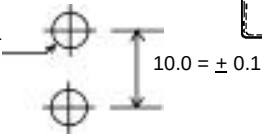


LBA Series

+85°C Snap-Mount Aluminum Electrolytic Capacitors

P.C. Mounting Specifications (Dim.=mm)

2.0 = ± 0.1



Features

Voltage Range: 10 to 450 WVDC
Capacitance Range: 47µF to 47,000µF
High Ripple Currents Ratings
Large case size selection
Rugged Design
Proven High Reliability
Solvent tolerant end seal standard
Rated at Full Voltage and Ripple Current for Long Life

LBA Specifications

Capacitance Tolerance: ± 20% (M) standard
Operating Temperature: -40°C to + 85°C (WVDC 10-250)
-25°C to + 85°C (WVDC 350-450)

Special Order Options

- Special Tolerances: ±10% (K), -10% + 30% (Q)
- Epoxy End Seal

Mfr.'s Type	MFD	WV DC	Dimensions Dia. /L(mm)	Each
476LBA450M2BC	47	450	22/25	2.25
686LBA450M2CC	68	450	25/25	2.87
107LBA350M2CC	100	350	25/25	2.52
107LBA400M2BD	100	400	22/30	2.81
107LBA450M2BE	100	450	22/35	2.92
157LBA250M2CA	150	250	25/20	2.60
157LBA400M2BF	150	400	22/40	3.45
157LBA400M2CD	150	400	25/30	3.29
157LBA450M2CF	150	450	25/40	4.13
227LBA160M2BA	220	160	22/20	2.24
227LBA200M2BC	220	200	22/25	2.22
227LBA250M2BD	220	250	22/30	2.78
227LBA250M2CC	220	250	25/25	2.91
227LBA350M2DD	220	350	30/30	4.14
227LBA400M2BH	220	400	22/50	6.24
227LBA400M2CF	220	400	25/40	4.26
227LBA450M2DF	220	450	30/40	5.55
337LBA160M2BC	330	160	22/25	2.53
337LBA200M2BD	330	200	22/30	2.88
337LBA200M2CC	330	200	25/25	2.64
337LBA250M2CD	330	250	25/30	3.17
337LBA400M2DG	330	400	30/45	5.87
337LBA450M2EF	330	450	35/40	7.44
477LBA160M2CC	470	160	25/25	3.05
477LBA200M2BF	470	200	22/40	3.43
477LBA200M2CE	470	200	25/35	3.59
477LBA200M2DC	470	200	30/25	3.65
477LBA250M2BH	470	250	22/50	3.97
477LBA250M2CF	470	250	25/40	4.10
477LBA250M2DD	470	250	30/30	3.89
477LBA400M2EG	470	400	35/45	7.68
477LBA450M2EH	470	450	35/50	10.05
567LBA200M2CE	560	200	25/35	3.81
567LBA250M2DE	560	250	30/35	4.82

LBA Series (Continued)

Mfr.'s Type	MFD	WV DC	Dimensions Dia. /L(mm)	Each
687LBA100M2BC	680	100	22/25	2.45
687LBA200M2CF	680	200	25/40	4.47
687LBA250M2DF	680	250	30/40	5.43
827LBA200M2DF	820	200	30/40	4.98
827LBA250M2DG	820	250	30/45	5.35
108LBA080M2BC	1,000	80	22/25	2.30
108LBA100M2CC	1,000	100	25/25	2.86
108LBA160M2DE	1,000	160	30/30	4.26
108LBA200M2DG	1,000	200	30/45	5.55
108LBA200M2EE	1,000	200	35/35	5.23
108LBA250M2DH	1,000	250	30/50	7.10
108LBA250M2EF	1,000	250	35/40	2.41
128LBA200M2DH	1,200	200	30/50	5.95
128LBA200M2EF	1,200	200	35/40	6.33
158LBA063M2BC	1,500	63	22/25	2.43
158LBA100M2CE	1,500	100	25/35	3.42
158LBA160M2EE	1,500	160	35/35	6.91
158LBA200M2EG	1,500	200	35/45	7.46
188LBA200M2EH	1,800	200	35/50	8.97
228LBA050M2BC	2,200	50	22/25	2.21
228LBA063M2CC	2,200	63	25/25	2.70
228LBA080M2BF	2,200	80	22/40	3.50
228LBA080M2CE	2,200	80	25/35	3.50
228LBA100M2CG	2,200	100	25/45	3.94
228LBA100M2DE	2,200	100	30/35	3.85
228LBA160M4FF	2,200	160	40/40	9.33
338LBA035M2BC	3,300	35	22/25	20.8
338LBA050M2CC	3,300	50	25/25	2.37
338LBA063M2CE	3,300	63	25/35	3.00
338LBA100M2EE	3,300	100	35/35	6.68
478LBA025M2BC	4,700	25	22/25	1.99
478LBA035M2BD	4,700	35	22/30	2.35
478LBA035M2CC	4,700	35	25/25	2.57
478LBA050M2BF	4,700	50	22/40	2.89
478LBA050M2CE	4,700	50	25/35	3.08
478LBA050M2DC	4,700	50	30/25	3.13
478LBA063M2CG	4,700	63	25/45	3.68
478LBA100M2EG	4,700	100	35/45	7.92
688LBA025M2CC	6,800	25	25/25	2.65
688LBA035M2BF	6,800	35	22/40	2.39
688LBA035M2CD	6,800	35	25/30	2.98
688LBA050M2CG	6,800	50	25/45	3.95
688LBA063M2EE	6,800	63	35/35	5.64
688LBA080M2EG	6,800	80	35/45	6.80
828LBA016M2BC	8,200	16	22/25	2.37
828LBA025M2BE	8,200	25	22/35	2.73
109LBA016M2BD	10,000	16	22/30	2.41
109LBA016M2CC	10,000	16	25/25	2.63
109LBA025M2BG	10,000	25	22/45	2.09
109LBA025M2DC	10,000	25	30/25	3.04
109LBA035M2CF	10,000	35	25/40	3.57
109LBA035M2DD	10,000	35	30/30	3.81
109LBA050M2EE	10,000	50	35/35	4.66
109LBA063M2EG	10,000	63	35/45	7.44
159LBA016M2BF	15,000	16	22/40	2.87
159LBA016M2DC	15,000	16	30/25	3.27
159LBA025M2CG	15,000	25	25/45	3.33
159LBA035M2EE	15,000	35	35/35	5.14
159LBA050M2EG	15,000	50	35/45	6.27
229LBA016M2DD	22,000	16	30/30	3.86
229LBA025M2EE	22,000	25	35/35	5.23
229LBA035M2EG	22,000	35	35/45	6.68
339LBA016M2DF	33,000	16	30/40	4.73
339LBA025M2EH	33,000	25	35/50	6.88
479LBA016M2EF	47,000	16	35/40	5.27

TTA Series

+85°C Miniature Axial Lead Aluminum Electrolytic Capacitors



Features

Wide Capacitance Range: 0.47µF to 22,000µF
2,000 Hour Endurance Rating
Small Sizes
High Ripple Current Ratings
Wide Voltage Range: 10 to 450 WVDC

TTA Specifications

Capacitance Tolerance: All values ± 20% (M) Standard
Leakage Current:

≤ 0.006 CV 2uA min. (≤ 100 WVDC)
≤ 0.006 CV + 100uAmin. (≥ 100 WVDC)

Operating

Temperature: -45°C to +85°C (WVDC 10-350)
-25°C to +85°C (WVDC 450)

Special Order Options

- Special Tolerances: ± 10% (K), -10% + 30% (Q)
- Tape and Reel
- Epoxy End Seal
- Polyester Sleeve

