

## GF series

### Features

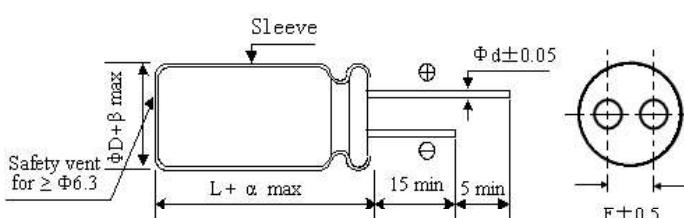
- ◆ Low impedance for high ripple current , 2000 to 4000 hours at 105°C.
- ◆ Used in communication equipments ,switching power supply, industrial measuring instruments, etc.
- ◆ RoHS Compliant.



### Specifications

Item	Performance Characteristics								
Temperature Range	-40~+105°C								
Rated Voltage Range	6.3~100Vdc								
Capacitance Range	2.2~4700μF								
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 For capacitance>1000μF , Add 0.5 per another 1000μF For Z-25°C / Z+20°C ,Add 1.0 per another 1000μF For Z-40°C / Z+20°C								
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 Φ6.3:2000hours ,Φ8 to Φ10:3000hours, ≥Φ13:4000hours 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
<220	0.40	0.75	0.90	1.00	
220~470	0.50	0.85	0.94	1.00	
680~1500	0.60	0.87	0.95	1.00	
2200~3900	0.75	0.90	0.95	1.00	
4700	0.85	0.95	0.98	1.00	

ΦD	5	6.3	8	10	13	16	18	22
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8
α	(L<20) + 1.5 (L≥20) + 2.0							
β	(D<20) + 0.5 (D≥20) + 1.0							