

# GDD 105°C Low impedance series

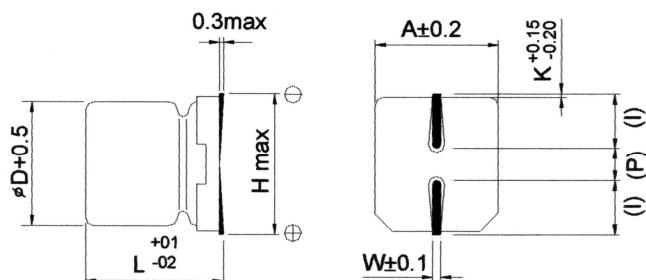
- For surface mounted and high frequency application.
- Low Impedance at 100kHz.
- Life guaranteed 2,000 ~ 5,000 hours/105°C.



## • Specifications

Item	Performance Characteristics												
Operating Temperature range	-55 + 105°C												
Rated Voltage	6.3V ~ 50V												
Capacitance Range	4.7 ~ 1,500 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 (max.)	0.28	0.24	0.20	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)	3	3	2	2	2	2						
	Z (-40°C) / Z (20°C)	7	7	5	3	3	3						
Load Life	After 5000 hours ( $\phi D \leq 6.3\text{mm}$ 2000 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											
	Leakage current	Initial specified value or less											
Shelf Life	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)



Dφ	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<sub>Ø</sub> x L (mm)

WV(SV) Cap (µF)	6.3 (8)			10 (13)			16 (20)		
	D x L	Imp.	R.C.	D x L	Imp.	R.C.	D x L	Imp.	R.C.
22							5x5.8	0.76	150
33	5x5.8	0.76	150	5x5.8	0.76	150	6.3x5.8	0.44	230
47	5x5.8	0.76	150	6.3x5.8	0.44	230	6.3x5.8	0.44	230
100	6.3x5.8	0.44	230	6.3x5.8	0.44	230	6.3x5.8	0.44	230
150	6.3x5.8	0.44	230	6.3x5.8	0.44	230	6.3x7.7	0.34	280
220	6.3x5.8	0.44	230	6.3x7.7	0.34	280	6.3x7.7	0.34	280
330	6.3x7.7	0.34	280	8x10.2	0.17	450	8x10.2	0.17	450
470	8x10.2	0.17	450	8x10.2	0.17	450	8x10.2	0.17	450
1000	8x10.2	0.17	450	10x10.2	0.09	670			
1500	10x10.2	0.09	670						

WV(SV) Cap (µF)	25 (32)			35 (44)			50 (63)		
	D x L	Imp.	R.C.	D x L	Imp.	R.C.	D x L	Imp.	R.C.
4.7							5x5.8	1.52	85
10				5x5.8	0.76	150	6.3x5.8	0.88	165
22	5x5.8	0.76	150	5x5.8	0.76	150	6.3x5.8	0.88	165
33	6.3x5.8	0.44	230	6.3x5.8	0.44	230	6.3x7.7	0.68	185
47	6.3x5.8	0.44	230	6.3x5.8	0.44	230	6.3x7.7	0.68	185
100	6.3x7.7	0.34	280	8x10.2	0.17	450	8x10.2	0.34	300
							10x10.2	0.34	670
150	8x10.2	0.17	450	8x10.2	0.17	450	10x10.2	0.18	670
220	8x10.2	0.17	450	8x10.2	0.17	450	10x10.2	0.18	670
				10x10.2	0.18	670			
330	8x10.2	0.17	450	10x10.2	0.09	670			
470	10x10.2	0.09	670						

Impedance: ( $\Omega$ ) max. at 20°C 100KHz Ripple current (mA) at 105°C 100KHz