



Miniature Aluminum Electrolytic Capacitors

Series

CKF

FEATURES

1、Superminiature, 5mmL, high temperature, suit for use in electronic circuit of high density assembly of videocorder, remote controller, VCD etc.

SPECIFICATIONS

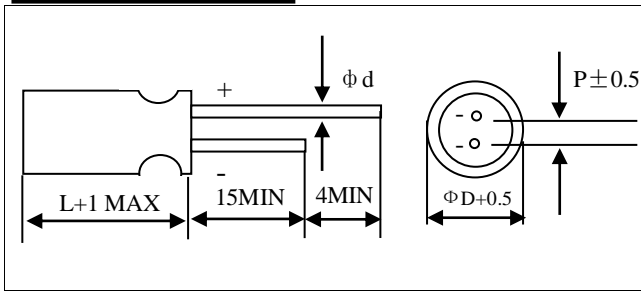
Item	Performance Characteristics								
Operating Temperature Range	-40 to +105°C								
Rated Working voltage Range	4 to 50V								
Nominal Capacitance Range	0.1 to 220(uF)								
Capacitance Tolerance	±20% (120Hz, +20°C)								
Leakage Current	$I \leq 0.01CV$ or 3(uA)				Whichever is greater measured after 2minutes application of rated working voltage at +20°C				
Dissipation Factor $\tan \delta$ (120Hz+20°C)	Working voltage(V)		4	6.3	10	16	25	35	50
	$\tan \delta$ (max.)		0.35	0.28	0.24	0.20	0.16	0.14	0.12
Low Temperature Characteristics	Impedance ratio max. at 120Hz								
	Working voltage(V)		4	6.3	10	16	25	35	50
	Z-25°C/Z+20°C		6	3	3	2	2	2	2
Z-40°C/Z+20°C		12	8	5	4	3	3	3	
Multiplier for Ripple Current vs. Frequency	CAP(uF)\Hz		60(50)	120	1K	10K≤			
	Multiplier	0.1~47	0.8	1	1.30	1.50			
		100	0.8	1	1.15	1.20			
Multiplier for Ripple Current vs. Temperature	Temperature°C		60	85	105				
	Multiplier		1.90	1.4	1.00				
High temperature Loading	Test conditions Duration : 2000 hours Ambient temperature : +105°C Applied voltage : Rated DC working voltage Post test requirements at +20°C Leakage current : ≤ Initial specified value Capacitance change : ≤ ±20% of initial measured value(4V: ≤ ±30%) $\tan \delta$: ≤200% of initial specified value								
Shelf life	Test conditions Duration : 1000 hours Ambient temperature : +105°C Applied voltage : (None) Post test requirements at +20°C Leakage current : ≤ Initial specified value Capacitance change : ≤ ±20% of initial measured value(4V: < ±30%) $\tan \delta$: ≤200% of initial specified value								
Others	JIS C-5141 JIS C-5102								



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CASE SIZE TABLE

Unit:mm



D φ	3	4	5	6.3
P	1.0	1.5	2.0	2.5
d φ (±0.05)	0.40	0.45		

DIMENSIONS

ΦD×L(mm)

Cap.(uF)	WV(SV) Code	4V(5)		6.3V(8)		10V(13)		16V(20)		25V(32)	
		0G		0J		1A		1C		1E	
4.7	475									4×5	13
10	106							4×5	18	4×5	23
22	226	4×5	22	4×5	20	5×5	27	5×5	30	6.3×5	38
33	336	5×5	30	5×5	30	5×5	35	6.3×5	40	6.3×5	48
47	476	5×5	36	5×5	36	6.3×5	46	6.3×5	50	6.3×5	62
100	107	6.3×5	60	6.3×5	60	6.3×5	65	6.3×5	72		
220	227	6.3×5	64	6.3×5	68	6.3×5	72			Case Size	Allowable ripple

Allowable Ripple (mA rms)at 105°C 120Hz

ΦD×L(mm)

Cap.(uF)	WV(SV) Code	35V(44)		50V(63)	
		1V		1H	
0.1	104			4×5	1.0
0.22	224			4×5	2.6
0.33	334			4×5	3.2
0.47	474			4×5	3.8
1	105			4×5	6.2
2.2	225	4×5	7	4×5	11
3.3	335	4×5	11	4×5	14
4.7	475	4×5	15	5×5	19
10	106	5×5	25	6.3×5	30
22	226	6.3×5	48	6.3×5	58
33	336	6.3×5	52	Case Size	Allowable ripple

Allowable Ripple (mA rms)at 105°C 120Hz