M100*	0511	4.7	100	4.7	8	40	1
REA0611100M100*	0611	10	100	10	8	66	1
REA0812220M100*	0812	22	100	22	8	112	1
REA1013330M100*	1013	33	100	33	8	155	1
REA1013390M100*	1013	39	100	39	8	160	1
REA1016470M100*	1016	47	100	47	8	190	1
REA1020680M100*	1020	68	100	68	8	210	1
REA1321820M100*	1321	82	100	82	8	240	1
REA1321101M100*	1321	100	100	100	8	310	1
REA1626221M100B	1626	220	100	220	8	540	1
REA1626331M100B	1626	330	100	330	8	660	1
REA1632471M100B	1632	470	100	470	8	880	1
160 Volt							
REA06112R2M160*	0611	2.2	160	10.56	15	28	1
REA08123R3M160*	0812	3.3	160	15.84	15	34	1
REA08124R7M160*	0812	4.7	160	22.56	15	43	1
REA1013100M160*	1013	10	160	48	15	75	1
REA1016220M160*	1016	22	160	105.6	15	130	1
REA1020330M160*	1020	33	160	158.4	15	170	1
REA1020390M160*	1020	39	160	187.2	15	190	1
REA1321470M160*	1321	47	160	225.6	15	230	1
REA1325680M160*	1325	68	160	326.4	15	260	1
REA1622820M160B	1622	82	160	393.6	15	320	1
REA1626101M160B	1626	100	160	480	15	350	1
REA1835221M160B	1835	220	160	1056	15	640	1
REA2240561M160B	2240	560	160	2688	15	1300	1
REA2250681M160B	2250	680	160	3264	15	1420	1
200 Volt							
REA06112R2M200*	0611	2.2	200	13.2	15	28	1
REA08123R3M200*	0812	3.3	200	19.8	15	35	1
REA10134R7M200*	1013	4.7	200	28.2	15	50	1
REA1016100M200*	1016	10	200	60	15	80	1

