

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

I14069 (SHT)

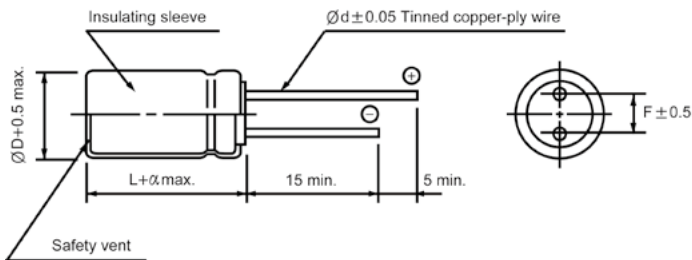
High Temperature, For 125°C Use Series

- Load life of 2000 hours at 125°C
- For Electronic Control unit and other high temperature applications
- Complied to the RoHS directive

Items	Performance characteristics							
Operating temperature range	-40 ~ +125°C							
Leakage current max.	WV ≤ 50	WV ≥ 63						
	I = 0.01CV or 3μA whichever is greater (after 2 minutes)	I = 0.03CV + 10μA (after 5 minutes)						
Capacitance tolerance	±20% at 120Hz, 20°C							
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000μF: tanδ increases by 0.02 for each 1000μF from below value.							
	WV	6.3	10	16	25	35	50	63~100
Tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.15
Low temperature characteristics (Impedance ratio at 120Hz)	WV	6.3 ~ 10			16 ~ 250			
	Z-25°C / Z+20°C	3			2			
	Z-40°C / Z+20°C	5			4			
Load life (after application of the rated voltage for 2000 hours at 125°C)	Leakage current	Less than specified value						
	Capacitance change	Within ±20% of initial value						
	Tanδ	Less than 300% of specified value						
	Φ5, Φ6.3 and WV≥100: 1000 hours.							
Shelf life (at 125°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value.							

● DRAWING

Unit : mm



ΦD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5		0.6		0.8		
α	1.5			2.0			

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV	Frequency μF	60Hz	120Hz	1kHz	10kHz	50kHz	100kHz≤
		6.3 ~ 100	~ 47	0.38	0.50	0.78	1.00
	68 ~ 680	0.46	0.57	0.77	0.86	0.93	1.00
	1000 ~	0.57	0.67	0.77	0.77	0.88	1.00
160 ~ 250	0.47 ~ 220	0.44	0.56	0.78	0.89	0.94	1.00
	330 ~	0.60	0.67	0.75	0.77	0.88	1.00

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● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF	6.3		10		16		25		35	
	22									5×11
33							5×11	165	6.3×11	240
47					5×11	165	6.3×11	220	6.3×11	285
68			5×11	165	6.3×11	230	6.3×11	275	8×11.5	405
100	5×11	160	6.3×11	220	6.3×11	280	8×11.5	405	8×11.5	485
150	6.3×11	240	6.3×11	280	8×11.5	410	8×11.5	485	10×12.5	660
220	6.3×11	300	8×11.5	410	8×11.5	485	10×12.5	635	10×16	815
330	8×11.5	310	8×11.5	485	10×12.5	660	10×16	790	10×20	1120
470	10×12.5	605	10×12.5	635	10×16	815	10×20	1075	12.5×20	1480
680	10×16	740	10×16	815	10×20	1075	12.5×20	1470	12.5×25	1755
1000	10×20	1005	10×20	1120	12.5×20	1490	12.5×25	1755	16×20	1870
1500	10×25	1290	12.5×20	1495	12.5×25	1755	16×20	1870	16×31.5	2520
2200	12.5×20	1520	12.5×25	1805	16×20	1900	16×25	2165	16×35.5	2830
3300	12.5×25	1805	16×20	1955	16×25	2210	16×35.5	2830	18×40	3210
4700	16×25	2045	16×31.5	2555	16×35.5	2830	18×40	3125		
6800	16×31.5	2505	16×35.5	2830	18×35.5	3060				
10000	16×40	2905	18×40	3210						
15000	18×40	3125								

Ripple current (mA rms) at 125°C , 100kHz
Case size ΦD×L(mm)

WV μF	50		63		100		160	
	1.0	5×11	40			8×11.5	25	10×12.5
1.5	5×11	50						
2.2	5×11	55			8×11.5	45	10×16	32
3.3	5×11	70			10×16	60	10×16	42
4.7	5×11	85			10×16	70	10×20	50
6.8	5×11	95						
10	5×11	120	8×11.5	80	10×20	110	12.5×20	85
15	5×11	155						
22	6.3×11	205	10×16	150	12.5×25	205	16×25	155
33	6.3×11	255	10×20	200	16×25	280	16×31.5	210
47	8×11.5	365	12.5×20	280	16×31.5	370		
68	8×11.5	435						
100	10×16	615	12.5×25	445				
150	10×20	865						
220	10×25	1100						
330	12.5×20	1330						
470	12.5×25	1585						
680	16×20	1720						
1000	16×31.5	2240						
1500	16×40	2545						
2200	18×40	2705						

WV μF	200		250	
	1.0	10×12.5	20	10×12.5
2.2	10×16	32	10×16	32
3.3	10×20	42	10×20	42
4.7	10×20	50	12.5×20	60
10	12.5×20	95	16×25	105
22	16×31.5	170		