

# GDF 105°C Low impedance series

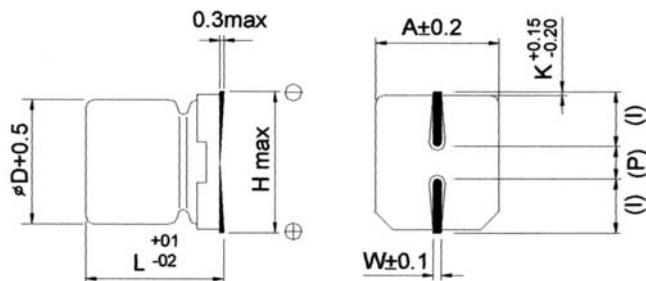
- For surface mounted and high frequency application.
- Life guaranteed 3,000 hours/105°C.



## • Specifications

Item	Performance Characteristics											
Operating Temperature range	-40 + 105°C											
Rated Voltage	6.3V ~ 50V											
Capacitance Range	10 ~ 1,000 μF											
Capacitance Tolerance	±20% (120 Hz, 20°C)											
Leakage Current	$I \leq 0.01CV$ or $3\mu A$ , whichever is greater after 2 minutes application of rated voltage.											
Dissipation Factor (120 Hz, 20°C)	Rated voltage (V)	6.3	10	16	25	35	50					
	Tan δ	0.28	0.24	0.22	0.16	0.13	0.12					
For capacitance of more than 1,000 μF, add 0.02 for every increase of 1,000 μF.												
Temperature Characteristics (120 Hz)	Impedance Ratio / Stability at Low Temperature											
	Rated voltage (V)	6.3	10	16	25	35	50					
	Z (-25°C) / Z (20°C)	4	3	2	2	2	2					
Load Life	Z (-40°C) / Z (20°C)	10	7	5	3	3	3					
	After specify 3,000 hours application of WV at 105°C, the capacitor shall meet the characteristics mentioned below.											
	Capacitance change	Within ± 30% of initial value										
	Tan δ	300% or less of initial specified value										
Shelf Life	Leakage current	Initial specified value or less										
	At 105°C, no voltage applied for 1,000 hours, the capacitor shall meet the limits as in load life. (With voltage treatment)											
Resistance to Soldering Heat	Capacitor placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the following conditions after being cooled to room temperature.											
	Capacitance change	Within ±10% of initial value										
	Tan δ	≤ initial specified value										
	Leakage current	≤ initial specified value										

## • Dimension (mm)



D $\phi$	L	A	H	I	W	P	K
4	5.8	4.3	5.5	1.8	0.65	1.0	0.35
5	5.8	5.3	6.5	2.2	0.65	1.5	0.35
6.3	5.8	6.6	7.8	2.6	0.65	2.1	0.35
6.3	7.7	6.6	7.8	2.6	0.65	2.1	0.35
8	10.2	8.3	10.0	3.4	0.90	3.1	0.70
10	10.2	10.3	12.0	3.5	0.90	4.6	0.70

# ALUMINUM ELECTROLYTIC CAPACITOR

**GEMCON**

## • Standard Products Table

D $\phi$  x L (mm)

WV(SV)	6.3 (8)			10 (13)			16 (20)			
	Cap ( $\mu$ F)	D x L	Imp.	R.C.	D x L	Imp.	R.C.	D x L	Imp.	R.C.
22								5 x 5.8	1.30	95
33					5 x 5.8	1.30	95	6.3 x 5.8	0.70	140
47	5x5.8	1.30	95		6.3 x 5.8	0.70	140	6.3 x 5.8	0.70	140
100	6.3x5.8	0.70	140		6.3 x 5.8	0.70	140	6.3 x 5.8	0.70	140
								6.3 x 7.7	0.70	230
150	6.3x5.8	0.70	140		6.3 x 5.8	0.70	140	6.3 x 7.7	0.70	230
220	6.3x5.8	0.70	230		6.3 x 7.7	0.70	230	6.3 x 7.7	0.70	230
					8 x 10.2	0.70	600	8 x 10.2	0.16	600
330	6.3x7.7	0.70	230		8 x 10.2	0.16	600	8 x 10.2	0.16	600
	8x10.2	0.16	600					8 x 10.2	0.16	600
470	8x10.2	0.16	600		8 x 10.2	0.16	600	10x10.2	0.08	850
1000	10x10.2	0.08	850							

WV(SV)	25 (32)			35 (44)			50 (63)			
	Cap ( $\mu$ F)	D x L	Imp.	R.C.	D x L	Imp.	R.C.	D x L	Imp.	R.C.
10					5 x 5.8	1.30	95	6.3 x 5.8	2.00	70
22					5 x 5.8	0.70	140	6.3 x 5.8	2.00	70
33	6.3 x 5.8	0.70	140		6.3 x 7.7	0.70	140	6.3 x 7.7	1.60	100
					8 x 10.2	0.70	600			
47	6.3 x 5.8	0.70	140		6.3 x 7.7	0.70	230	6.3 x 7.7	1.60	100
	6.3 x 7.7	0.70	230					8 x 10.2	0.34	350
100	6.3 x 7.7	0.70	230		6.3 x 7.7	0.70	230	8 x 10.2	0.34	350
	8 x 10.2	0.16	600		8 x 10.2	0.16	600	10x10.2	0.18	670
150	8 x 10.2	0.16	600		8 x 10.2	0.16	600	10x10.2	0.18	670
220	8 x 10.2	0.16	600		8 x 10.2	0.16	600	10x10.2	0.18	670
					10x10.2	0.08	850			
330	8 x 10.2	0.16	600		10x10.2	0.08	850			
	10x10.2	0.08	850							
470	10x10.2	0.08	850							

Impedance: ( $\Omega$ ) max. at 20°C 100KHz

Ripple current (mA) at 105°C 100KHz