Mfr.'s Type	MFD	WV DC	Dimensions Dia. /L (mm)	Each
474TTA100M	.47	100	5/12.5	.15
105TTA050M	1.0	50	5/12.5	.15
105TTA100M	1.0	100	5/12.5	.15
105TTA160M	1.0	160	6.3/12.5	.25
105TTA350M	1.0	350	6.3/16	.32
105TTA450M	1.0	450	8/16	.38
225TTA050M	2.2	50	5/12.5	.15
225TTA100M	2.2	100	5/12.5	.15
225TTA160M	2.2	160	6.3/16	.23
225TTA250M	2.2	250	8/16	.37
225TTA350M	2.2	350	8/16	.38
225TTA450M	2.2	450	10/20	.69
335TTA050M	3.3	50	5/12.5	.15
335TTA100M	3.3	100	5/12.5	.17
335TTA160M	3.3	160	8/16	.29
335TTA250M	3.3	250	8/16	.42
335TTA350M	3.3	350	8/20	.62
335TTA450M	3.3	450	8/20	.90
475TTA050M	4.7	50	5/12.5	.15
475TTA100M	4.7	100	5/12.5	.15
475TTA160M	4.7	160	8/16	.32
475TTA250M	4.7	250	8/20	.63
475TTA350M	4.7	350	8/20	.75
475TTA450M	4.7	450	10/25	.82
106TTA035M	10	35	5/12.5	.15
106TTA050M	10	50	5/12.5	.15
106TTA063M	10	63	5/12.5	.18
106TTA100M	10	100	6.3/12.5	.19
106TTA160M	10	160	8/20	.57
106TTA250M	10	250	10/20	.66
106TTA350M	10	350	12.5/25	.97
106TTA450M	10	450	12.5/25	1.20
156TTA050M	15	50	5/12.5	.18

TTA Series (Continued)



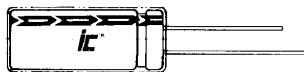
TTA Series (Continued)

Mfr.'s Type	MFD	WV DC	Dimensions Dia. /L (mm)	Each
226TTA016M	22	16	5/12.5	.15
226TTA035M	22	35	5/12.5	.18
226TTA050M	22	50	6.3/12.5	.19
226TTA100M	22	100	8/16	.25
226TTA160M	22	160	10/25	.77
226TTA250M	22	250	12.5/25	1.01
226TTA350M	22	350	12.5/30	1.35
226TTA450M	22	450	16/30	1.83
336TTA025M	33	25	5/12.5	.18
336TTA050M	33	50	6.3/16	.20
336TTA100M	33	100	8/16	.32
336TTA160M	33	160	12.5/25	.91
336TTA250M	33	250	12.5/30	1.19
336TTA350M	33	350	16/31.5	1.93
336TTA450M	33	450	16/40	2.42
476TTA016M	47	16	5/12.5	.19
476TTA025M	47	25	6.3/12.5	.19
476TTA035M	47	35	6.3/16	.20
476TTA050M	47	50	6.3/16	.23
476TTA063M	47	63	8/16	.25
476TTA100M	47	100	8/20	.39
476TTA160M	47	160	12.5/30	1.03
476TTA250M	47	250	16/30	1.21
476TTA350M	47	350	16/40	2.07
476TTA450M	47	450	22/40	3.59
686TTA016M	68	16	6.3/16	.19
686TTA035M	68	35	8/16	.25
686TTA063M	68	63	8/20	.30
107TTA010M	100	10	6.3/12.5	.17
107TTA025M	100	25	6.3/16	.22
107TTA050M	100	50	8/16	.30
107TTA063M	100	63	8/20	.30
107TTA100M	100	100	10/25	.50
107TTA160M	100	160	16/30	1.42
107TTA250M	100	250	16/40	1.96
107TTA350M	100	350	18/40	3.28
107TTA450M	100	450	22/50	3.08
157TTA025M	150	25	8/16	.24
157TTA035M	150	35	8/20	.29
157TTA050M	150	50	10/16	.34
157TTA063M	150	63	10/20	.39
157TTA100M	150	100	12.5/25	.65
227TTA016M	220	16	8/16	.24
227TTA025M	220	25	8/16	.29
227TTA035M	220	35	8/20	.30
227TTA050M	220	50	10/20	.36
227TTA063M	220	63	10/25	.51
227TTA100M	220	100	12.5/25	1.05
227TTA160M	220	160	22/40	2.72
227TTA250M	220	250	22/40	4.08
337TTA016M	330	16	8/16	.29
337TTA025M	330	25	8/20	.29
337TTA050M	330	50	10/25	.51
337TTA063M	330	63	12.5/25	.66
337TTA100M	330	100	12.5/30	1.35
477TTA010M	470	10	8/16	.26
477TTA016M	470	16	8/20	.30
477TTA025M	470	25	10/20	.42

Mfr.'s Type	MFD	WV DC	Dimensions Dia. /L (mm)	Each
477TTA035M	470	35	10/25	.51
477TTA050M	470	50	12.5/25	.66
477TTA063M	470	63	12.5/30	.87
477TTA100M	470	100	16/30	1.75
108TTA010M	1,000	10	10/20	.36
108TTA016M	1,000	16	10/25	.44
108TTA025M	1,000	25	12.5/25	.60
108TTA035M	1,000	35	12.5/25	.76
108TTA050M	1,000	50	16/30	1.22
108TTA063M	1,000	63	16/30	1.65
108TTA080M	1,000	80	16/40	2.63
108TTA100M	1,000	100	18/40	3.24
158TTA025M	1,500	25	12.5/25	1.10
158TTA035M	1,500	35	16/30	1.50
158TTA050M	1,500	50	16/40	2.01
228TTA010M	2,200	10	12.5/25	.65
228TTA016M	2,200	16	12.5/30	.76
228TTA025M	2,200	25	16/30	.29
228TTA035M	2,200	35	16/30	.30
228TTA050M	2,200	50	16/40	.36
338TTA010M	3,300	10	12.5/30	.99
338TTA016M	3,300	16	16/30	1.21
338TTA025M	3,300	25	16/40	1.63
338TTA035M	3,300	35	16/40	2.09
338TTA050M	3,300	50	22/40	3.04
478TTA010M	4,700	10	16/30	1.30
478TTA016M	4,700	16	16/31.5	1.63
478TTA025M	4,700	25	16/40	2.06
478TTA035M	4,700	35	16/40	2.93
478TTA050M	4,700	50	22/50	4.15
688TTA016M	6,800	16	16/40	2.06
688TTA025M	6,800	25	18/40	2.80
688TTA035M	6,800	35	22/50	3.78
109TTA010M	10,000	10	18/40	2.12
109TTA016M	10,000	16	18/40	2.76
109TTA025M	10,000	25	22/50	3.76
109TTA035M	10,000	35	25/50	5.13
159TTA016M	15,000	16	22/50	3.52
159TTA025M	15,000	25	25/50	4.67
229TTA016M	22,000	16	22/50	5.06

CKR Series

+85°C Standard Radial Lead
Aluminum Electrolytic Capacitors



Features

Standard Size
Wide Capacitance Range: 0.1μ to 15,000μF
Wide Voltage Range: 6.3 to 450 WVDC
Solvent Tolerant End Seals Standard
2,000 Hour Endurance Rating
High Ripple Current
Low Leakage Current

CKR Specifications

Capacitance Tolerance: All Values ± 20% (M) Standard Operating

Temperature: -40°C to +85°C (WVDC 6.3-100)
-25°C to +85°C (WVDC 160-450)

Special Order Options

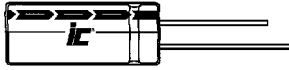
- Special Tolerances: ±10% (K), -10% + 30% (Q)
- Tape and Reel/Ammo Pack
- Cut, Formed, Cut & Formed, & Snap-in Leads
- Epoxy and Seal
- Polyester Sleeve

