

GDK 105°C Low impedance series

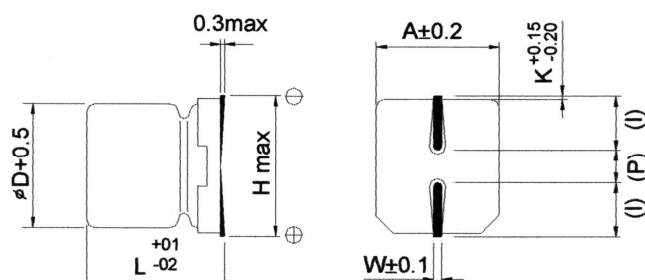
- For surface mounted and high frequency application.
- Impedance lower than GDX series.
- Life guaranteed 1,000~2,000 hours/105°C.



• 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 ≤ 0.01CV or 3μA, 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.)	4φ ~ 6.3φ	0.24	0.20	0.16	0.14	0.12	0.12
		8φ ~ 10φ	0.28	0.24	0.20	0.16	0.14	0.14
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	2	2	2	2	2	
	Z (-55°C) / Z (20°C)	5	4	4	3	3	3	
Load Life	After specify hours (φD ≤ 6.3 mm 1,000 hours / φD ≥ 8 mm 2,000 hours) application of WV at 105°C, the capacitor shall meet the characteristics mentioned below.							
	Capacitance change	Within ± 25% of initial value						
	Tan δ	200% 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

• Standard Products Table

Dφ 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.
							4 x 5.8	1.45	90
22				4 x 5.8	1.45	90	5 x 5.8	0.70	170
27	4 x 5.8	1.45	90	5 x 5.8	0.70	170	5 x 5.8	0.76	150
33	5 x 5.8	0.70	170	5 x 5.8	0.70	170	6.3 x 5.8	0.39	250
47	5 x 5.8	0.70	170	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250
56	5 x 5.8	0.70	170	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250
68	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250
100	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250
150	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250	6.3 x 7.7	0.30	300
220	6.3 x 5.8	0.39	250	6.3 x 7.7	0.30	300	6.3 x 7.7	0.30	300
330	6.3 x 7.7	0.30	300	8 x 10.2	0.15	600	8 x 10.2	0.15	600
470	8 x 10.2	0.15	600	8 x 10.2	0.15	600	8 x 10.2	0.15	600
680	8 x 10.2	0.15	600	10 x 10.2	0.08	850	10 x 10.2	0.08	850
1000	8 x 10.2	0.15	600	10 x 10.2	0.08	850			
1500	10 x 10.2	0.08	850						

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				4 x 5.8	1.45	90	4 x 5.8	2.55	64
10	4 x 5.8	1.45	90	5 x 5.8	0.70	170	6.3 x 5.8	0.52	215
15	5 x 5.8	0.70	170	5 x 5.8	0.70	170	6.3 x 5.8	0.52	215
22	5 x 5.8	0.70	170	5 x 5.8	0.70	170	6.3 x 5.8	0.52	215
27	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250	6.3 x 7.7	0.44	243
33	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250	6.3 x 7.7	0.44	243
47	6.3 x 5.8	0.39	250	6.3 x 5.8	0.39	250	6.3 x 7.7	0.44	243
56	6.3 x 5.8	0.39	250	6.3 x 7.7	0.30	300	8 x 10.2	0.22	400
68	6.3 x 5.8	0.39	250	6.3 x 7.7	0.30	300	8 x 10.2	0.22	400
100	6.3 x 7.7	0.30	300	8 x 10.2	0.15	600	8 x 10.2	0.22	400
150	8 x 10.2	0.15	600	8 x 10.2	0.15	600	10 x 10.2	0.13	585
220	8 x 10.2	0.15	600	8 x 10.2	0.15	600	10 x 10.2	0.13	585
330	8 x 10.2	0.15	600	10 x 10.2	0.08	850			
470	10 x 10.2	0.08	850						

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