

GFL series

Features

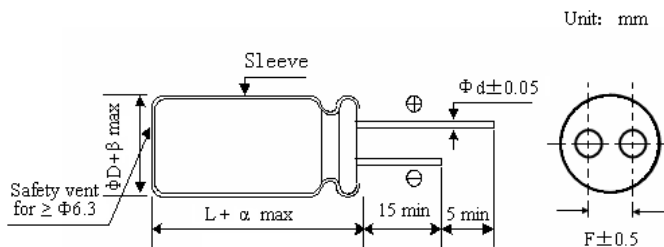
- ◆ Low impedance for high ripple current ,3000 to 6000 hours at 105 °C.
- ◆ Used in communication equipments ,switching power supply, industrial measuring instruments, etc.
- ◆ RoHS Compliant .



Specifications

Item	Performance Characteristics									
Temperature Range	-40~+105°C									
Rated Voltage Range	6.3~100Vdc									
Capacitance Range	2.2~3300µF									
Capacitance Tolerance	±20% (120Hz, +20°C)									
Leakage Current (+20°C,max.)	I≤0.01CV 或 3 (µA) After 2 minutes, whichever is greater measured with rated working voltage applied									
Dissipation Factor(tgδ) 120Hz, +20°C	Working Voltage(Vdc)	6.3	10	16	25	35	50	63	100	
	D.F (%) max.	22	19	16	14	12	10	9	8	
For capacitance>1000µF , Add 2% per another 1000µF (120Hz, +20°C)										
Low Temperature Characteristics(120Hz)	Impedance ratio max.									
	Working Voltage(Vdc)	6.3	10	16	25	35	50	63	100	
	Z-25°C/ Z+20°C	4	3	2	2	2	2	2	2	
	Z-40°C/ Z+20°C	8	6	4	3	3	3	3	3	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple Current is applied for the specified period of time at 105°C									
	Time	Φ5 to Φ6.3:3000hours ,Φ8:4000hours ,Φ10:5000hours ,≥Φ13:6000hours								
	Rated Voltage	6.3 to 10Vdc			16 to 100Vdc					
	Capacitance Change	≤±30% of the initial value				≤±25% of the initial value				
	D.F.(tgδ)	≤200% of the initial specified value								
	Leakage Current	≤The initial specified value								
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the load life characteristics listed above.									
Others	JISC-5101(IEC 60384)									

Diagram of Dimensions



Frequency Multipliers

µF \ Hz	120	1K	10K	100K
<47	0.55	0.70	0.90	1.00
39~330	0.70	0.85	0.95	1.00
470~1000	0.75	0.90	0.98	1.00
>1000	0.80	0.95	1.00	1.00

ΦD	5	6.3	8	10	13	16
F	2.0	2.5	3.5	5.0	5.0	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8
α	(L< 20) + 1.5		(L≥20) + 2.0			
β	(D< 20) + 0.5		(D≥20) + 1.0			

GFL series**Standard Ratings**

Voltage	6.3V			10V			16V			25V		
Cap(μF)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
47							5×11	0.59	208	5×11	0.58	210
100	5×11	0.58	210	5×11	0.58	210	6.3×11	0.22	340	6.3×11	0.22	340
150	5×11	0.58	210	5×11	0.58	210	6.3×11	0.22	340	6.3×11	0.22	340
220	6.3×11	0.22	340	6.3×11	0.22	340	8×12	0.13	640	8×12	0.13	640
330	6.3×11	0.22	340	8×12	0.13	640	8×12	0.13	640	8×16	0.087	840
470	8×12	0.13	640	8×12	0.13	640	8×16	0.087	840	8×20	0.069	1050
560	8×12	0.13	640	8×12	0.13	640	8×16	0.087	840	8×20	0.069	1050
680	8×12	0.13	640	8×16	0.087	840	8×20	0.069	1050	10×20	0.046	1400
820	8×16	0.087	840	8×20	0.069	1050	10×20	0.046	1400	13×20	0.035	1900
1000	8×16	0.087	840	8×20	0.069	1050	10×20	0.046	1400	13×20	0.035	1900
1200	8×20	0.069	1050	10×20	0.046	1400	10×25	0.042	1650	13×25	0.030	2124
1500	10×20	0.046	1400	10×25	0.042	1650	13×20	0.035	1900	13×25	0.030	2124
2200	10×25	0.042	1650	13×20	0.035	1900	13×25	0.030	2124	13×30	0.027	2480
3300	13×20	0.035	1900	13×25	0.030	2124	13×30	0.027	2480	16×30	0.026	2880

Voltage	35V			50V			63V			100V		
Cap(μF)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
2.2				5×11	3.0	54						
3.3				5×11	3.0	63						
4.7				5×11	3.0	75						
6.8				5×11	3.0	91						
10				5×11	1.4	110	5×11	2.3	49	6.3×11	1.44	94
15				5×11	1.4	110	6.3×11	0.96	115	6.3×11	0.96	115
22				6.3×11	0.505	183	6.3×11	0.96	115	8×12	0.85	220
33	5×11	0.58	210	6.3×11	0.337	224	6.3×11	0.96	115	10×12	0.69	314
47	6.3×11	0.337	224	6.3×11	0.237	267	8×12	0.19	380	10×12	0.344	370
68	6.3×11	0.237	267	8×12	0.190	380	8×12	0.17	555	10×17	0.248	470
100	8×12	0.190	380	8×12	0.170	555	8×16	0.14	610	10×25	0.160	560
150	8×12	0.190	380	8×12	0.170	555	8×16	0.14	610	10×25	0.160	560
220	8×16	0.087	840	10×17	0.084	1050	10×20	0.080	920	13×25	0.130	950
330	10×17	0.060	1210	10×25	0.055	1440	13×20	0.065	1250	16×25	0.100	1440
470	10×20	0.046	1400	13×20	0.045	1660	13×25	0.053	1620			
560	10×25	0.042	1650	13×20	0.045	1660	13×25	0.053	1620			
680	13×20	0.035	1900	13×25	0.040	1930	16×30	0.043	1950			
1000	13×25	0.030	2124	16×25	0.028	2300						
1500	13×30	0.032	2130	16×35	0.026	2750						
2200	16×30	0.030	2780	18×40	0.024	3100						

Max Allowable Ripple Current (mA, rms) at 105°C 100 KHz, Max Impedance (Ω) at 20°C 100 KHz, Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.