

GFW series

Features

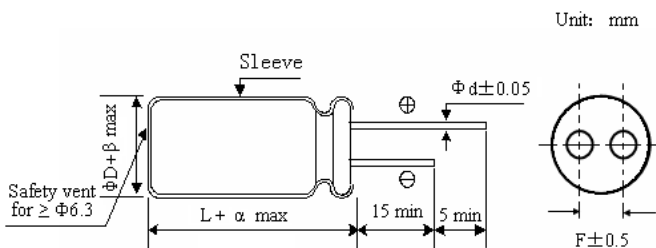
- ◆ Wide temperature range , -55~+125°C, 4000 to 10000 hours at 105°C, 2000 hours at 125°C.
- ◆ Especially designed for LED driver, LED lighting .
- ◆ RoHS Compliant .



Specifications

Item	Performance Characteristics							
Temperature Range	-55~+125°C							
Rated Voltage Range	6.3~50Vdc							
Capacitance Range	10~6800µF							
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	
	D.F (%) max.	22	19	16	14	12	10	
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	
	Z-25°C/ Z+20°C	4	3	2	2	1.5	1.5	
	Z-40°C/ Z+20°C	6	4	3	3	2	2	
Z-55°C/ Z+20°C								
8 6 5 5 4 4								
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				The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 125°C			
	ΦD	5~6.3	8~10	≥13	Rated Voltage	6.3 to 50Vdc		
Life	4000 h	7000 h	10000 h	Capacitance Change	≤±30% of the initial value			
				D.F.(tgδ)	≤300% 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							
	Rated Voltage		6.3 to 50Vdc					
	Capacitance Change		≤±30% of the initial value					
	D.F.(tgδ)		≤300% of the initial specified value					
Leakage Current		≤The initial specified value						
Others	JISC-5101(IEC 60384)							

Diagram of Dimensions



Frequency Multipliers

µF \ Hz	120	1K	10K	100K
<47	0.45	0.55	0.70	0.90
47~330	0.60	0.70	0.85	0.95
470~1000	0.65	0.75	0.90	0.98
> 1000	0.75	0.80	0.95	1.00

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

GFW series**Standard Ratings**

Voltage	6.3V			10V			16V		
Cap(μ F)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
10							5×11	3.90	30
22				5×11	3.08	55	5×11	2.64	60
33				5×11	2.33	60	5×11	2.00	120
47				5×11	1.71	110	5×11	1.35	155
68				5×11	1.30	135	5×11	1.18	190
100	5×11	1.45	120	6.3×11	1.02	160	6.3×11	0.86	220
220	6.3×11	1.02	160	6.3×15	0.58	185	8×12	0.46	250
330	8×12	0.46	250	8×12	0.46	250	8×16	0.40	340
470	8×12	0.46	250	8×12	0.46	250	8×20	0.28	450
680	10×12	0.40	340	8×20	0.28	450	10×17	0.24	490
1000	8×20	0.28	450	10×17	0.24	490	10×20	0.20	610
1500	10×20	0.22	510	10×25	0.18	560	13×20	0.15	935
2200	10×25	0.18	560	13×20	0.15	935	13×25	0.12	1030
3300	13×20	0.15	935	16×25	0.11	1150	13×35	0.10	1310
4700	13×30	0.11	1150	13×35	0.10	1310	16×30	0.088	1390
6800	16×25	0.10	1260	16×30	0.088	1390	18×35	0.070	1750

Voltage	25V			35V			50V		
Cap(μ F)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
10	5×11	3.01	55	5×11	2.65	70	5×11	2.05	100
22	5×11	2.30	120	5×11	1.83	135	6.3×11	1.27	140
33	5×11	1.72	145	6.3×11	1.25	200	6.3×15	0.85	247
47	5×11	1.37	185	6.3×11	0.92	220	8×12	0.55	305
68	6.3×11	0.97	250	6.3×15	0.55	290	8×12	0.36	350
100	6.3×11	0.68	300	8×12	0.45	345	8×16	0.25	480
220	8×16	0.40	340	10×17	0.24	490	10×20	0.20	610
330	10×12	0.30	394	10×20	0.20	610	13×20	0.15	935
470	10×17	0.24	490	13×20	0.15	935	13×25	0.13	1040
680	10×20	0.20	610	13×20	0.13	1040	13×25	0.12	1230
1000	13×20	0.15	935	13×30	0.11	1120	16×30	0.088	1390
1500	13×25	0.12	1230	16×30	0.088	1390	16×35	0.075	1590
2200	16×25	0.090	1310	16×35	0.075	1590			
3300	16×35	0.075	1590						

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

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