Dimensions: A= Diameter, B= Case Length,
C= Lead Spacing

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
104CKR050M	0.1	50	5/11/2	.06
154CKR050M	0.15	50	5/11/2	.06
224CKR050M	0.22	50	5/11/2	.06
334CKR050M	0.33	50	5/11/2	.06
474CKR050M	0.47	50	5/11/2	.06
474CKR100M	0.47	100	5/11/2	.06
684CKR050M	0.68	50	5/11/2	.06
105CKR050M	1.0	50	5/11/2	.12
105CKR100M	1.0	100	5/11/2	.06
105CKR250M	1.0	250	6.3/11/2.5	.10
155CKR050M	1.5	50	5/11/2	.06
225CKR050M	2.2	50	5/11/2	.06
225CKR100M	2.2	100	5/11/2	.06
225CKR160M	2.2	160	6.3/11/2.5	.09
225CKR250M	2.2	250	8/11/3.5	.15
335CKR050M	3.3	50	5/11/2	.06
335CKR100M	3.3	100	5/11/2	.07
335CKR160M	3.3	160	8/11.5/3.5	.14
335CKR250M	3.3	250	10/11.5/3.5	.15
475CKR050M	4.7	50	5/11/2	.06
475CKR100M	4.7	100	5/11/2	.07
475CKR160M	4.7	160	8/11.5/3.5	.14
475CKR250M	4.7	250	10/12.5/5	.19
685CKR063M	6.8	63	5/11/2	.11
106CKR050M	10	50	5/11/2	.06
106CKR063M	10	63	5/11/2	.06
106CKR100M	10	100	6.3/11/2.5	.10
106CKR160M	10	160	10/16/5	.22
106CKR250M	10	250	10/20/5	.27
156CKR050M	15	50	5/11/2	.06
156CKR063M	15	63	6.3/11/2.5	.10
156CKR100M	15	100	8/11.5/3.5	.14
226CKR050M	22	50	5/11/2	.06
226CKR063M	22	63	6.3/11/2.5	.10
226CKR100M	22	100	8/11.5/3.5	.14
226CKR160M	22	160	10/20/5	.28
226CKR250M	22	250	12.5/20/5	.48
336CKR035M	33	35	5/11/2	.07
336CKR050M	33	50	6.3/11/2.5	.10
336CKR063M	33	63	6.3/11/2.5	.11
336CKR100M	33	100	10/12.5/5	.21
336CKR160M	33	160	10/20/5	.51
336CKR250M	33	250	12.5/25/5	.57
476CKR025M	47	25	5/11/2	.06
476CKR050M	47	50	6.3/11/2.5	.10
476CKR063M	47	63	8/11.5/3.5	.13
476CKR100M	47	100	10/16/5	.23
476CKR160M	47	160	12.5/25/5	.54
476CKR250M	47	250	16/25/7.5	.74
686CKR025M	68	25	6.3/11/2.5	.14
686CKR050M	68	50	8/11.5/3.5	.14
686CKR063M	68	63	10/12.5/5	.21
686CKR100M	68	100	10/16/5	.24

CKR Series Continued
On Next Page

CKR Series (Continued)



Dimensions: A= Diameter, B= Case Length,
C= Lead Spacing

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
107CKR010M	100	10	5/11/2	.06
107CKR025M	100	25	6.3/11/2.5	.09
107CKR050M	100	50	8/11.5/3.5	.15
107CKR063M	100	63	10/12.5/5	.21
107CKR100M	100	100	12.5/20/5	.39
107CKR160M	100	160	16/25/7.5	.77
107CKR250M	100	250	16/35.5/7.5	1.44

157CKR010M	150	10	6.3/11/2.5	.13
157CKR025M	150	25	8/11.5/3.5	.14
157CKR035M	150	35	10/12.5/5	.19
157CKR050M	150	50	10/16/5	.68
157CKR100M	150	100	12.5/20/5	.39

227CKR010M	220	10	6.3/11/2.5	.10
227CKR016M	220	16	8/11.5/3.5	.13
227CKR025M	220	25	8/11.5/3.5	.15
227CKR035M	220	35	10/12.5/5	.19
227CKR050M	220	50	10/16/5	.25
227CKR063M	220	63	10/20/5	.25
227CKR100M	220	100	16/25/7.5	.57

337CKR6R3M	330	6.3	6.3/11/2.5	.11
337CKR016M	330	16	8/11.5/3.5	.14
337CKR025M	330	25	10/12.5/5	.19
337CKR035M	330	35	10/16/5	.25
337CKR050M	330	50	10/20/5	.28
337CKR063M	330	63	12.5/20/5	.43
337CKR100M	330	100	16/25/7.5	.76

477CKR010M	470	10	8/11.5/3.5	.14
477CKR016M	470	16	10/12.5/5	.19
477CKR025M	470	25	10/16/5	.23
477CKR035M	470	35	10/20/5	.27
477CKR050M	470	50	12.5/20/5	.42
477CKR063M	470	63	12.5/25/5	.49
477CKR100M	470	100	16/31.5/7.5	.81

687CKR016M	680	16	10/16/5	.10
687CKR035M	680	35	12.5/20/5	.25
687CKR050M	680	50	12.5/25/5	.49

108CKR6R3M	1,000	6.3	10/12.5/5	.19
108CKR010M	1,000	10	10/16/5	.22
108CKR016M	1,000	16	10/20/5	.27
108CKR025M	1,000	25	12.5/20/5	.40
108CKR035M	1,000	35	12.5/25/5	.53
108CKR050M	1,000	50	16/25/7.5	.70
108CKR063M	1,000	63	16/31.5/7.5	.97

158CKR016M	1,500	16	12.5/20/5	.41
158CKR025M	1,500	25	12.5/25/5	.50
158CKR035M	1,500	35	16/25/7.5	.72
158CKR050M	1,500	50	18/31.5/7.5	1.40

228CKR010M	2,200	10	12.5/20/5	.41
228CKR016M	2,200	16	12.5/25/5	.48
228CKR025M	2,200	25	16/25/7.5	.67
228CKR035M	2,200	35	16/31.5/7.5	.94
228CKR050M	2,200	50	18/35.5/7.5	1.40

338CKR6R3M	3,300	6.3	12.5/20/5	.10
338CKR010M	3,300	10	12.5/25/5	.52
338CKR016M	3,300	16	16/25/7.5	.70
338CKR025M	3,300	25	16/31.5/7.5	.88
338CKR035M	3,300	35	18/35.5/7.5	1.34

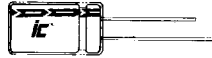
478CKR010M	4,700	10	16/25/7.5	.71
478CKR016M	4,700	16	16/31.5/7.5	.86
478CKR025M	4,700	25	18/31.5/7.5	1.38

688CKR6R3M	6,800	6.3	16/25/7.5	.65
688CKR016M	6,800	16	18/35.5/7.5	1.34

109CKR6R3M	10,000	6.3	16/31.5/7.5	.19
109CKR010M	10,000	10	18/35.5/7.5	1.25

RSS Series

+85°C Low Profile Radial Lead Aluminum
Electrolytic Capacitors



Features

Small Case Sizes
Capacitance Range: 1μ to 2200μF
Voltage Range: 6.3 to 50 WVDC
Suitable for Dipped Tantalum Replacement
Solvent Tolerant End Seal Standard

Specifications

Capacitance Tolerance: ± 20% (M) standard
Operating Temperature: -40°C To + 85°C

Special Order Options

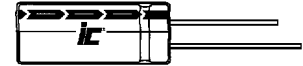
- Special Tolerances: ± 10%(K), -10% + 30% (Q)
- Tape and Reel/Ammo Pack
- Cut, Cut and Formed Leads and Snap-in Leads
- Epoxy End Seal
- Polyester Sleeve

