

Radial Lead type ZF A type series

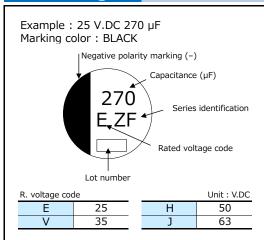


Features

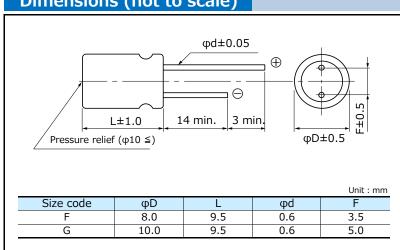
- Endurance : 1000 h at 150 ℃ (High temperature)
- High temperature compared with ZC series
- \bullet High-withstand voltage (to 63 V.DC), Low LC (0.01 CV or 3 $\mu A)$
- Equivalent to conductive polymer type Aluminum Electrolytic Capacitor (There are little characteristics change by temperature and frequency)
- AEC-Q200 compliant
- RoHS compliant

Specifications							
Size code	F		G				
Category temp. range	-55 ℃ to +150 ℃						
Rated voltage range	25 V.DC to 63 V.DC						
Nominal cap.range	33 μF to 1	50 μF		56 μF to 270 μF			
Capacitance tolerance	±20 % (120 Hz / +20℃)						
DC leakage current	I ≤ 0.01 CV or 3 (μA) After 2 minutes (whichever is greater)						
Dissipation factor (tan δ)	Please see the attached characteristics list						
	$+150~\% \pm 2~\%$, 1000 h, apply the rated ripple current without exceeding the rated voltage.						
	Capacitance change	Within ±30% of the initial value					
	Dissipation factor (tan δ)	≤ 200 % of the initial limit					
Endurance	ESR	≤ 200 % of the initial limit					
Lituarance	DC leakage current	Within the initial limit					
	ESR after endurance $(\Omega / 100 \text{ kHz})(-40 ^{\circ}\text{C})$	Size code					
		F	G				
		0.4	0.3				
Shelf life	After storage for 1000 hours at +150 $^{\circ}$ C \pm 2 $^{\circ}$ C with no voltage applied and then being						
	stabilized at $+20 ^{\circ}\mathrm{C}$, capacitors shall meet the limits specified in endurance.						
	(With voltage treatment)						
Damp heat (Load)	$+85~\%~\pm~2~\%$, $85~\%$ to 90 %, 2000 h, rated voltage applied						
	Capacitance change	Within ±30% of the initial value					
	Dissipation factor (tan δ)	≤ 200 % of the initial limit					
	ESR	≤ 200 % of the initial limit					
	DC leakage current	Within the initial limit					

Marking



Dimensions (not to scale)





Conductive Polymer Hybrid Aluminum Electrolytic Capacitors

Characteristics list

Endurance : 150 ℃ 1000 h

Rated voltage (V.DC)	Capacitance (±20 %) (µF)	Case size (mm)			Specification				Min.packaging q'ty
		φD	L	Size code	Ripple current *1 (mA r.m.s.)	ESR ^{*2} (mΩ)	tan δ ^{*3}	Part number	Long lead (pcs)
25	150	8.0	9.5	F	800	27	0.14	EEHAZF1E151	200
	270	10.0	9.5	G	1000	20	0.14	EEHAZF1E271	200
35	100	8.0	9.5	F	770	30	0.12	EEHAZF1V101	200
	150	10.0	9.5	G	950	23	0.12	EEHAZF1V151	200
50	56	8.0	9.5	F	700	35	0.10	EEHAZF1H560	200
	100	10.0	9.5	G	900	28	0.10	EEHAZF1H101	200
63	33	8.0	9.5	F	650	40	0.08	EEHAZF1J330	200
	56	10.0	9.5	G	840	30	0.08	EEHAZF1J560	200

^{*1:} Ripple current (100 kHz $/ +150 \, ^{\circ}$ C)

Frequency correction factor for ripple current									
Rated capacitance (C)	Frequency (f)	100 Hz ≤ f < 200 Hz	200 Hz ≤ f< 300 Hz	300 Hz ≤ f < 500 Hz	500 Hz ≤ f< 1 kHz				
C < 47 µF	- Correction - factor	0.10	0.10	0.15	0.20				
47 μF ≦ C < 150 μF		0.15	0.20	0.25	0.30				
150 μF ≦ C		0.15	0.25	0.25	0.30				
Rated capacitance (C)	Frequency (f)	$1 \text{ kHz} \leq f < 2 \text{ kHz}$	$2 \text{ kHz} \leq f < 3 \text{ kHz}$	$3 \text{ kHz} \leq f < 5 \text{ kHz}$	$5 \text{ kHz} \le f < 10 \text{ kHz}$				
C < 47 µF	Correction factor	0.30	0.40	0.45	0.50				
47 μF ≦ C < 150 μF		0.40	0.45	0.55	0.60				
150 μF ≦ C		0.45	0.50	0.60	0.65				
Rated capacitance (C)	Frequency (f)	10 kHz ≦ f< 15 kHz	15 kHz ≤ f< 20 kHz	20 kHz ≤ f < 30 kHz	30 kHz ≤ f< 40 kHz				
$C < 47 \mu F$	Correction factor	0.60	0.65	0.70	0.75				
47 μF ≦ C < 150 μF		0.70	0.75	0.80	0.80				
150 μF ≦ C		0.75	0.80	0.85	0.85				
Rated capacitance (C)	Frequency (f)	40 kHz ≤ f < 50 kHz	$50 \text{ kHz} \le f < 100 \text{ kHz}$	$100 \text{ kHz} \le f < 500 \text{ kHz}$	500 kHz ≦ f				
$C < 47 \mu F$	Correction -	0.80	0.85	1.00	1.05				
47 μF ≦ C < 150 μF		0.85	0.90	1.00	1.00				
150 μF ≦ C		0.85	0.90	1.00	1.00				

^{*2:} ESR (100 kHz / +20 $^{\circ}$ C) *3: tan δ (120 Hz / +20 $^{\circ}$ C)



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