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Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL Max. (µA)	DF Max. (%)	120Hz RMS Current (mA) / 105°C	MSL
REA1020220M200*	1020	22	200	132	15	140	1
REA1321330M200*	1321	33	200	198	15	200	1
REA1321390M200*	1321	39	200	234	15	220	1
REA1321470M200*	1321	47	200	282	15	250	1
REA1325680M200*	1325	68	200	408	15	280	1
REA1626820M200B	1626	82	200	492	15	350	1
REA1632101M200B	1632	100	200	600	15	480	1
REA1840221M200B	1840	220	200	1320	15	810	1
REA2250561M200B	2250	560	200	3360	15	1400	1
REA2550681M200B	2550	680	200	4080	15	1550	1
REA2550821M200B	2550	820	200	4920	15	1700	1
250 Volt							
REA08122R2M250*	0812	2.2	250	16.5	15	35	1
REA08123R3M250*	0812	3.3	250	24.75	15	50	1
REA08124R7M250*	0812	4.7	250	35.25	15	55	1
REA1016100M250*	1016	10	250	75	15	100	1
REA1321220M250*	1321	22	250	165	15	170	1
REA1321330M250*	1321	33	250	247.5	15	225	1
REA1325390M250*	1325	39	250	292.5	15	250	1
REA1325470M250*	1325	47	250	352.5	15	280	1
REA1622680M250B	1622	68	250	510	15	310	1
REA1632820M250B	1632	82	250	615	15	390	1
REA1636101M250B	1636	100	250	750	15	500	1
350 Volt							
REA08122R2M350*	0812	2.2	350	23.1	20	35	1
REA08123R3M350*	0812	3.3	350	34.65	20	44	1
REA10134R7M350*	1013	4.7	350	49.35	20	55	1
REA1020100M350*	1020	10	350	105	20	92	1
REA1321220M350*	1321	22	350	231	20	162	1
REA1040330M350B	1040	33	350	346.5	20	210	1
REA1325330M350*	1325	33	350	346.5	20	205	1
REA1040390M350B	1040	39	350	409.5	20	210	1
REA1330390M350B	1330	39	350	409.5	20	270	1
REA1622390M350B	1622	39	350	409.5	20	205	1
REA1040470M350B	1040	47	350	493.5	20	300	1
REA1335470M350B	1335	47	350	493.5	20	320	1
REA1430470M350B	1430	47	350	493.5	20	320	1
REA1626470M350B	1626	47	350	493.5	20	320	1
REA1335530M350B	1335	53	350	556.5	20	320	1
REA1060680M350B	1060	68	350	714	20	400	1
REA1340680M350B	1340	68	350	714	20	430	1
REA1626680M350B	1626	68	350	714	20	350	1
REA1635680M350B	1635	68	350	714	20	420	1
REA1350820M350B	1350	82	350	861	20	450	1
REA1635820M350B	1635	82	350	861	20	500	1
REA1825820M350B	1825	82	350	861	20	420	1
REA1640101M350B	1640	100	350	1050	20	530	1
REA1832101M350B	1832	100	350	1050	20	550	1
REA1835121M350B	1835	120	350	1260	20	650	1
400 Volt							
REA08122R2M400*	0812	2.2	400	26.4	20	35	1
REA08123R3M400*	0812	3.3	400	39.6	20	50	1
REA10134R7M400*	1013	4.7	400	56.4	20	60	1
REA1020100M400*	1020	10	400	120	20	100	1
REA0850220M400B	0850	22	400	264	20	135	1
REA1325220M400*	1325	22	400	264	20	190	1
REA0861330M400B	0861	33	400	396	20	280	1
REA1040330M400B	1040	33	400	396	20	260	1
REA1622330M400B	1622	33	400	396	20	240	1
REA0861390M400B	0861	39	400	468	20	280	1
REA1045390M400B	1045	39	400	468	20	300	1
REA1335390M400B	1335	39	400	468	20	310	1
REA1626390M400B	1626	39	400	468	20	300	1
REA1050470M400B	1050	47	400	564	20	330	1

Radial Leaded Aluminum Electrolytic Capacitors

REA Series



Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL Max. (μA)	DF Max. (%)	120Hz RMS Current (mA) / 105°C	MSL
REA1340470M400B	1340	47	400	564	20	350	1
REA1440470M400B	1440	47	400	564	20	370	1
REA1632470M400B	1632	47	400	564	20	330	1
REA1350530M400B	1350	53	400	636	20	385	1
REA1350680M400B	1350	68	400	816	20	385	1
REA1445680M400B	1445	68	400	816	20	400	1
REA1635680M400B	1635	68	400	816	20	420	1
REA1825680M400B	1825	68	400	816	20	350	1
REA1445820M400B	1445	82	400	984	20	530	1
REA1640820M400B	1640	82	400	984	20	550	1
REA1832820M400B	1832	82	400	984	20	580	1
REA1450101M400B	1450	100	400	1200	20	700	1
REA1645101M400B	1645	100	400	1200	20	720	1
REA1835101M400B	1835	100	400	1200	20	660	1
REA1840121M400B	1840	120	400	1440	20	770	1
450 Volt							
REA10132R2M450*	1013	2.2	450	29.7	20	36	1
REA10133R3M450*	1013	3.3	450	44.55	20	48	1
REA10164R7M450*	1016	4.7	450	63.45	20	60	1
REA1321100M450*	1321	10	450	135	20	110	1
REA1040220M450B	1040	22	450	297	20	280	1
REA1622220M450B	1622	22	450	297	20	210	1
REA1050330M450B	1050	33	450	445.5	20	350	1
REA1335330M450B	1335	33	450	445.5	20	300	1
REA1626330M450B	1626	33	450	445.5	20	280	1
REA0861390M450B	0861	39	450	526.5	20	350	1
REA1050390M450B	1050	39	450	526.5	20	350	1
REA1340390M450B	1340	39	450	526.5	20	360	1
REA1632390M450B	1632	39	450	526.5	20	330	1
REA1060470M450B	1060	47	450	634.5	20	410	1
REA1350470M450B	1350	47	450	634.5	20	370	1
REA1440470M450B	1440	47	450	634.5	20	390	1
REA1825470M450B	1825	47	450	634.5	20	360	1
REA1060530M450B	1060	53	450	715.5	20	440	1
REA1360680M450B	1360	68	450	918	20	450	1
REA1450680M450B	1450	68	450	918	20	400	1
REA1640680M450B	1640	68	450	918	20	440	1
REA1832680M450B	1832	68	450	918	20	500	1
REA1450820M450B	1450	82	450	1107	20	600	1
REA1645820M450B	1645	82	450	1107	20	620	1
REA1835820M450B	1835	82	450	1107	20	600	1
REA1650101M450B	1650	100	450	1350	20	760	1
REA1840101M450B	1840	100	450	1350	20	720	1