Dimensions: A= Diameter, B= Case Length,
C= Lead Spacing

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
104RSS050M	0.1	50	4/7/1.5	.10
334RSS050M	0.33	50	4/7/1.5	.10
474RSS050M	0.47	50	4/7/1.5	.10
105RSS050M	1.0	50	4/7/1.5	.10
225RSS050M	2.2	50	4/7/1.5	.10
335RSS050M	3.3	50	4/7/1.5	.10
475RSS035M	4.7	35	4/7/1.5	.08
475RSS050M	4.7	50	5/7/2	.09
685RSS025M	6.8	25	4/7/1.5	.08
106RSS016M	10	16	4/7/1.5	.08
106RSS035M	10	35	5/7/2	.09
106RSS050M	10	50	6.3/7/2.5	.11
226RSS016M	22	16	5/7/2	.09
226RSS035M	22	35	6.3/7/2.5	.10
336RSS010M	33	10	5/7/2	.09
336RSS025M	33	25	6.3/7/2.5	.11
476RSS6R3M	47	6.3	5/7/2	.09
476RSS016M	47	16	6.3/7/2.5	.11
107RSS6R3M	100	6.3	6.3/7/2.5	.11
107RSS025M	100	25	8/9/3.5	.21
107RSS035M	100	35	10/9/5	.29
227RSS010M	220	10	8/9/3.5	.21
227RSS016M	220	16	10/9/5	.29
337RSS010M	330	10	10/9/5	.29
337RSS050M	330	50	16/15/7.5	.67
477RSS6R3M	470	6.3	10/9/5	.29
477RSS035M	470	35	12.5/15/5	.65
477RSS050M	470	50	16/15/7.5	.81
108RSS016M	1,000	16	12.5/15/5	.56
108RSS035M	1,000	35	16/15/7.5	.91
228RSS016M	2,200	16	16/15/7.5	.87

CKH Series

+105°C Extended Life Standard Radial Lead
Aluminum Electrolytic Capacitors



Features

Standard Size
Wide Capacitance Range: 0.1μF to 15,000μF
Solvent Tolerant End Seals Standard

Specifications

Capacitance Tolerance: ± 20% (M) Standard
Operating Temperature: -55°C to +105°C (WVDC 6.3-100)
-40°C to +105°C (WVDC 160-250)
-25°C to +105°C (WVDC 350-450)

Special Order Options

- Special Tolerances: ± 10%(K), -10% + 30% (Q)
- Tape and Reel/Ammo Pack
- Cut, Formed, Cut and Formed and Snap-in Leads
- Epoxy End Seal
- Polyester Sleeve

Dimensions: A= Diameter, B= Case Length,,
C= Lead Spacing

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
104CKH050M	0.1	50	5.0/11/2.0	.08
154CKH050M	0.15	50	5.0/11/2.0	.08
224CKH050M	0.22	50	5.0/11/2.0	.07
334CKH050M	0.33	50	5.0/11/2.0	.07
474CKH050M	0.47	50	5.0/11/2.0	.07
474CKH100M	0.47	100	5.0/11/2.0	.07
474CKH250M	0.47	250	6.3/11/2.5	.11
684CKH050M	0.68	50	5.0/11/2.0	.07
105CKH050M	1	50	5.0/11/2.0	.07
105CKH100M	1	100	5.0/11/2.0	.07
105CKH250M	1	250	6.3/11/2.5	.10
155CKH050M	1.5	50	5.0/11/2.0	.08
225CKH050M	2.2	50	5.0/11/2.0	.07
225CKH100M	2.2	100	5.0/11/2.0	.07
225CKH250M	2.2	250	6.3/11/2.5	.12
335CKH050M	3.3	50	5.0/11/2.0	.07
335CKH100M	3.3	100	5.0/11/2.0	.07
335CKH160M	3.3	160	6.3/11/2.5	.13
335CKH200M	3.3	200	8.0/11.5/3.5	.13
335CKH250M	3.3	250	8.0/11.5/3.5	.20
475CKH050M	4.7	50	5.0/11/2.0	.06
475CKH100M	4.7	100	5.0/11/2.0	.09
475CKH160M	4.7	160	6.3/11/2.5	.14
475CKH200M	4.7	200	8.0/11.5/3.5	.19
475CKH250M	4.7	250	8.0/12.5/3.5	.19
685CKH050M	6.8	50	5.0/11/2.0	.07
685CKH063M	6.8	63	5.0/11/2.0	.07
685CKH100M	6.8	100	6.3/11/2.5	.14
685CKH200M	6.8	200	10/16/5.0	.24
685CKH250M	6.8	250	10/16/5.0	.26

CKH Series Continued On Next Page

CKH Series (Continued)

Dimensions: A= Diameter, B= Case Length,
C= Lead Spacing

Dimensions: A= Diameter, B= Case Length,
C= Lead Spacing

RLS Series (Continued)

Dimensions: A= Diameter, B= Case Length,
C= Lead Spacing

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
106CKH050M	10	50	5.0/11/2.0	.07
106CKH063M	10	63	5.0/11/2.0	.09
106CKH100M	10	100	6.3/11/2.5	.10
106CKH160M	10	160	10/16/5.0	.19
106CKH200M	10	200	10/16/5.0	.27
106CKH250M	10	250	10/20/5.0	.27
156CKH050M	15	50	5.0/11/2.0	.09
156CKH063M	15	63	6.3/11/2.5	.13
156CKH100M	15	100	8.0/11.5/3.5	.19
156CKH160M	15	160	10/16/5.0	.30
156CKH250M	15	250	10/20/5.0	.34
226CKH050M	22	50	5.0/11/2.0	.07
226CKH063M	22	63	6.3/11/2.5	.13
226CKH100M	22	100	8.0/11.5/3.5	.17
226CKH160M	22	160	10/20/5.0	.31
226CKH200M	22	200	10/20/5.0	.34
226CKH250M	22	250	12.5/20/5.0	.52
336CKH035M	33	35	5.0/11/2.0	.09
336CKH050M	33	50	6.3/11/2.5	.13
336CKH063M	33	63	6.3/11/2.5	.13
336CKH100M	33	100	10/25/5.0	.21
336CKH160M	33	160	12.5/20/5.0	.43
336CKH200M	33	200	12.5/20/5.0	.57
336CKH250M	33	250	12.5/25/5.0	.63
476CKH025M	47	25	5.0/11/2.0	.08
476CKH050M	47	50	6.3/11/2.5	.13
476CKH063M	47	63	8.0/11.5/3.5	.18
476CKH100M	47	100	10/16/5.0	.29
476CKH160M	47	160	12.5/25/5.0	.56
476CKH200M	47	200	12.5/25/5.0	.54
476CKH250M	47	250	16/25/7.5	.89
686CKH016M	68	16	5.0/11/2.0	.09
686CKH025M	68	25	6.3/11/2.5	.13
686CKH050M	68	50	8.0/11.5/3.5	.17
686CKH063M	68	63	10/12.5/5.0	.30
686CKH100M	68	100	10/16/5.0	.34
686CKH160M	68	160	16/25/7.5	.84
686CKH200M	68	200	16/25/7.5	.83
686CKH250M	68	250	16/31.5/7.5	.97
107CKH010M	100	10	5.0/11/2.0	.09
107CKH025M	100	25	6.3/11/2.5	.10
107CKH050M	100	50	8.0/11.5/3.5	.16
107CKH063M	100	63	10/12.5/5.0	.22
107CKH100M	100	100	12.5/20/5.0	.41
107CKH160M	100	160	16/25/7.5	.85
107CKH200M	100	200	16/31.5/7.5	2.17
107CKH250M	100	250	16/35.5/7.5	1.43
157CKH010M	150	10	6.3/11/2.5	.13
157CKH025M	150	25	8.0/11.5/3.5	.17
157CKH035M	150	35	10/12.5/5.0	.26
157CKH050M	150	50	10/16/5.0	.35
157CKH063M	150	63	10/20/5.0	.36
157CKH100M	150	100	12.5/20/5.0	.55
157CKH160M	150	160	16/31.5/7.5	1.18
157CKH200M	150	200	16/35.5/7.5	1.65
227CKH010M	220	10	6.3/11/2.5	.09
227CKH025M	220	25	8.0/11.5/3.5	.16
227CKH035M	220	35	10/12.5/5.0	.19
227CKH050M	220	50	10/16/5.0	.27
227CKH063M	220	63	10/20/5.0	.38
227CKH100M	220	100	16/25/7.5	.81
227CKH160M	220	160	18/35.5/7.5	1.56
337CKH6R3M	330	6.3	6.3/11/2.5	.13
337CKH016M	330	16	8/11.5/3.5	.17
337CKH025M	330	25	10/12.5/5.0	.26
337CKH035M	330	35	10/16/5.0	.32
337CKH050M	330	50	10/20/5.0	.37
337CKH063M	330	63	12.5/20/5.0	.54
337CKH100M	330	100	16/25/7.5	1.04

