

GDR 85°C Standard Series

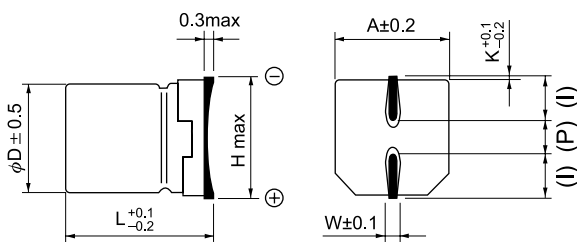
- For surface mounted and general-purpose use.
- Life guaranteed 2,000 hours/85°C.



• Specifications

Item	Performance Characteristics										
Operating Temperature range	-40 + 85°C										
Rated Voltage	4V ~ 100V										
Capacitance Range	0.1 ~ 1,500 μF										
Capacitance Tolerance	±20% (120 Hz, 20°C)										
Leakage Current	I ≤ 0.01CV or 3 μA, 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	63	100	
	Tan δ (max.)	3φ	0.40	0.30	-	0.20	0.16	0.14	0.14	-	-
		4φ ~ 6.3φ	0.35	0.26	0.20	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	63	100	
	Z (-25°C) / Z (20°C)	7	4	3	2	2	2	2	2	2	
	Z (-40°C) / Z (20°C)	15	8	6	4	4	3	3	3	3	
Load Life	After 2,000 hours application of WV at 85°C, capacitor shall meet the characteristics mentioned below.										
	Capacitance change	Within ±20% of initial value (for Diameter ≤ 6.3mm/4~6.3V : 1000 hours ± 30%)									
	Tan δ	200% or less of initial specified value									
	Leakage current	Initial specified value or less									
Shelf Life	At 85°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
3	5.4	3.3	3.3	1.5	0.55	0.8	0.35
4	5.4	4.3	5.5	1.8	0.65	1.0	0.35
5	5.4	5.3	6.5	2.2	0.65	1.5	0.35
6.3	5.4	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	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

Dφ x L (mm)

WV(SV) Cap (μF)	4 (5)		6.3 (8)		10 (13)		16 (20)		25 (32)	
	4.7									4 x 5.4 ○
10									4 x 5.4	25
							4 x 5.4 ○	24	5 x 5.4	29
22	○				4 x 5.4	30	4 x 5.4	30	5 x 5.4	38
			4 x 5.4	27	5 x 5.4	36	5 x 5.4	40	6.3 x 5.4	49
33			4 x 5.4	30	4 x 5.4	32	5 x 5.4	43	5 x 5.4	46
	4 x 5.4	29	5 x 5.4	38	5 x 5.4	44	6.3 x 5.4	55	6.3 x 5.4	60
47			4 x 5.4	36	5 x 5.4	47	5 x 5.4	50	6.3 x 5.4	60
	4 x 5.4	35	5 x 5.4	46	6.3 x 5.4	60	6.3 x 5.4	65	8 x 6.2	100
100	5 x 5.4	60	6.3 x 5.4	70	6.3 x 5.4	80	6.3 x 5.4	90	8 x 6.2	150
			5 x 5.4	71	8 x 6.2	130	8 x 6.2	140	6.3 x 7.7	145
220			6.3 x 5.4		6.3 x 7.7	175	6.3 x 7.7	165	10 x 10.2	560
	6.3 x 5.4	80	8 x 6.2	150	8 x 6.2	190	8 x 10.2	260	8 x 10.2	270
330	6.3 x 5.4	120	6.3 x 7.7	190			10 x 10.2	670	10 x 10.2	370
	8 x 6.2	140	8 x 6.2	180	8 x 10.2	290	8 x 10.2	310	10 x 10.2	450
470	6.3 x 7.7	200			10 x 10.2	680	10 x 10.2	690	10 x 10.2	700
	8 x 10.2	210	8 x 10.2	260	10 x 10.2	420	10 x 10.2	450		
1000	8 x 10.2	300	10 x 10.2	460	10 x 10.2	610				
1500	10 x 10.2	440	10 x 10.2	560					Case size	Ripple

WV(SV) Cap (μF)	35 (44)		50 (63)		63 (79)		100 (125)	
	0.1			4 x 5.4 ○	3			
0.22			4 x 5.4 ○	4				
0.33			4 x 5.4 ○	5				
0.47			4 x 5.4 ○	6				
1			4 x 5.4 ○	9				
2.2	○		4 x 5.4	13				
3.3	○		4 x 5.4	17			8 x 6.2	41
4.7	4 x 5.4	19	5 x 5.4	21			8 x 10.2	60
10	4 x 5.4	27	5 x 5.4	30				
	5 x 5.4	31	6.3 x 5.4	36			8 x 10.2	85
22	5 x 5.4	39	6.3 x 5.4	48	8 x 10.2	75		
	6.3 x 5.4	55	8 x 6.2	110	8 x 10.2	120	10 x 10.2	150
33	6.3 x 5.4	58	6.3 x 7.7	95				
	8 x 6.2	120	8 x 6.2	130	8 x 10.2	140	10 x 10.2	180
47	6.3 x 5.4	70	6.3 x 7.7	105	8 x 10.2	170		
	8 x 6.2	140	8 x 10.2	190	10 x 10.2	190		
100	6.3 x 7.7	160	8 x 10.2	270				
	8 x 10.2	250	10 x 10.2	310	10 x 10.2	280		
220	8 x 10.2	320						
	10 x 10.2	440	10 x 10.2	460				
330	10 x 10.2	540					Case size	Ripple

Size 3 x 5.4 available for symbol with "○" above

Ripple current (mA) at 85°C 120 Hz