* Used to denote packing type: "K" for Ammo Pack or "B" for Bulk Pack.

DF = When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2 volts. DCL is measured at rated voltage after 3 minutes.

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Rated Voltage (V)	Capacitance (μF)	Frequency (Hz)			
		50	120	1K	≥ 10K
≤ 100	< 100	0.70	1.00	1.40	1.60
	100 - 4700	0.75	1.00	1.30	1.40
	> 4700	0.80	1.00	1.15	1.20
≥ 160	2.2 - 820	0.80	1.00	1.30	1.40

Radial Leaded Aluminum Electrolytic Capacitors

RE Series



QUALIFICATION TABLE

Test	RE Series (Temperature Range -40°C to +105°C (6.3-250V), -25°C to 105°C (350-450V))							
	Condition	Characteristics						
Temperature Stability (Max. Impedance Ratio)	120Hz	Rated Voltage (V)	6.3	10-16	25-100	160-250	350-400	450
		Z(-25°C) / Z(20°C)	4	3	2	4	8	15
		Z(-40°C) / Z(20°C)	8	6	4	6	-	-
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 5000 hours (D ≤ 8: 3000 hours; D=10: 4000 hours, D ≥13: 5000 hours) at 105°C.	ΔC/C	within ±20% of initial limit					
		DF	200% or less of initial specified limit					
		DCL	initial specified limit or less					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.	ΔC/C	within ±20% of initial limit					
		DF	200% or less of initial specified limit					
		DCL	initial specified limit or less					
Standard	JIS C 5101-4-1 (IEC 60384)							

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use the rms ripple current has to be reduced.

STORAGE

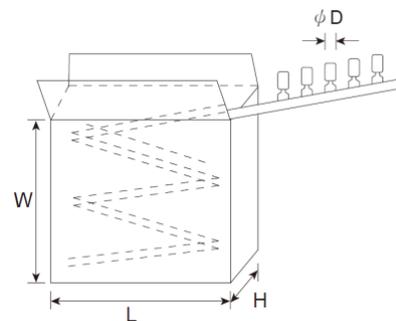
- It is recommended to keep capacitors between the ambient temperatures of 5°C to 35°C and a relative humidity of 75% or below.
- Confirm that the environment does not have any of the following conditions:
 - Damp conditions such as water, saltwater spray, or oil spray or fumes. High humidity or humidity condensation situations.
 - In an atmosphere filled with toxic gasses (such as hydrogen sulfide, sulfurous acid, nitrous acid, chlorine, ammonia, etc.).
 - Being exposed to direct sunlight, ozone, ultraviolet ray, or radiation.
 - Being exposed to acidic or alkaline solutions.
 - Under severe conditions where vibration and / or mechanical shock exceed the applicable ranges of the specification.
-

Category	Description	Storage Life
Mid-High Voltage	160V and above	2yrs, after 1yr, needs to check characteristics, if NG, needs to do aging
Low Voltage	120V and below	2yrs