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
477CKH010M	470	10	8.0/11.5/3.5	.17
477CKH016M	470	16	10/12.5/5.0	.21
477CKH025M	470	25	10/16/5.0	.29
477CKH035M	470	35	10/20/5.0	.33
477CKH050M	470	50	12.5/20/5.0	.49
477CKH063M	470	63	12.5/25/5.0	.64
477CKH100M	470	100	16/31.5/7.5	1.16
687CKH6R3M	680	6.3	10/12.5/5.0	.27
687CKH016M	680	16	10/16/5.0	.33
687CKH035M	680	35	12.5/20/5.0	.53
687CKH050M	680	50	12.5/25/5.0	.65
687CKH063M	680	63	16/25/7.5	1.09
108CKH6R3M	1,000	6.3	10/12.5/5.0	.28
108CKH010M	1,000	10	10/16/5.0	.27
108CKH016M	1,000	16	10/20/5.0	.32
108CKH025M	1,000	25	12.5/20/5.0	.55
108CKH035M	1,000	35	12.5/25/5.0	.57
108CKH050M	1,000	50	16/25/7.5	.87
108CKH063M	1,000	63	16/31.5/7.5	1.35
158CKH6R3M	1,500	6.3	10/20/5.0	1.96
158CKH016M	1,500	16	12.5/20/5.0	.52
158CKH025M	1,500	25	12.5/20/5.0	.62
158CKH035M	1,500	35	16/25/7.5	1.05
158CKH050M	1,500	50	18/31.5/7.5	1.76
228CKH010M	2,200	10	12.5/20/5.0	.52
228CKH016M	2,200	16	12.5/25/5.0	.62
228CKH025M	2,200	25	16/25/7.5	.97
228CKH035M	2,200	35	16/31.5/7.5	1.11
228CKH050M	2,200	50	18/35.5/7.5	1.68
338CKH6R3M	3,300	6.3	12.5/20/5.0	.54
338CKH010M	3,300	10	12.5/25/5.0	.61
338CKH016M	3,300	16	16/25/7.5	.99
338CKH025M	3,300	25	16/31.5/7.5	1.20
338CKH035M	3,300	35	18/35.5/7.5	1.91
478CKH010M	4,700	10	16/25/7.5	.82
478CKH016M	4,700	16	16/31.5/7.5	1.11
478CKH025M	4,700	25	18/35.5/7.5	1.80
688CKH6R3M	6,800	6.3	16/25/7.5	.91
688CKH010M	6,800	10	16/31.5/7.5	1.12
688CKH016M	6,800	16	18/35.5/7.5	1.68
109CKH6R3M	10,000	6.3	16/31.5/7.5	1.27
109CKH010M	10,000	10	18/35.5/7.5	1.78
159CKH6R3M	15,000	6.3	18/35.5/7.5	1.96

RLS Series

+85°C Low Leakage Radial Lead
Aluminum Electrolytic Capacitors



Features

Capacitance Range: 1μ to 1000μF
Voltage Range: 10 to 50 WVDC
Low Leakage Current
Alternative to Tantalum Capacitors

Specifications

Capacitance Tolerance: ±20% (M) Standard
Operating Temperature: -40°C to +85°C

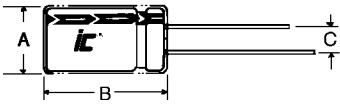
Special Order Options

- Special Tolerances: ± 10% (K), -10% + 30% (Q)
- Tape and Reel/Ammo Pack
- Cut, Formed, Cut and Formed and Snap-in Leads
- Polyester Seal
- Epoxy End Seal

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
104RLS050M	0.1	50	5.0/11.0/2.0	.08
154RLS050M	0.15	50	5.0/11.0/2.0	.08
224RLS050M	0.22	50	5.0/11.0/2.0	.08
334RLS050M	0.33	50	5.0/11.0/2.0	.08
474RLS050M	0.47	50	5.0/11.0/2.0	.08
684RLS050M	0.68	50	5.0/11.0/2.0	.08
105RLS050M	1.0	50	5.0/11.0/2.0	.08
155RLS050M	1.5	50	5.0/11.0/2.0	.09
225RLS050M	2.2	50	5.0/11.0/2.0	.08
335RLS050M	3.3	50	5.0/11.0/2.0	.08
475RLS050M	4.7	50	5.0/11.0/2.0	.09
685RLS050M	6.8	50	5.0/11.0/2.0	.11
106RLS035M	10	35	5.0/11.0/2.0	.11
106RLS050M	10	50	5.0/11.0/2.0	.11
156RLS035M	15	35	5.0/11.0/2.0	.11
156RLS050M	15	50	6.3/11.0/2.5	.14
226RLS016M	22	16	5.0/11.0/2.0	.11
226RLS025M	22	25	5.0/11.0/2.0	.11
226RLS035M	22	35	6.3/11.0/2.5	.15
226RLS050M	22	50	6.3/11.0/2.5	.15
336RLS016M	33	16	5.0/11.0/2.0	.11
336RLS035M	33	35	6.3/11.0/2.5	.15
336RLS050M	33	50	8.0/11.5/3.5	.19
476RLS010M	47	10	5.0/11.0/2.0	.11
476RLS016M	47	16	6.3/11.0/2.5	.14
476RLS025M	47	25	6.3/11.0/2.5	.15
476RLS050M	47	50	8.0/11.5/3.5	.19
686RLS016M	68	16	6.3/11.0/2.5	.15
686RLS035M	68	35	8.0/11.5/3.5	.19
686RLS050M	68	50	10.0/12.5/5.0	.23
107RLS010M	100	10	6.3/1.0/2.5	.15
107RLS016M	100	16	8.0/11.5/3.5	.19
107RLS025M	100	25	8.0/11.5/3.5	.19
107RLS035M	100	35	10.0/12.5/5.0	.23
107RLS050M	100	50	10.0/16.0/5.0	.27
157RLS016M	150	16	8.0/11.5/3.5	.19
157RLS025M	150	25	10.0/12.5/5.0	.23
157RLS035M	150	35	10.0/16.0/5.0	.27
157RLS050M	150	50	10.0/20.0/5.0	.36
227RLS010M	220	10	8.0/11.5/3.5	.19
227RLS016M	220	16	10.0/12.5/5.0	.22
227RLS025M	220	25	10.0/16.0/5.0	.28
227RLS035M	220	35	10.0/20.0/5.0	.35
227RLS050M	220	50	12.5/20.0/5.0	.50
337RLS010M	330	10	10.0/12.5/5.0	.22
337RLS016M	330	16	10.0/16.0/5.0	.26
337RLS025M	330	25	10.0/20.0/5.0	.35
337RLS035M	330	35	12.5/20.0/5.0	.50
477RLS010M	470	10	10.0/16.0/5.0	.26
477RLS016M	470	16	10.0/20.0/5.0	.35
108RLS010M	1,000	10	12.5/20.0/5.0	.49

