

RZS

+105°C High Frequency Radial Lead Aluminum Electrolytic Capacitors



For Switching Power Supplies

FEATURES

- High Ripple Current
- Low Impedance
- Low ESL and ESR
- 100 kHz Operating Frequency Range
- Capacitance Range 22 μF to 2,200 μF
- Voltage Range 6.3 WVDC to 63 WVDC
- Solvent Tolerant End Seals Standard

SPECIFICATIONS

Capacitance Tolerance		± 20% at 120Hz, 20°C								
Operating Temperature Range		-55°C to +105°C								
Dissipation Factor 120Hz, 20°C	WVDC	6.3	10	16	25	35	50	63		
	tan δ	.2	.15	.1	.08	.07	.06	.05		
		Note: For above D.F. specifications, add .02 for every 1,000 μF above 1,000 μF								
Impedance Ratio (Max.) @120Hz	WVDC	6.3	10	16	25	35	50	63		
	-55°C/20°C	2.0	1.5	1.5	1.5	1.5	1.5	1.5		
Leakage Current	WVDC	≤ 63 WVDC								
	Time	2 minutes								
		.01 CV or 3 μA whichever is greater								
Load Life		2,000 hours + 105°C with rated voltage								
		Capacitance change Dissipation factor Leakage current				≤ 20% of initial measured value ≤ 200% of initial specified value ≤ initial specified value				
Shelf Life		1,000 hours at +105°C with no voltage applied.								
		Capacitance change Dissipation factor Leakage current				≤ 20% initial readings ≤ 250% of initial specified value ≤ 200% of initial specified value				

SPECIAL ORDER OPTIONS

(See pages 33 thru 37)

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



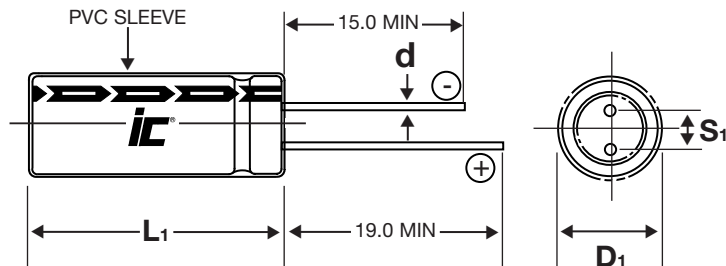
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PHYSICAL DIMENSIONS

WVDC (μF) (SV)	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
22					→	10x12.5	10x16
33				→	10x12.5	→	10x16
47				→	10x12.5	10x16	10x20
100		→	10x12.5	10x16	10x20	12.5x20	12.5x25
220	10x12.5	→	10x16	12.5x20	12.5x25	16x25	16x31.5
330	10x16	→	10x20	12.5x25	16x25	16x31.5	16x35.5
470	10x20	→	12.5x20	→	16x25	16x35.5	
1,000	→	12.5x25	16x25	16x31.5			
2,200	16x25	16x31.5	16x35.5				

Convert to inches, divide by 25.4

DxL(mm)



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

LEAD INFORMATION VS. CASE DIAMETER

D	5.0	6.3	8.0	10.0	12.5	16.0
S	2.0	2.5	3.5	5.0	5.0	7.5
d	0.5	0.5	0.6	0.6	0.6	0.8
B	0.5	0.5	0.5	0.5	0.8	0.5

L≤16 L₁ = L + 1.5 mm Max.
L>16 L₁ = L + 2.0 mm Max.
D₁ = D + B Max.
D = 12.5 and L>25, d=0.8
S₁ = S ± 0.5 mm

STANDARD PART LISTING

Capacitance (μ F)	WVDC	IC [®] PART NUMBER	Maximum ESR Ω +20°C, 120Hz	Maximum RMS Ripple Current (mA) 100kHz,+105°C	Impedance Ω 20°C 10k/100kHz	Dimensions DxL (mm)
22	50	226RZS050M	4.52	150	1.35/.6	10x12.5
22	63	226RZS063M	3.768	200	1.35/.6	10x16
33	35	336RZS035M	3.517	180	.9/.53	10x12.5
33	63	336RZS063M	2.512	240	.9/.5	10x16
47	35	476RZS035M	2.469	210	.8/.53	10x12.5
47	50	476RZS050M	2.116	260	.8/.5	10x16
47	63	476RZS063M	1.764	310	.8/.5	10x20
100	16	107RZS016M	1.658	240	.54/.45	10x12.5
100	25	107RZS025M	1.326	310	.36/.27	10x16
100	35	107RZS035M	1.161	370	.35/.23	10x20
100	50	107RZS050M	0.995	450	.3/.1	12.5x20
100	63	107RZS063M	0.829	540	.3/.1	12.5x25
220	6.3	227RZS6R3M	1.507	250	.48/.45	10x12.5
220	16	227RZS016M	0.754	400	.29/.26	10x16
220	25	227RZS025M	0.603	540	.15/.14	12.5x20
220	35	227RZS035M	0.528	650	.15/.1	12.5x25
220	50	227RZS050M	0.452	820	.14/.08	16x25

Capacitance (μ F)	WVDC	IC [®] PART NUMBER	Maximum ESR Ω +20°C, 120Hz	Maximum RMS Ripple Current (mA) 100kHz,+105°C	Impedance Ω 20°C 10k/100kHz	Dimensions DxL (mm)
220	63	227RZS063M	0.377	1080	.14/.08	16x31.5
330	6.3	337RZS6R3M	1.005	360	.35/.27	10x16
330	16	337RZS016M	0.502	520	.21/.18	10x20
330	25	337RZS025M	0.402	700	.12/.1	12.5x25
330	35	337RZS035M	0.352	840	.09/.07	16x25
330	50	337RZS050M	0.301	1030	.09/.05	16x31.5
330	63	337RZS063M	0.251	1270	.08/.06	16x35.5
470	6.3	477RZS6R3M	0.705	490	.26/.23	10x20
470	16	477RZS016M	0.353	700	.12/.11	12.5x20
470	35	477RZS035M	0.247	1090	.08/.05	16x25
470	50	477RZS050M	0.212	1350	.06/.05	16x35.5
1,000	10	108RZS010M	0.249	900	.11/.11	12.5x25
1,000	16	108RZS016M	0.166	1150	.09/.09	16x25
1,000	25	108RZS025M	0.133	1320	.06/.06	16x31.5
2,200	6.3	228RZS6R3M	0.151	1090	.07/.07	16x25
2,200	10	228RZS010M	0.113	1520	.05/.05	16x31.5
2,200	16	228RZS016M	0.075	1780	.05/.05	16x35.5

Ripple Current Multiplier

NOTE: When operated at temperatures below +105°C or at frequencies below 10kHz-100kHz, RMS Ripple current may be varied according to the multiplier values listed below. Peak Voltage not to exceed rated DC voltage.

Ripple Current Multipliers

Frequency(Hz)							Temperature(°C)		
(WVDC)	60	120	400	1K	10K	100K	+105°C	+85°C	+70°C
6.3-16	.54	.70	.85	.95	1.0	1.0	1.0	2.20	2.83
25-35	.43	.57	.73	.88	1.0	1.0	1.0	2.20	2.83
50-63	.39	.55	.71	.86	1.0	1.0	1.0	2.20	2.83

Caution: The surface temperature of the Capacitor shall not rise more than 10°C above the ambient temperature and shall never exceed +105°C.