PACKAGE TAPE DIMENSIONS

AMMO PACKING

Size Code	Ammo Pack					
	W±5 (mm)	L±5 (mm)	H±5 (mm)	Qty. (pcs)	G.W. kg/box	Box /Carton
0511	235	327	54	2000	0.99	10
0611	235	327	54	1500	1.12	10
0812	265	327	51	1000	1.48	10
1013/1016	235	330	57	600	1.29	5
1020	235	330	57	600	1.48	5
1321	280	315	65	400	1.95	6
1325	280	315	65	400	2.35	6



Radial Leaded Aluminum Electrolytic Capacitors

REA Series



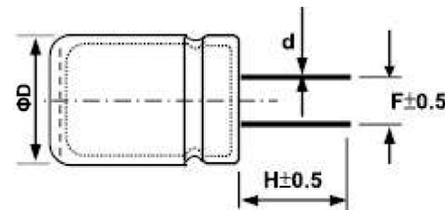
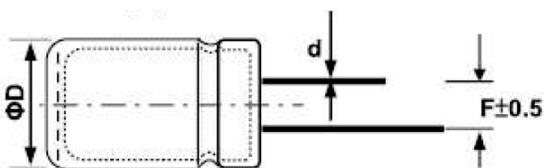
BULK PACKING

Size Code	Bulk		Ammo Taping	
	Bag / Box	Carton	Box	Carton
0511	Bag	1000	2000	20,000
0611	Bag	1000	1500	15,000
0812	Bag	500	1000	10,000
0850	Box	588	-	-
0861	Box	588	-	-
1013	Bag	200	600	3000
1016	Bag	200	600	3000
1020	Bag	200	600	3000
1040	Box	828	-	-
1045	Box	828	-	-
1050	Box	828	-	-
1060	Box	828	-	-
1321	Bag	150	400	2400
1325	Bag	150	400	2400
1330	Bag	100	-	-
1335	Bag	100	-	-
1340	Box	540	-	-
1350	Box	540	-	-
1360	Box	270	-	-
1430	Box	448	-	-
1440	Box	448	-	-
1445	Box	448	-	-
1450	Box	448	-	-
1622	Box	390	-	-
1626	Box	390	-	-
1632	Box	390	-	-
1635	Box	390	-	-
1636	Box	390	-	-
1640	Box	390	-	-
1645	Box	390	-	-
1650	Box	390	-	-
1825	Box	286	-	-
1832	Box	286	-	-
1835	Box	286	-	-
1840	Box	286	-	-
2240	Box	198	-	-
2250	Box	198	-	-
2550	Box	144	-	-

TERMINATION TYPE

Letter "A": Empty = Standard Long lead.

Letter "C": Lead cut only.



Radial Leaded Aluminum Electrolytic Capacitors

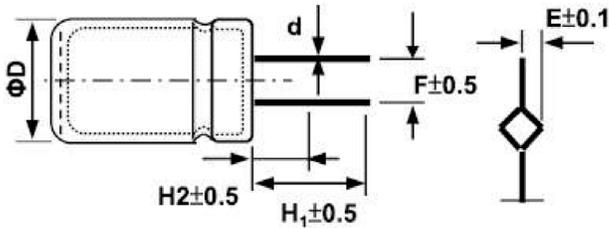
Capacitors

REA Series

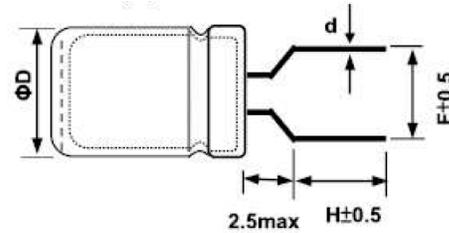


TERMINATION TYPE

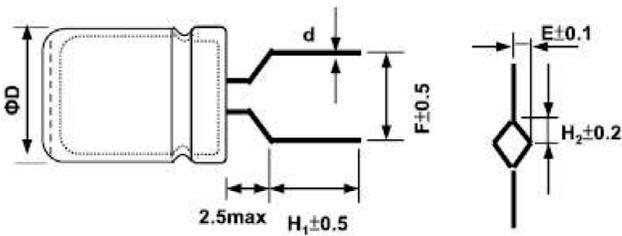
Letter "D": Lead cut and crimp.