RZM Series

+105°C High Frequency Radial Lead Aluminum Electrolytic Capacitors



Features

Up to 3,000 Hrs. of Load Life at +105°C and at Full Rated Voltage and Ripple Current
Low ESR
100 KHz Operating Frequency Range
Low Impedance

Specifications

Operating Temperature: -55°C to +105°C
Capacitance Tolerance: ±20% (M) standard

Special Order Options

- Special Tolerances: ±10% (K), -10% + 30% (Q)
- Tape and Reel/Ammo Pack
- Cut, Formed, Cut & Formed Leads and Snap-In Leads
- Epoxy End Seal
- Polyester Sleeve

RZM Series (Continued)

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
687RZM6R3M1013	680	6.3	10.0/12.5/5.0	.42
687RZM010M820	680	10	10.0/20.0/3.5	.79
687RZM010M1016	680	10	8.0/16.0/5.0	.52
687RZM016M	680	16	10.0/16.0/5.0	.53
687RZM025M1030	680	25	10.0/30.0/5.0	.72
687RZM025M1320	680	25	12.5/20.0/5.0	.78
687RZM025M1615	680	25	16.0/15.0/7.5	1.10
687RZM035M1320	680	35	12.5/20.0/5.0	.79
687RZM035M1815	680	35	18.0/15.0/7.5	1.12
687RZM050M1325	680	50	12.5/25.0/5.0	.98
687RZM050M1620	680	50	16.0/20.0/7.5	1.32

108RZM6R3M	1,000	6.3	10.0/12.5/5.0	.43
108RZM010M	1,000	10	10.0/16.0/5.0	.52
108RZM016M1020	1,000	16	10.0/20.0/5.0	.60
108RZM016M1615	1,000	16	16.0/15.0/7.5	1.04
108RZM025M1320	1,000	25	12.5/20.0/5.0	.82
108RZM025M1815	1,000	25	18.0/15.0/7.5	1.13
108RZM035M1325	1,000	35	12.5/25.0/5.0	1.05
108RZM035M1620	1,000	35	16.0/20.0/7.5	1.45
108RZM050M	1,000	50	16.0/25.0/7.5	1.33

158RZM6R3M1020	1,500	6.3	10.0/20.0/5.0	.58
158RZM6R3M1315	1,500	6.3	12.5/15.0/5.0	.80
158RZM010M1030	1,500	10	10.0/30.0/5.0	.73
158RZM010M1320	1,500	10	12.5/20.0/5.0	.80
158RZM010M1615	1,500	10	16.0/15.0/7.5	1.11
158RZM016M1320	1,500	16	12.5/20.0/5.0	.84
158RZM016M1815	1,500	16	18.0/15.0/7.5	1.14
158RZM025M1325	1,500	25	12.5/25.0/5.0	.99
158RZM025M1620	1,500	25	16.0/20.0/7.5	1.36
158RZM035M1340	1,500	35	12.5/40.0/5.0	1.60
158RZM035M1625	1,500	35	16.0/25.0/7.5	1.47
158RZM035M1820	1,500	35	18.0/20.0/7.5	1.55
158RZM050M1640	1,500	50	16.0/40.0/7.5	1.96
158RZM050M1832	1,500	50	18.0/31.0/7.5	2.31

228RZM6R3M1030	2,200	6.3	10.0/30.0/5.0	.77
228RZM6R3M1320	2,200	6.3	12.5/20.0/5.0	.78
228RZM6R3M1615	2,200	6.3	16.0/15.0/7.5	1.06
228RZM010M1320	2,200	10	12.5/20.0/5.0	.78
228RZM010M1815	2,200	10	18.0/15.0/7.5	1.20
228RZM016M1325	2,200	16	12.5/25.0/5.0	1.01
228RZM016M1620	2,200	16	16.0/20.0/7.5	1.31
228RZM025M1340	2,200	25	12.5/40.0/5.0	1.54
228RZM025M1625	2,200	25	16.0/25.0/7.5	1.37
228RZM025M1820	2,200	25	18.0/20.0/7.5	1.55
228RZM035M	2,200	35	16.0/31.5/7.5	1.92
228RZM050M	2,200	50	18.0/35.5/7.5	2.45

338RZM6R3M1320	3,300	6.3	12.5/20.0/5.0	.82
338RZM6R3M1815	3,300	6.3	18.0/15.0/7.5	1.18
338RZM010M1325	3,300	10	12.5/25.0/5.0	.97
338RZM010M1620	3,300	10	16.0/20.0/7.5	1.31
338RZM016M1340	3,300	16	12.5/40.0/5.0	1.42
338RZM016M1625	3,300	16	16.0/25.0/7.5	1.34
338RZM016M1820	3,300	16	18.0/20.0/7.5	1.47
338RZM025M	3,300	25	16.0/31.5/7.5	1.79
338RZM035M	3,300	35	18.0/35.5/7.5	2.80

478RZM6R3M1335	4,700	6.3	12.5/35.5/5.0	1.37
478RZM6R3M1625	4,700	6.3	16.0/25.0/7.5	1.26
478RZM6R3M1820	4,700	6.3	18.0/20.0/7.5	1.38
478RZM010M	4,700	10	16.0/25.0/7.5	1.31
478RZM016M	4,700	16	16.0/31.5/7.5	1.66
478RZM025M	4,700	25	18.0/35.5/7.5	2.52
478RZM035M	4,700	35	18.0/40.0/7.5	3.23

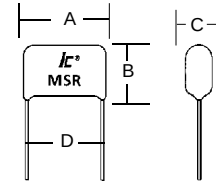
688RZM6R3M	6,800	6.3	16.0/25.0/7.5	1.32
688RZM010M	6,800	10	16.0/31.5/7.5	1.65
688RZM016M	6,800	16	18.0/35.5/7.5	2.94

109RZM6R3M	10,000	6.3	16.0/31.5/7.5	2.12
109RZM010M	10,000	10	18.0/35.5/7.5	2.33
109RZM16M	10,000	16	18.0/40.0/7.5	2.94

159RZM6R3M	15,000	6.3	18.0/35.0/7.5	2.65
159RZM010M	15,000	10	18.0/40.0/7.5	2.82

MSR Series

+125°C Epoxy Dipped Radial Lead Metalized Polyester Film Capacitors



Features

Self Healing
Capacitance Range: 0.01µF to 10.0µF
Voltage Range: 100 to 1000 WVDC

Specifications

Capacitance Tolerance: ± 10% (K) standard
Operating Temperature: -55°C to + 125°C

