

RCZ

+105°C High Frequency Low Impedance Radial Lead Aluminum Electrolytic Capacitors



For all high frequency switching power supplies

FEATURES

- Highest Reliability, up to 5,000 hours
- Low Impedance
- Wide capacitance range 10 μF to 8,200 μF
- Voltage Range: 10 WVDC to 63 WVDC
- Solvent tolerant end seals standard

SPECIFICATIONS

Capacitance Tolerance		$\pm 20\%$ at 120Hz, 20°C					
Operating Temperature Range		-55°C to +105°C					
Dissipation Factor 120Hz, 20°C	WVDC	10	16	25	35	50	63
	$\tan \delta$.19	.16	.14	.12	.10	.10
Note: For above D.F. specifications, add .02 for every 1,000 μF above 1,000 μF							
Impedance Ratio (Max.) @120Hz	WVDC	10	16	25	35	50	63
	-55°C/20°C	4	3	2	2	2	2
Leakage Current	WVDC	≤ 63 WVDC					
	Time	2 minutes					
		.01 CV					
Load Life	5,000 hours, at +105°C with rated WVDC and ripple current for D>10 mm (2000 hrs. for D \leq 6.3 mm, 3000 hrs. for D = 8 and 10 mm.)						
	Capacitance change Dissipation factor Leakage current				$\leq 20\%$ of initial measured value $\leq 200\%$ of initial specified value $\leq 100\%$ initial specified value		
Shelf Life	1,000 hours at +105°C with no voltage applied. Units will meet load life specifications						
Ripple Current Multipliers	Capacitance (μF)	120	1k	10k	100k		
	$C \leq 180$	0.40	0.75	0.90	1.00		
	$180 < C \leq 560$	0.50	0.85	0.94	1.00		
	$560 < C \leq 1800$	0.60	0.87	0.95	1.00		
	$1800 < C \leq 3900$	0.75	0.90	0.95	1.00		
	$C > 3900$	0.85	0.95	0.98	1.00		

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SPECIAL ORDER OPTIONS

(See pages 37 thru 41)

- Special tolerances: $\pm 10\%$ (K), -10% + 30% (Q)
- Tape and Reel/Ammo Pack
- Cut, Formed, Cut and Formed Leads and Snap In Leads
- Epoxy end seal

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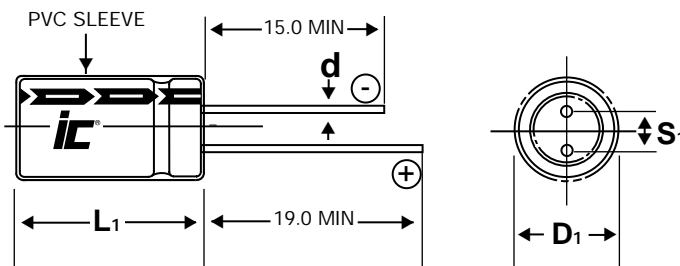
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PHYSICAL DIMENSIONS

WVDC (µF) (SV)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
10						5x11.5
18					5x11.5	6.3x11.5
27				5x11.5		
33						6.3x15
39			5x11.5		6.3x11.5	
47						8x12
56		5x11.5		6.3x11.5	6.3x15	10x12.5
68					8x12	8x15, 10x16
82	5x11.5		6.3x11.5	6.3x15	8x15, 10x12.5	8x20
120		6.3x11.5	6.3x15	8x12, 10x12.5	8x20, 10x16	10x20
150			8x12			10x25
180	6.3x11.5	6.3x15	10x12.5	8x15	10x20	10x30
220	6.3x15		8x15	8x20, 10x16	10x25	12.5x20
270		8x12, 10x12.5				12.5x25
330	8x12	8x15	8x20, 10x16	10x20	10x30, 12.5x20	16x20
390	10x12.5			10x25		12.5x30
470	8x15	8x20, 10x16	10x20		12.5x25	12.5x35, 16x25
560			10x25	10x30, 12.5x20	12.5x30	12.5x40
680	8x20, 10x16	10x20		12.5x25	12.5x35, 16x20	16x30
820		10x25	10x30, 12.5x20		12.5x40, 16x25	16x35
1,000	10x20		12.5x25	12.5x30, 16x20	16x30	16x40
1,200	10x25	10x30, 12.5x20		12.5x35, 16x25	16x35	
1,500	10x30	12.5x25	12.5x30, 16x20	12.5x40	16x40	
1,800	12.5x20		12.5x35, 16x25	16x30		
2,200	12.5x25	12.5x30, 16x20	12.5x40	16x35		
2,700	12.5x30	12.5x35, 16x25	16x30	16x40		
3,300	12.5x35, 16x20	12.5x40	16x35			
3,900	12.5x40, 16x25	16x30	16x40			
4,700		16x35				
5,600	16x30	16x40				
6,800	16x35					
8,200	16x40					

Convert to inches, divide by 25.4

DxL(mm)



D	5.0	6.3	8.0	10.0	12.5	16
d	0.5	0.5	0.6	0.6	0.6	0.8
S	2.0	2.5	3.5	5.0	5.0	7.5

$D_1 = D + 0.5$ Max.
 $L_1 = L + 1.5$ Max.
 $S_1 = S \pm 0.5$ (mm)

