- For general purposes series with 85℃ 2000 hours
- Suitable for AV(TV, Video , Audio), Personal Computer, Home appliance

• SPECIFICATION

Item	Characteristic
Operation Temperature Range	−40～+85℃
Rated working Voltage	4～100 V.DC
Capacitance Tolerance	± 20%(120Hz/+25℃)
Leakage Current (25℃)	Polarized: I ≦ 0.01 CV or 3 (μA) Bi-polar : I ≦ 0.02 CV or 6 (μA) Whichever is greater after 2 minutes I : Leakage Current (μA) C : RatedCapacitance(μF) V : Working Voltage(V)
Dissipation Factor(tan δ) (120Hz 25℃)	Polar : Add 0.02 to D.F. for φ3 case size

W.V.(V)		4	6.3	10	16	25	35	50	63	100
D.F.	φ4~φ6.3	0.35	0.26	0.20	0.16	0.14	0.12	0.12	--	--
	φ8~φ10	0.40	0.35	0.26	0.20	0.16	0.14	0.12	0.18	0.18

Bi-polar :

W.V.(V)	6.3	10	16	25	35	50
D.F.	0.52	0.40	0.32	0.28	0.24	0.24

Low Temperature Stability

Impedance ratio at 120Hz

W.V.(V)	4	6.3	10	16	25	35	50	63	100
-25/+25℃	7	4	3	2	2	2	2	3	3
-40/+25℃	15	8	6	4	4	3	3	4	4

Load Life

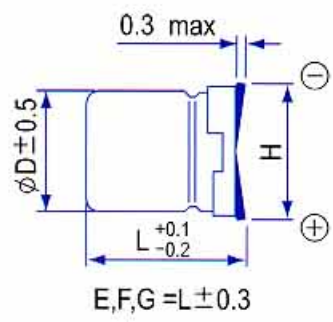
After 2000 hours application of W.V. at +85℃, the capacitor shall meet the following limits.

Capacitance Change	≦± 20% of initial value(φ3, 4 W.V. : 1000h±30%)
Dissipation Factor	≦200% of initial specified value
Leakage current	≦initial specified value

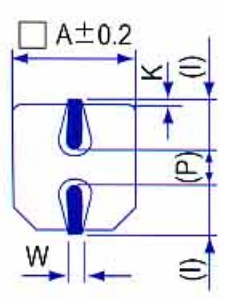
Shelf Life: At +85℃ no voltage application after 1000 hours and then through the aging treatment (reference JIS C 5102, 4.4), the capacitor shall meet the limits for load life characteristics.

• DIMENSIONS (mm)

SIZE CODE \ ITEM	D	L	A	H	I	W	P	K
A	3.0	5.4	3.3	4.5 MAX	1.5	0.55±0.1	0.6	0.35 +0.15 -0.20
B	4.0	5.4	4.3	5.5 MAX	1.8	0.65±0.1	1.0	0.35 +0.15 -0.20
C	5.0	5.4	5.3	6.5 MAX	2.2	0.65±0.1	1.5	0.35 +0.15 -0.20
D	6.3	5.4	6.6	7.8 MAX	2.6	0.65±0.1	1.8	0.35 +0.15 -0.20
E	8.0	6.2	8.3	9.5 MAX	3.4	0.65±0.1	2.2	0.35 +0.15 -0.20
F	8.0	10.2	8.3	10.0 MAX	3.4	0.90±0.2	3.1	0.70±0.2
G	10.0	10.2	10.3	12.0 MAX	3.5	0.90±0.2	4.6	0.70±0.2



E,F,G =L±0.3



( )reference size

• CASE SIZE & MAX RIPPLE CURRENT

• Polarized

Max ripple current : (mA) r.m.s. (120Hz/+85℃)

μF \ code \ V(code)		4 (0G)		6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)		100 (2A)	
0.1	0R1													A,B	1,1				
0.22	R22													A,B	2,2				
0.33	R33													A,B	3,3				
0.47	R47													A,B	5,5				
1.0	010													A,B	8,10				
2.2	2R2											A	8	B	16				
3.3	3R3											A	10	B	16			E	50
4.7	4R7									A,B	12,22	B	22	C	23			F	80
10	100							A,B	20,28	C	28	C	30	D	35	E	35	F	85
22	220	A	19	B	29	B	28	C	39	D	55	D	60	E	120	F	40	G	85
33	330	B	26	B	22	C	43	C	35	D	65	E	130	F	110	F	45	G	90
47	470	B	34	C	46	C	43	D	70			E	165	G	130				
100	101	C	61	D	71	D	70	E	200	F	180	G	210	G	250	G	60		
220	221	D	82			E	250	F	280	G	310	G	310						
330	331			E	300	F	330	G	380										
470	471			F	380	G	400	G	420										
1000	102			G	700	G	580											Size Code	R.C.

• Bi-polar

μF \ code \ V(code)		6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)	
0.22	R22											B	2
0.33	R33											B	3
0.47	R47											B	5
1.0	010											B	10
2.2	2R2									B	12	C	16
3.3	3R3							B	12			C	21
4.7	4R7					B	20	C	21	C	22	D	31
10	100			B	25	C	25	D	28	D	30		
22	220	C	29			D	39						
33	330			D	43								
47	470	D	46									Size Code	R.C.

• PARTS NUMBER SYSTEM (example : 22μF, 10V)

1	2	3	4	5	6	7	8	9	10	11	12	13
C	S	M	2	2	0	M	I	A	C	0	5	B
Series name		Type	Capacitance code			Capacitance Tolerance	Voltage Code		Case Size	Case Size		Polarity

M : Surface Mount Type

M : ±20%

Type	Polarized	Bi-polar
Code	—	B

Case Size (L mm) :

L (mm)	5.4	6.2	10.2
Code	05	06	10

Case Size (φ D mm) :

φ D(mm)	3	4	5	6.3	8	10
Code	A	C	D	E	F	G

Voltage Code :

Voltage	4	6.3	10	16	25	35	50	63	100
Code	0G	0J	1A	1C	1E	1V	1H	1J	2A

Capacitance code :

Capacitance	0.1	0.22	0.33	0.47	1.0	2.2	3.3	4.7	10	22	33	47	100	220	330	470	1000
Code	OR1	R22	R33	R47	010	2R2	3R3	4R7	100	220	330	470	101	221	331	471	102