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C/D (mm)	Each
103MSR400K	.01	400	9.5/9.0/5.0/7.5	.20
103MSR630K	.01	630	12.5/10.0/5.0/10.0	.21
103MSR102K	.01	1,000	14.0/11.5/8.0/10.0	.40
153MSR250K	.015	250	9.5/9.0/5.0/7.5	.19
153MSR400K	.015	400	9.5/9.5/5.5/7.5	.20
153MSR630K	.015	630	12.5/10.5/6.0/10.0	.22
153MSR102K	.015	1,000	14.0/11.5/8.0/10.0	.42
223MSR250K	.022	250	9.5/9.0/5.0/7.5	.19
223MSR400K	.022	400	12.5/9.0/5.0/10.0	.24
223MSR630K	.022	630	12.5/10.7/7.0/10.0	.24
223MSR102K	.022	1,000	19.0/12.5/8.5/15.0	.77
333MSR250K	.033	250	9.5/9.5/5.5/7.5	.19
333MSR400K	.033	400	12.5/10.5/5.5/10.0	.21
333MSR630K	.033	630	17.5/11.5/6.5/15.0	.25
333MSR102K	.033	1,000	19.5/14.0/9.5/15.0	.50
473MSR100K	.047	100	9.5/8.5/5.0/7.5	.19
473MSR250K	.047	250	12.5/9.0/5.0/10.0	.19
473MSR400K	.047	400	12.5/11.0/6.5/10.0	.22
473MSR630K	.047	630	17.5/12.5/7.5/15.0	.28
473MSR102K	.047	1,000	27.0/14.0/9.0/22.5	.52
683MSR100K	.068	100	9.5/8.0/4.5/7.5	.21
683MSR250K	.068	250	12.5/10.0/5.0/10.0	.21
683MSR400K	.068	400	17.5/10.0/5.5/15.0	.26
683MSR630K	.068	630	17.5/14.0/8.0/15.0	.64
683MSR102K	.068	1,000	27.0/15.0/10.0/22.5	.56
104MSR100K	.10	100	12.5/8.5/5.5/10.0	.23
104MSR250K	.10	250	12.5/11.0/6.0/10.0	.18
104MSR400K	.10	400	17.5/11.5/6.5/15.0	.27
104MSR630K	.10	630	17.5/15.5/10.0/15.0	.37
104MSR102K	.10	1,000	27.0/16.5/11.5/22.5	.64
154MSR100K	.15	100	12.5/9.0/5.0/10.0	.26
154MSR250K	.15	250	13.0/13.0/7.0/10.0	.38
154MSR400K	.15	400	17.5/12.5/7.5/15.0	.32
154MSR630K	.15	630	22.5/16.5/9.0/20.0	.45
224MSR100K	.22	100	12.5/10.0/5.5/10.0	.28
224MSR250K	.22	250	17.5/10.0/5.5/15.0	.27
224MSR400K	.22	400	22.5/14.5/7.5/20.0	.33
224MSR630K	.22	630	22.5/19.0/11.0/20.0	.48
224MSR102K	.22	1,000	32.5/22.5/14.5/27.5	.77
334MSR100K	.33	100	17.5/10.0/5.5/15.0	.31
334MSR250K	.33	250	17.5/12.5/7.0/15.0	.28
334MSR400K	.33	400	22.5/16.0/9.0/20.0	.35
334MSR630K	.33	630	30.0/18.5/11.0/27.5	.54
334MSR102K	.33	1,000	32.5/25.5/16.0/27.5	.85

MSR Series Continued on next page

Mfr.'s Type	MFD	WV DC	Dimensions A/B/C (mm)	Each
474RZM050M	.47	50	5.0/11.0/2.0	.15
684RZM050M	.68	50	5.0/11.0/2.0	.15
105RZM050M	1.0	50	5.0/11.0/2.0	.15
155RZM050M	1.5	50	5.0/11.0/2.0	.15
225RZM050M	2.2	50	5.0/11.0/2.0	.15
335RZM050M	3.3	50	5.0/11.0/2.0	.15
475RZM050M	4.7	50	5.0/11.0/2.0	.15
685RZM050M	6.8	50	5.0/11.0/2.0	.15
106RZM050M	10	50	5.0/11.0/2.0	.15
156RZM050M	15	50	5.0/11.0/2.0	.15

226RZM010M	22	10	5.0/11.0/2.0	.15
226RZM016M	22	16	5.0/11.0/2.0	.15
226RZM050M	22	50	5.0/11.0/2.0	.15

336RZM035M	33	35	5.0/11.0/2.0	.15
336RZM050M	33	50	6.3/11.0/2.5	.18

476RZM025M	47	25	5.0/11.0/2.0	.15
476RZM050M	47	50	6.3/11.0/2.5	.18

686RZM016M	68	16	5.0/11.0/2.5	.15
686RZM025M	68	25	6.3/11.0/2.5	.19
686RZM050M	68	50	8.0/11.5/3.5	.24

107RZM010M	100	10	5.0/11.0/2.0	.15
107RZM025M	100	25	6.3/11.0/2.5	.18
107RZM050M	100	50	8.0/11.5/3.5	.24

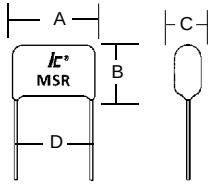
157RZM010M	150	10	6.3/11.0/2.5	.18
157RZM016M	150	16	6.3/15.0/2.5	.50
157RZM025M	150	25	8.0/11.5/3.5	.25
157RZM035M815	150	35	8.0/15.0/3.5	.53
157RZM035M1013	150	35	10.0/12.5/5.0	.43
157RZM050M	150	50	10.0/10.0/5.0	.52

227RZM010M	220	10	6.3/11.0/2.5	.18
227RZM025M	220	25	8.0/11.5/3.5	.24
227RZM035M820	220	35	8.0/20.0/3.5	.55
227RZM035M1013	220	35	10.0/12.5/5.0	.45
227RZM050M	220	50	10.0/16.0/5.0	.52

337RZM6R3M	330	6.3	6.3/11.0/2.5	.18
337RZM016M	330	16	8.0/11.5/3.5	.24
337RZM025M820	330	25	8.0/20.0/3.5	.52
337RZM025M1013	330	25	10.0/12.5/5.0	.45
337RZM035M	330	35	10.0/16.0/5.0	.57
337RZM050M1020	330	50	10.0/20.0/5.0	.62
337RZM050M1615	330	50	16.0/15.0/7.5	1.09

477RZM010M	470	10	8.0/11.5/5.5	.24
477RZM016M820	470	16	8.0/20.0/3.5	.55
477RZM016M1013	470	16	10.0/12.5/5.0	.43
477RZM025M	470	25	10.0/16.0/5.0	.54
477RZM035M1020	470	35	10.0/20.0/5.0	.65
477RZM035M1615	470	35	16.0/15.0/7.5	1.06
477RZM050M1320	470	50	12.5/20.0/5.0	.93
477RZM050M1815	470	50	18.0/15.0/7.5	1.21

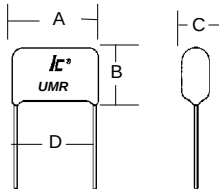
MSR Series Continued



Mfr.'s Type	MFD	WV DC	Dimensions A/B/C/D (mm)	Each
474MSR100K	.47	100	17.5/11.0/6.5/15.0	.40
474MSR250K	.47	250	22.5/12.5/7.5/20.0	.31
474MSR400K	.47	400	22.5/19.5/10.0/20.0	.38
474MSR630K	.47	630	30.0/22.0/12.5/27.5	.58
474MSR102K	.47	1,000	32.5/26.5/18.5/27.5	.88
684MSR100K	.68	100	17.5/12.5/7.5/15.0	.48
684MSR250K	.68	250	22.5/14.5/8.5/20.0	.37
684MSR400K	.68	400	30.0/18.0/10.0/27.5	.53
684MSR630K	.68	630	33.0/24.5/14.0/30.0	.64
105MSR100K	1.0	100	18.0/14.0/8.0/15.0	.48
105MSR250K	1.0	250	22.5/17.0/9.5/20.0	.45
105MSR400K	1.0	400	30.0/20.5/12.0/27.5	.70
155MSR100K	1.5	100	22.5/14.5/8.5/20.0	.73
155MSR250K	1.5	250	30.0/18.0/9.5/27.5	.68
225MSR100K	2.2	100	22.5/16.5/10.5/20.0	.95
225MSR250K	2.2	250	30.0/21.5/11.5/27.5	.96
335MSR100K	3.3	100	22.5/21.0/11.5/20.0	1.21
475MSR100K	4.7	100	30.0/20.5/11.0/27.5	1.62
685MSR100K	6.8	100	30.0/22.5/12.5/27.5	2.17
106MSR100K	10	100	32.0/28.0/17.0/27.5	2.94

