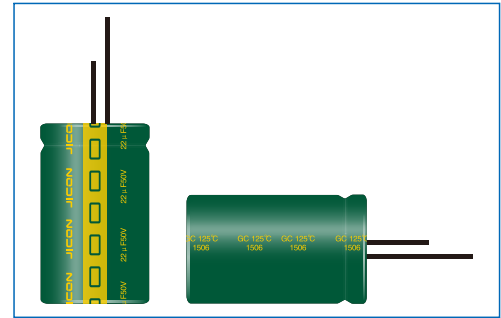


GC 系列 SERIES

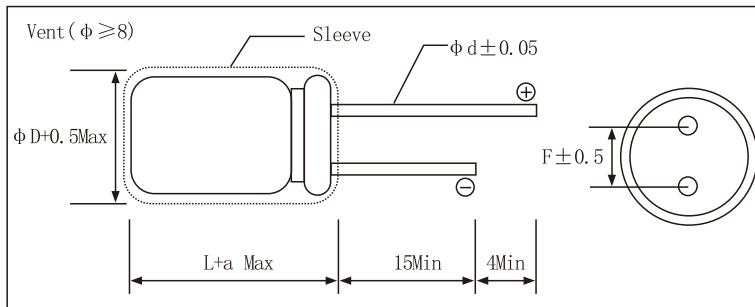
- High reliability high temperature
- Endurance: 125°C 2,000~3000 hours
- RoHS Compliant



◆ SPECIFICATION

Items	Characteristics																								
Operating Temperature Range (°C)	-40~+125°C																								
Voltage range (V)	10~100V																								
Capacitance Range (μF)	1~4700 μF																								
Capacitance Tolerance	±20% (at 20°C, 120Hz)																								
leakage current (μA)	$I \leq 0.01C_R U_R$ (at 20°C, After 5 minutes application of rate voltage) I=Leakage Current UR=Rated Voltage CR=Rated Capacitance.																								
Dissipation Factor (Tan δ)	<table border="1"> <tr> <td>WV (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Tan δ (max)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </table>	WV (V)	10	16	25	35	50	63	100	Tan δ (max)	0.20	0.16	0.14	0.12	0.10	0.09	0.08								
	WV (V)	10	16	25	35	50	63	100																	
Tan δ (max)	0.20	0.16	0.14	0.12	0.10	0.09	0.08																		
(at 20°C, 120Hz)																									
Low Temperature Characteristics (Max. Impedance Ratio)	<table border="1"> <tr> <td>Rated Voltage(V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>3</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>6</td> <td>4</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> </table>	Rated Voltage(V)	10	16	25	35	50	63	100	Z(-25°C)/Z(+20°C)	3				2			Z(-40°C)/Z(+20°C)	6	4			3		
	Rated Voltage(V)	10	16	25	35	50	63	100																	
	Z(-25°C)/Z(+20°C)	3				2																			
Z(-40°C)/Z(+20°C)	6	4			3																				
(120Hz)																									
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated rippled current is applied for 2000~3000 hours at 125°C																								
	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30%initial value</td> <td>Case Dia.</td> <td>Life time(hours)</td> </tr> <tr> <td>D. F. (Tan δ)</td> <td>Not more than 300% of specified value</td> <td>ΦD≤10</td> <td>2000</td> </tr> <tr> <td>leakage current</td> <td>Not more than specified value</td> <td>ΦD>10</td> <td>3000</td> </tr> </table>	Capacitance change	Within ±30%initial value	Case Dia.	Life time(hours)	D. F. (Tan δ)	Not more than 300% of specified value	ΦD≤10	2000	leakage current	Not more than specified value	ΦD>10	3000												
	Capacitance change	Within ±30%initial value	Case Dia.	Life time(hours)																					
	D. F. (Tan δ)	Not more than 300% of specified value	ΦD≤10	2000																					
leakage current	Not more than specified value	ΦD>10	3000																						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied .																								
	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30%initial value</td> </tr> <tr> <td>D. F. (Tan δ)</td> <td>Not more than 300% of specified value</td> </tr> <tr> <td>leakage current</td> <td>Not more than 500% of specified value</td> </tr> </table>	Capacitance change	Within ±30%initial value	D. F. (Tan δ)	Not more than 300% of specified value	leakage current	Not more than 500% of specified value																		
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◆ DIMENSIONS(mm)



D	8	10	12.5	16	18
d	0.5 0.6	0.6	0.6	0.8	0.8
F	3.5	5.0	5.0	7.5	7.5
D'	∅D+0.5max.				
L'	L+2max.				

◆ Frequency Coefficient

Cap. (μF)	Frequency (Hz)				
	50/60	120	1k	10k	100k
Cap < 10	0.35	0.42	0.60	0.80	1.00
10 ≤ Cap. < 47	0.45	0.55	0.75	0.90	1.00
47 ≤ Cap. < 470	0.60	0.70	0.85	0.95	1.00
470 ≤ Cap. < 2200	0.65	0.75	0.90	0.98	1.00
Cap. ≥ 2200	0.75	0.80	0.95	1.00	1.00

◆ Temperature Coefficient

Temperature (°C)	+85	+105	+125
Coefficient	2.00	1.60	1.00



◆ STANDARD RATINGS

UR (Surge Voltage) Code	Rated Capacitance	Dissipation Factor 20°C120Hz	Rated Ripple Current 125°C100kHz	Size φD×L
(V)	(μF)	tan δ	(mA rms)	(mm)
10 (13) 1A	330	0.20	360	8×12
	470	0.20	620	10×13
	1000	0.20	960	10×20
	2200	0.22	1430	13×25
	3300	0.24	1900	16×25
	4700	0.26	2300	16×30
16 (20) 1C	330	0.16	360	8×12
	470	0.16	620	10×13
	1000	0.16	960	10×20
	2200	0.18	1430	13×25
	3300	0.20	2300	16×30
	4700	0.22	2550	16×35
25 (32) 1E	220	0.14	360	8×12
	330	0.14	620	10×13
	470	0.14	800	10×16
	1000	0.14	1100	13×20
	2200	0.16	2300	16×30
	3300	0.18	2550	16×35
35 (44) 1V	100	12.00	360	8×12
	220	0.12	620	10×13
	330	0.12	800	10×16
	470	0.12	960	10×20
	1000	0.12	1430	13×25
	2200	0.14	2550	16×35
	3300	0.16	2800	18×35
50 (63) 1H	1	0.10	35	8×12
	2.2	0.10	50	8×12
	3.3	0.10	70	8×12
	4.7	0.10	100	8×12
	10	0.10	200	8×12
	22	0.10	260	8×12
	33	0.10	300	8×12
	47	0.10	300	8×12
	100	0.10	520	10×13
	220	0.10	890	10×20
	330	0.10	1000	13×20
	470	0.10	1200	13×35
	1000	0.10	2180	16×30
	2200	0.12	2800	18×40
63 (79) 1J	33	0.09	250	8×12
	47	0.09	400	10×13
	100	0.09	450	10×16
	220	0.09	820	13×20
	330	0.09	1000	13×25
	470	0.09	1500	16×25
	1000	0.09	1850	16×30
	1500	0.09	2350	18×40
100 (125) 2A	4.7	0.08	100	8×12
	10	0.08	200	8×12
	22	0.08	220	8×12
	33	0.08	260	10×13
	47	0.08	330	10×16
	100	0.08	670	13×20
	220	0.08	1100	16×25
	330	0.08	1300	16×30
470	0.08	1600	18×30	