

# CapXon GS(GR) Series

## GS(GR) Series General Purpose

### Features

- Wide CV value range.
- Load life 2000 hrs at 85 °C.
- Safety vent construction design.
- For detail specifications, please refer to Engineering Bulletin No. E101



### Specifications

Item	Performance Characteristics																																			
Operating Temperature Range	-40 to +85	-25 to +85																																		
Rate Voltage Range	6.3 to 100 VDC	160 to 450 VDC																																		
Capacitance Range	0.1 to 15000 $\mu$ F	0.47 to 470 $\mu$ F																																		
Capacitance Tolerance	$\pm$ 20% (120Hz, +20 °C)																																			
Leakage Current(+20 °C, max)	I $\leq$ 0.01 CV or 3 ( $\mu$ A) After 1 minutes whichever is greater measures with rated working voltage applied.	I $\leq$ 0.03 CV ( $\mu$ A) After 1 minutes with rated working voltage applied.																																		
Dissipation Factor(tan $\delta$ )	<table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>D.F. (%)max.</td> <td>22</td> <td>19</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>9</td> <td>8</td> </tr> </table>									Working Voltage(VDC)	6.3	10	16	25	35	50	63	100	D.F. (%)max.	22	19	16	14	12	10	9	8									
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D.F. (%)max.	16	18	18	20	20	20																														
For capacitance > 1000 $\mu$ F, add 2% per another 100 $\mu$ F. (+20 °C, at 120Hz)																																				
Low Temperature Characteristics (120Hz)	Impedance ratio max.																																			
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Z-25 / Z+20	2	2	3	5	15	15																														
For Capacitance Value > 1000 $\mu$ F, Add 0.5 per another 1000 $\mu$ F for -25 / +20 Add 1 per another 1000 $\mu$ F for -40 / +20																																				
Load Life	Test conditions Duration time :2000Hrs Ambient temperature:+85 Applied voltage :Rated DC working voltage After test requirements at +20 Capacitance change : $\pm$ 20% of the initial measured value Dissipation factor : 200% of the initial specified value																																			
Shelf Life	Test conditions Duration time :1000Hrs Ambient temperature :+85 Applied voltage :None After test requirements at +20 :Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																																			

### Multiplier for Ripple Current vs. Frequency

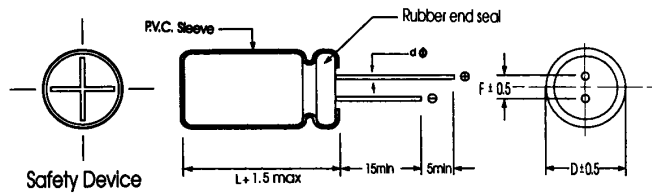
CAP( $\mu$ F) \ Hz		50(60)	120	400	1K	10K	50K-100K
Multiplier	CAP $\leq$ 10	0.8	1	1.30	1.30	1.65	1.70
	10 < CAP $\leq$ 100	0.8	1	1.23	1.23	1.48	1.53
	100 < CAP $\leq$ 1000	0.8	1	1.16	1.16	1.35	1.38
	1000 < CAP	0.8	1	1.11	1.11	1.25	1.28

### Multiplier for Ripple Current vs. Temperature

Temperature	45	60	70	85
Multiplier	1.8	1.50	1.30	1.0

# CapXon GS(GR) Series

Diagram of Dimensions: (Unit:mm)



D	5	6.3	8	10	13	16	18	22
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10
d	0.5			0.6		0.8		

## Case Size

WV(SV) μF	DxL(mm)													
	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)	160 (200)	200 (250)	250 (300)	350 (400)	400 (450)	450 (500)
0.1	→					5x11	5x11	5x11	—	—	—	—	—	—
0.22	→					5x11	5x11	5x11	—	—	—	—	—	—
0.33	→					5x11	5x11	5x11	—	—	—	—	—	—
0.47	→					5x11	5x11	5x11	5x11	5x11	5x11	6.3x11	6.3x11	6.3x11
1	→					5x11	5x11	5x11	5x11	6.3x11	6.3x11	6.3x11	8x11.5	8x11.5
2.2	→					5x11	5x11	5x11	6.3x11	6.3x11	8x11.5	10x12.5	10x12.5	10x12.5
3.3	→					5x11	5x11	5x11	6.3x11	6.3x11	8x11.5	10x12.5	10x12.5 10x16	10x16 10x20
4.7	→			5x11	5x11	5x11	5x11	5x11	6.3x11 8x11.5	8x11.5	10x12.5	10x12.5 10x16	10x16	10x20
10	→		5x11	5x11	5x11	5x11	5x11	6.3x11	8x11.5 10x12.5	10x12.5 10x16	10x16	10x20	13x20	13x20 13x25
22	→	5x11	5x11	5x11	5x11	5x11	6.3x11	6.3x11 8x11.5	10x16	10x20	10x20	13x25	16x25	16x25 16x31.5
33	5x11	5x11	5x11	5x11	5x11	5x11 6.3x11	6.3x11 8x11.5	8x11.5 10x12.5	10x20	13x20	13x20 13x25	16x25	16x25	16x35.5
47	5x11	5x11	5x11	5x11	5x11 6.3x11	6.3x11	6.3x11 8x11.5	10x12.5 10x16	13x20	13x20 13x25	13x25	16x31.5	16x31.5	16x35.5
100	5x11	5x11	5x11 6.3x11	6.3x11	6.3x11 8x11.5	8x11.5	8x11.5	10x20	13x25 16x25	16x25	16x31.5	18x41	—	—
220	5x11 6.3x11	6.3x11	6.3x11 8x11.5	8x11.5	10x12.5	10x12.5 10x16	10x16 10x20	13x25 16x25	16x35.5	18x35.5	—	—	—	—
330	6.3x11	6.3x11 8x11.5	8x11.5	10x12.5	10x12.5 10x16	10x16 10x20	10x20 13x20	13x25 16x25	18x31.5	18x35.5	—	—	—	—
470	6.3x11 8x11.5	8x11.5	8x11.5	10x12.5	10x16 10x20	13x20	13x20 13x25	16x25 16x31.5	18x35.5	18x41	—	—	—	—
1000	8x11.5	10x12.5	10x16	10x20	13x20	13x25 16x25	16x25 16x31.5	18x41	—	—	—	—	—	—
2200	10x20	10x20	13x20	13x25	16x25 16x31.5	16x35.5	18x35.5 18x41	—	—	—	—	—	—	—
3300	10x20 13x20	13x20	13x25	16x25 16x31.5	16x35.5	18x35.5	22x41	—	—	—	—	—	—	—
4700	13x20 13x25	13x25	16x25	16x31.5	18x35.5	22x41	—	—	—	—	—	—	—	—
6800	16x25	16x25	16x31.5	18x35.5	—	—	—	—	—	—	—	—	—	—
10000	16x25 16x31.5	16x35.5 18x35.5	18x35.5 18x41	—	—	—	—	—	—	—	—	—	—	—
15000	16x35.5 18x35.5	18x35.5	—	—	—	—	—	—	—	—	—	—	—	—