UMR Series

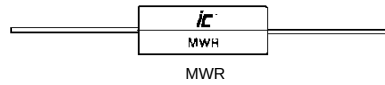
+85°C Epoxy Dipped Radial Lead Inductive Film/Foil Capacitors



Features				
Cost Efficient				
Ceramic Disc Alternative				
High Insulation Resistance				
Specifications				
Capacitance Tolerance: $\pm 10\%$ (K) standard				
Operating Temperature: -55°C To + 85°C				
Mfr.'s Type	MFD	WV DC	Dimensions A/B/C/D (mm)	Each
102UMR100K	.001	100	5.5/11.0/3.0/3.0	.04
152UMR100K	.0015	100	5.5/11.0/3.0/3.0	.04
222UMR100K	.0022	100	5.5/11.0/3.0/3.0	.04
332UMR100K	.0033	100	5.5/11.0/3.0/3.0	.04
392UMR100K	.0039	100	6.0/11.0/3.5/3.5	.15
472UMR100K	.0047	100	6.0/11.0/3.5/3.5	.04
562UMR100K	.0056	100	6.0/11.0/3.0/4.0	.04
682UMR100K	.0068	100	6.0/11.0/3.5/3.5	.04
103UMR100K	.01	100	6.5/12.0/4.0/4.0	.05
153UMR100K	.015	100	7.0/12.0/4.0/4.0	.05
223UMR100K	.022	100	7.0/12.0/4.0/4.0	.05
333UMR100K	.033	100	8.5/12.0/4.5/6.0	.06
473UMR100K	.047	100	9.5/13.0/4.5/7.0	.06
563UMR100K	.056	100	9.5/13.0/4.5/7.0	.07
683UMR100K	.068	100	10.0/13.0/5.0/7.0	.07
104UMR100K	.1	100	11.0/13.0/6.5/7.0	.09
154UMR100K	.15	100	12.5/16.0/6.5/7.5	.12
224UMR100K	.22	100	13.0/16.0/7.0/7.5	.12
334UMR100K	.33	100	14.0/16.0/7.5/8.0	.15
474UMR100K	.47	100	15.0/16.0/8.5/8.5	.21

MWR Series

+125°C Metallized Polyester Film Wrapped & Filled Axial Lead Capacitors



Features				
Self Healing				
Wide Operating Temperature Range				
Low ESR and ESL				
High dV/dt Ratings				

Specifications				
Capacitance Tolerance: $\pm 10\%$ (K) standard				
Operating Temperature: -55°C to + 125°C				

Mfr.'s Type	MFD	WV DC	Case Dia./Length (mm)	Each
334MWR063K	.33	63	5.5/14.0	.53
334MWR100K	.33	100	7.5/14.0	.40
334MWR250K	.33	250	8.0/19.0	.43
334MWR400K	.33	400	10.0/27.0	.64
334MWR630K	.33	630	13.5/32.0	1.02
334MWR102K	.33	1,000	17.0/34.0	1.87
474MWR100K	.47	100	7.0/15.5	.47
474MWR250K	.47	250	9.5/19.0	.47
474MWR400K	.47	400	12.5/27.0	.78
474MWR630K	.47	630	15.5/32.0	1.33
474MWR102K	.47	1,000	19.5/34.0	2.44
684MWR063K	.68	63	6.5/19.0	.64
684MWR100K	.68	100	8.0/19.0	.55
684MWR250K	.68	250	9.5/27.0	.53
684MWR400K	.68	400	12.5/32.0	.99
684MWR630K	.68	630	18.0/32.0	1.61
105MWR063K	1.0	63	7.5/19.0	.85
105MWR100K	1.0	100	9.5/19.0	.64
105MWR250K	1.0	250	10.5/27.0	.63
105MWR400K	1.0	400	14.5/32.0	1.29
105MWR630K	1.0	630	22.0/32.0	2.27
155MWR063K	1.5	63	9.5/19.0	1.09
155MWR100K	1.5	100	9.0/27.0	.95
155MWR250K	1.5	250	12.5/27.0	.95
155MWR400K	1.5	400	17.5/32.0	1.61
155MWR630K	1.5	630	21.0/47.0	3.06
225MWR063K	2.2	63	9.5/27.0	1.25
225MWR100K	2.2	100	11.0/27.0	1.13
225MWR250K	2.2	250	14.5/32.0	1.23
225MWR400K	2.2	400	20.5/32.0	2.29
335MWR063K	3.3	63	11.0/27.0	1.71
335MWR100K	3.3	100	12.5/27.0	1.52
335MWR250K	3.3	250	15.5/32.0	1.60
335MWR400K	3.3	400	20.0/47.0	3.17
475MWR063K	4.7	63	12.5/27.0	2.08
475MWR100K	4.7	100	14.0/32.0	2.05
475MWR250K	4.7	250	19.5/32.0	2.13
685MWR100K	6.8	100	17.0/32.0	2.59
685MWR250K	6.8	250	23.0/32.0	3.23
106MWR063K	10	63	17.0/32.0	3.77
106MWR100K	10	100	21.0/32.0	3.32
106MWR250K	10	250	23.0/47.0	4.02
156MWR100K	15	100	22.0/34.0	4.07
226MWR100K	22	100	22.0/46.0	6.48
333MWR250K	.033	250	5.0/10.5	.30
333MWR400K	.033	400	6.0/14.0	.27
333MWR630K	.033	630	7.0/19.0	.33
333MWR102K	.033	1,000	10.5/20.5	1.87
393MWR250K	.039	250	6.0/11.5	.36
393MWR400K	.039	400	7.0/15.5	.39
393MWR630K	.039	630	8.0/20.5	.48
473MWR250K	.047	250	5.5/14.0	.26
473MWR400K	.047	400	7.0/14.0	.29
473MWR630K	.047	630	7.5/19.0	.36
473MWR102K	.047	1,000	10.5/29.0	.68
683MWR100K	.068	100	5.5/10.5	.37
683MWR250K	.068	250	5.5/14.0	.37
683MWR400K	.068	400	6.5/19.0	.34
683MWR630K	.068	630	9.0/19.0	.55
683MWR102K	.068	1,000	11.5/29.0	.85
823MWR100K	.082	100	6.0/11.5	.37
823MWR250K	.082	250	6.5/15.5	.37
823MWR400K	.082	400	8.0/20.5	.48
823MWR630K	.082	630	8.5/29.0	.60
104MWR100K	.10	100	6.0/10.5	.27
104MWR250K	.10	250	6.0/14.0	.27
104MWR400K	.10	400	7.5/19.0	.34
104MWR630K	.10	630	9.0/27.0	.48
104MWR102K	.10	1,000	12.0/29.0	.88
154MWR063K	.15	63	5.5/14.0	.44
154MWR100K	.15	100	6.0/14.0	.35
154MWR250K	.15	250	7.0/14.0	.35
154MWR400K	.15	400	8.5/19.0	.45
154MWR630K	.15	630	10.5/27.0	.70
154MWR102K	.15	1,000	13.0/34.0	1.15
224MWR100K	.22	100	6.5/14.0	.33
224MWR250K	.22	250	7.0/19.0	.35
224MWR400K	.22	400	8.5/27.0	.56
224MWR630K	.22	630	12.5/27.0	.76
224MWR102K	.22	1,000	14.5/34.0	1.46

Note: WVDC= Max Working Voltage @ +85°C.