NOTE: Case Vent is standard on all diameter ≥ 8.0 mm

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STANDARD PART LISTING

Capacitance (µF)	WVDC	IC [®] PART NUMBER	Ripple Current +105°C (mA) 100kHz	Impedance Ω 100kHz 20°C	Impedance Ω 100kHz -10°C	Dimensions DxL (mm)
10	63	106RCZ063M	103	1.90	480	5x11.5
18	50	186RCZ050M	129	1.20	2.40	5x11.5
18	63	186RCZ063M	1.00	1.00	2.50	6.3x11.5
27	35	276RCZ035M	163	0.75	1.50	5x11.5
33	63	336RCZ063M	233	0.61	1.60	6.3x15
39	25	396RCZ025M	163	0.75	1.50	5x11.5
39	50	396RCZ050M	219	0.54	1.10	6.3x11.5
47	63	476RCZ063M	274	0.47	1.20	8x12
56	16	566RCZ016M	163	0.75	1.50	5x11.5
56	35	566RCZ035M	273	0.35	0.70	6.3x11.5
56	50	566RCZ050M	310	0.34	0.68	6.3x15
56	63	566RCZ063M	418	0.27	0.68	10x12.5
68	50	686RCZ050M	340	0.30	0.60	8x12
68	63	686RCZ063M815	360	0.34	0.85	8x15
68	63	686RCZ063M1016	523	0.21	0.53	10x16
82	10	826RCZ010M	163	0.75	1.50	5x11.5
82	25	826RCZ025M	273	0.35	0.70	6.3x11.5
82	35	826RCZ035M	390	0.25	0.50	6.3x15
82	50	826RCZ050M815	470	0.20	0.40	8x15
82	50	826RCZ050M1013	480	0.20	0.40	10x12.5
82	63	826RCZ063M	500	0.21	0.53	8x20
120	16	127RCZ016M	272	0.35	0.70	6x11.5
120	25	127RCZ025M	390	0.25	0.50	6.3x15
120	35	127RCZ035M812	445	0.17	0.34	8x12
120	35	127RCZ035M1013	625	0.12	0.24	10x12.5
120	50	127RCZ050M820	610	0.14	0.28	8x20
120	50	127RCZ050M1016	755	0.13	0.26	10x16
120	63	127RCZ063M	650	0.16	0.40	10x20
150	25	157RCZ025M	445	0.17	0.34	8x12
150	63	157RCZ063M	783	0.13	0.33	10x25
180	10	187RCZ010M	273	0.35	0.70	6.3x11.5
180	16	187RCZ016M	390	0.25	0.50	6.3x15
180	25	187RCZ025M	625	0.12	0.24	10x12.5
180	35	187RCZ035M	555	0.13	0.26	8x15
180	50	187RCZ050M	945	0.088	0.18	10x20
180	63	187RCZ063M	957	0.10	0.25	10x30
220	10	227RCZ010M	390	0.25	0.50	6.3x15
220	25	227RCZ025M	555	0.13	0.26	8x15
220	35	227RCZ035M820	740	0.095	0.19	8x20
220	35	227RCZ035M1016	825	0.084	0.17	10x16
220	50	227RCZ050M	1150	0.073	0.15	10x25
220	63	227RCZ063M	869	0.11	0.28	12.5x20

Capacitance (µF)	WVDC	IC [®] PART NUMBER	Ripple Current +105°C (mA) 100kHz	Impedance Ω 100kHz 20°C	Impedance Ω 100kHz -10°C	Dimensions DxL (mm)
270	16	277RCZ016M812	445	0.17	0.34	8x12
270	16	277RCZ016M1013	625	0.12	0.24	10x12.5
270	63	277RCZ063M	1150	0.074	0.19	12.5x25
330	10	337RCZ010M	445	0.17	0.34	8x12
330	16	337RCZ016M	555	0.13	0.28	8x15
330	25	337RCZ025M820	740	0.095	0.19	8x20
330	25	337RCZ025M1016	825	0.084	0.17	10x16
330	35	337RCZ035M	1040	0.062	0.13	10x20
330	50	337RCZ050M1030	1260	0.054	0.11	10x30
330	50	337RCZ050M1320	1190	0.059	0.12	12.5x20
330	63	337RCZ063M	1100	0.085	0.22	16x20
390	10	397RCZ010M	625	0.12	0.24	10x12.5
390	35	397RCZ035M	1260	0.052	0.11	10x25
390	63	397RCZ063M	1280	0.068	0.17	12.5x30
470	10	477RCZ010M	555	0.13	0.26	8x15
470	16	477RCZ016M820	740	0.095	0.19	8x20
470	16	477RCZ016M1016	825	0.084	0.1	10x16
470	25	477RCZ025M	1040	0.062	0.13	10x20
470	50	477RCZ050M	1490	0.044	0.088	12.5x25
470	63	477RCZ063M1335	1390	0.063	0.16	12.5x35
470	63	477RCZ063M1625	1480	0.055	0.14	16x25
560	25	567RCZ025M	1260	0.052	0.11	10x25
560	35	567RCZ035M1030	1440	0.044	0.088	10x30
560	35	567RCZ035M1320	1340	0.046	0.092	12.5x20
560	50	567RCZ050M	1720	0.039	0.078	12.5x30
560	63	567RCZ063M	1530	0.051	0.13	12.5x40
680	10	687RCZ010M820	740	0.095	0.19	8x20
680	10	687RCZ010M1016	825	0.084	0.17	10x16
680	16	687RCZ016M	1040	0.062	0.13	10x20
680	35	687RCZ035M	1690	0.034	0.068	12.5x25
680	50	687RCZ050M1335	1890	0.033	0.066	12.5x35
680	50	687RCZ050M1620	1420	0.05	0.10	16x20
680	63	687RCZ063M	1720	0.046	0.12	16x30
820	16	827RCZ016M	1260	0.052	0.11	10x25
820	25	827RCZ025M1030	1440	0.044	0.088	10x30
820	25	827RCZ025M1320	1340	0.046	0.092	12.5x20
820	50	827RCZ050M1340	2030	0.029	0.058	12.5x40
820	50	827RCZ050M1625	1880	0.034	0.068	16x25
820	63	827RCZ063M	1910	0.04	0.10	16x35
1000	10	108RCZ010M	1040	0.062	0.13	10x20
1000	25	108RCZ025M	1690	0.034	0.068	12.5x25
1000	35	108RCZ035M1330	1950	0.03	0.06	12.5x30