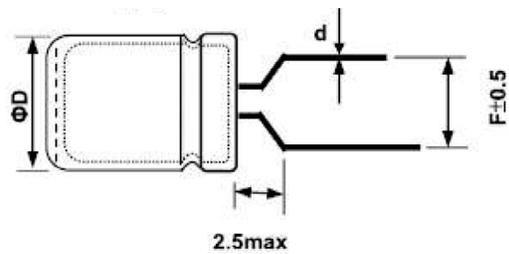
Letter "F": Lead cut and form.



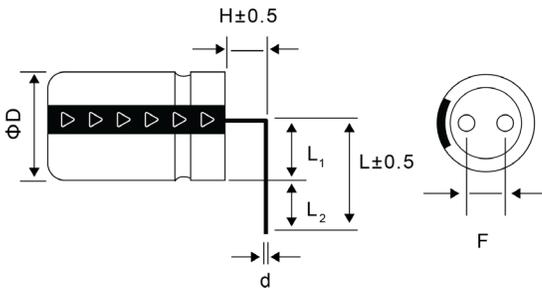
Letter "H": Lead cut, crimp, and form.



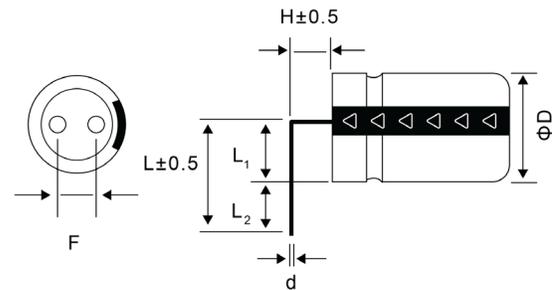
Letter "B": Forming only.



Letter "L": Lead cut and bend (Left).



Letter "Z": Lead cut and bend (Right).



Letter	Termination Type	Dø	5ø	6.3ø	8ø	10ø	13ø	14.5ø	16ø	18ø	22ø	25ø
	Standard long lead	F	2.00	2.50	3.50	5.00	5.00	7.50	7.50	7.50	10.00	10.00
		d	0.50	0.50	0.50	0.60	0.60	0.80	0.80	0.80	0.80	0.80
C	Lead cut only	F	2.00	2.50	3.50	5.00	5.00	7.50	7.50	7.50	10.00	
		d	0.50	0.50	0.50	0.60	0.60	0.80	0.80	0.80	0.80	
D	Lead cut and crimp	E	1.12	1.12	1.32	1.32	1.32	1.32	1.32	1.32	1.50	
		F				5.00	5.00	7.50	7.70	7.50	10.00	
		H ₁				5.00	5.00	5.00	5.00	5.00	5.00	
		H ₂				1.80	1.80	1.80	1.80	1.80	1.80	
F	Lead cut and form	d				0.60	0.60	0.80	0.80	0.80	0.80	
		F	5.00	5.00	5.00							
		H	5.00	5.00	5.00							
		d	0.50	0.50	0.50							
H	Lead, cut, crimp, and form	E	1.12	1.12	1.32	1.32	1.32	1.32	1.32	1.32	1.50	
		F	5.00	5.00	5.00							
		H ₁	5.00	5.00	5.00							
		H ₂	1.80	1.80	1.80							
B	Forming only	d	0.50	0.50	0.50							
		F	5.00	5.00	5.00							
		H	2.00	2.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
		L ₁	2.70	3.40	4.50	5.30	6.80	7.70	8.40	9.40	11.40	
L/Z	Lead cut and bend	L ₂	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
		d	0.50	0.50	0.50	0.60	0.60	0.80	0.80	0.80	0.80	

*All dimensions in mm.