

## GDM 105°C Standard series, Extended Life

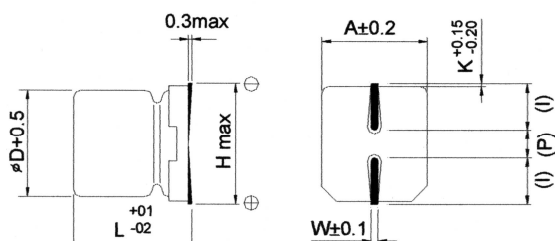
- For surface mounted and wide temperature operating.
- Life guaranteed 2,000 hours/105°C.



### • Specifications

Item	Performance Characteristics									
Operating Temperature range	-55 + 105°C									
Rated Voltage	4V ~ 50V									
Capacitance Range	0.1 ~ 470 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)	4	6.3	10	16	25	35	50		
	Tan δ (max.)	4φ ~ 6.3φ	0.50	0.30	0.22	0.16	0.14	0.12	0.12	
Temperature Characteristics (120 Hz)	Impedance Ratio / Stability at Low Temperature									
	Rated voltage (V)	4	6.3	10	16	25	35	50		
	Z (-25°C) / Z (20°C)	7	4	3	2	2	2	2	2	
	Z (-40°C) / Z (20°C)	15	8	6	4	4	3	3	3	
Load Life	After 2,000 hours application of WV at 105°C, capacitor shall meet the characteristics mentioned below.									
	Capacitance change	Within ± 25% of initial value (4V : ≤ ± 35%)								
	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
8	6.2	8.3	9.5	3.4	0.65	2.2	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

WV(SV) Cap μF	Dφ x L (mm)															
	4 (5)		6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)			
0.1														4 x 5.8	3	
0.22														4 x 5.8	4	
0.33														4 x 5.8	5	
0.47														4 x 5.8	6	
1														4 x 5.8	8	
2.2														4 x 5.8	12	
3.3														4 x 5.8	15	
4.7									4 x 5.8	15	4 x 5.8	18	5 x 5.8	20		
10							4 x 5.8	20	5 x 5.8	25	5 x 5.8	26	6.3 x 5.8	33		
22	4 x 5.8	20	4 x 5.8	24	5 x 5.8	30	5 x 5.8	34	6.3 x 5.8	42	6.3 x 5.8	45	8 x 10.2	75		
33	4 x 5.8	25	4 x 5.8	30	5 x 5.8	37	6.3 x 5.8	48	6.3 x 5.8	50	8 x 6.2	70	8 x 10.2	90		
47	4 x 5.8	30	5 x 5.8	41	6.3 x 5.8	50	6.3 x 5.8	55	8 x 6.2	75	8 x 10.2	100	10 x 10.2	120		
100	5 x 5.8	49	6.3 x 5.8	70	6.3 x 5.8	75	8 x 10.2	120	8 x 10.2	140	10 x 10.2	170				
220	6.3 x 5.8	85	8 x 10.2	140	8 x 10.2	160	10 x 10.2	210	10 x 10.2	230						
330	8 x 10.2	140	8 x 10.2	170	8 x 10.2	200	10 x 10.2	260								
470	8 x 10.2	170	8 x 10.2	200	10 x 10.2	270								Case size	Ripple	

Ripple current (mA) at 105°C 120 Hz

• Standard Products Table

Dφ x L (mm)

WV(SV) Cap μF	63 (79)		100 (125)										
10			8 x 10.2	60									
47	8 x 10.2	110	10 x 10.2	150									
100	10 x 10.2	310										Case size	Ripple

Ripple current (mA) at 105°C 120 Hz