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Capacitance (µF)	WVDC	ic® PART NUMBER	Ripple Current +105°C (mA) 100kHz	Impedance Ω 100kHz 20°C	Impedance Ω 100kHz -10°C	Dimensions DxL (mm)
1000	35	108RCZ035M1620	1630	0.038	0.076	16x20
1000	50	108RCZ050M	2150	0.03	0.06	16x30
1000	63	108RCZ063M	2070	0.036	0.09	16x40
1200	10	128RCZ010M	1260	0.052	0.11	10x25
1200	16	128RCZ016M1030	1440	0.044	0.088	10x30
1200	16	128RCZ016M1320	1340	0.046	0.092	12.5x20
1200	35	128RCZ035M1335	2220	0.024	0.048	12.5x35
1200	35	128RCZ035M1625	2070	0.028	0.056	16x25
1200	50	128RCZ050M	2320	0.027	0.054	16x35
1500	10	158RCZ010M	1440	0.044	0.088	10x30
1500	16	158RCZ016M	1690	0.034	0.068	12.5x25
1500	25	158RCZ025M1330	1950	0.03	0.06	12.5x30
1500	25	158RCZ025M1620	1630	0.038	0.076	16x20
1500	35	158RCZ035M	2390	0.022	0.044	12.5x40
1500	50	158RCZ050M	2540	0.024	0.048	16x40
1800	10	188RCZ010M	1340	0.046	0.092	12.5x20
1800	25	188RCZ025M1335	2220	0.024	0.048	12.5x35
1800	25	188RCZ025M1625	2070	0.028	0.056	16x25
1800	35	188RCZ035M	2350	0.025	0.05	16x30
2200	10	228RCZ010M	1690	0.034	0.068	12.5x25
2200	16	228RCZ016M1330	1950	0.03	0.06	12.5x30

Capacitance (µF)	WVDC	ic® PART NUMBER	Ripple Current +105°C (mA) 100kHz	Impedance Ω 100kHz 20°C	Impedance Ω 100kHz -10°C	Dimensions DxL (mm)
2200	16	228RCZ016M1620	1630	0.038	0.076	16x20
2200	25	228RCZ025M	2390	0.022	0.044	12.5x40
2200	35	228RCZ035M	2550	0.022	0.044	16x35
2700	10	278RCZ010M	1950	0.03	0.06	12.5x30
2700	16	278RCZ016M1335	2220	0.024	0.048	12.5x35
2700	16	278RCZ016M1625	2070	0.028	0.056	16x25
2700	25	278RCZ025M	2350	0.025	0.05	16x30
2700	35	278RCZ035M	2900	0.018	0.036	16x40
3300	10	338RCZ010M1335	2220	0.024	0.048	12.5x35
3300	10	338RCZ010M1620	1630	0.038	0.076	16x20
3300	16	338RCZ016M	2390	0.022	0.044	12.5x40
3300	25	338RCZ025M	2550	0.022	0.044	16x35
3900	10	398RCZ010M1340	2390	0.022	0.044	12.5x40
3900	10	398RCZ010M1625	2070	0.028	0.056	16x25
3900	16	398RCZ016M	2350	0.02	0.050	16x30
3900	25	398RCZ025M	2900	0.018	0.036	16x40
4700	16	478RCZ016M	2550	0.022	0.044	16x35
5600	10	568RCZ010M	2350	0.025	0.050	16x30
5600	16	568RCZ016M	2900	0.018	0.036	16x40
6800	10	688RCZ010M	2550	0.022	0.044	16x35
8200	10	828RCZ010M	2900	0.018	0.036	16x40



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