

2000 - 5000h at 105°C

- Low Impedance
- High Ripple Current
- SMPS, UPS

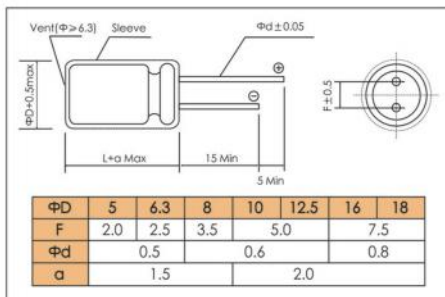


Items	Characteristics																		
Operating Temperature Range (°C)	-55 ~ +105																		
Voltage Range (V)	6.3 ~ 100																		
Capacitance Range (µF)	0.47 ~ 15000																		
Capacitance Tolerance (20°C, 120Hz)	± 20%																		
Leakage Current (µA)	After 2 minutes at 20°C application of rated voltage, leakage current is not more than 0.02CV or 3, whichever is greater. C: Nominal Capacitance (µF) V: Rated Voltage (V)																		
Dissipation Factor (20°C, 120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tan δ (max)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </tbody> </table>	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100										
Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08											
For Capacitances >1000µF add 0.02 to every 1000µF																			
Stability at Low Temperature (Impedance Ratio at 120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3 ~ 100</th> </tr> </thead> <tbody> <tr> <td>Z_{-55°C} / Z_{+20°C}</td> <td>3</td> </tr> </tbody> </table>	Rated Voltage (V)	6.3 ~ 100	Z _{-55°C} / Z _{+20°C}	3														
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	Useful Life	Load Life	Endurance Test	Shelf Life
Lifetime	$\Phi \leq 6.3$: 4000h $\Phi 8 - 10$: 6000h $\Phi \geq 12.5$: 10000h $\Phi \geq 8$: > 250000h	$\Phi \leq 6.3$: 2000h $\Phi 8 - 10$: 3000h $\Phi \geq 12.5$: 5000h	$\Phi \leq 6.3$: 3000h $\Phi 8 - 10$: 5000h $\Phi \geq 12.5$: 7000h	1000h
Leakage Current	Not more than specified value	Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ± 30% of initial value	Within ± 20% of initial value	Within ± 20% of initial value	Within ± 20% of initial value
Dissipation Factor	Not more than 300% of specified value	Not more than 200% of specified value	Not more than 200% of specified value	Not more than 200% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	U_R I_R 105°C	U_R $1.4 \times I_R$ 40°C	U_R I_R 105°C	U_R $I_R = 0$ 105°C After test: U_R to be applied for 30min >24h before measurement

Dimensions

mm



Frequency Coefficient

Cap (µF)	Frequency			
	120Hz	1kHz	10kHz	100kHz
0.47 ~ 4.7	0.40	0.68	0.83	1.00
5.6 ~ 47	0.50	0.76	0.87	1.00
56 ~ 270	0.70	0.85	0.93	1.00
330 ~ 1000	0.80	0.93	0.98	1.00
1200 ~ 15000	0.90	0.95	1.00	1.00

Temperature Coefficient

Temperature(°C)	+70	+85	+105
Coefficient	1.96	1.68	1.00

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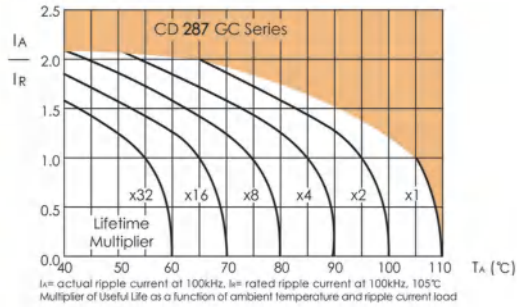
Ratings for CD 287 Series

U_s (Surge Voltage) Code	Rated Capa- cittance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Max Imp -10°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Size $\Phi D \times L$
(V)	(μF)	(Ω)	(Ω)	(Ω)	(mArms)	(mm)
35 (44) 1V	1800	0.088	0.025	0.050	2350	16×31.5
		0.088	0.027	0.054	2200	18×25
	2200	0.084	0.022	0.044	2550	16×35.5
		0.084	0.023	0.046	2490	18×31.5
	2700	0.069	0.020	0.040	2900	16×40
		0.069	0.020	0.040	2770	18×35.5
	3300	0.064	0.019	0.038	3110	18×40
	0.47	282.333	3.9	7.8	22	5×11.5
	1	132.696	3.5	7.0	36	5×11.5
	2.2	60.317	3.0	6.0	54	5×11.5
3.3	40.211	2.6	5.2	63	5×11.5	
4.7	28.233	2.2	4.4	75	5×11.5	
10	13.270	1.4	2.8	110	5×11.5	
18	7.372	0.95	1.9	120	5×11.5	
27	4.915	0.55	1.1	135	5×15	
39	3.402	0.36	0.72	148	6.3×11.5	
56	2.370	0.28	0.56	153	6.3×15	
68	1.951	0.20	0.40	360	8×11.5	
82	1.618	0.18	0.36	460	8×16	
	1.618	0.18	0.36	443	10×12.5	
100	1.327	0.15	0.30	553	10×16	
120	1.106	0.13	0.26	670	8×20	
180	0.737	0.095	0.19	676	10×20	
	0.737	0.105	0.21	745	12.5×15	
220	0.603	0.080	0.16	876	10×25	
330	0.402	0.065	0.13	1010	10×30	
	0.402	0.070	0.14	979	12.5×20	
	0.402	0.075	0.15	982	16×15	
470	0.282	0.054	0.108	1180	12.5×25	
	0.282	0.058	0.116	1180	18×15	
560	0.237	0.050	0.1	1310	12.5×30	
680	0.195	0.046	0.092	1470	12.5×35	
	0.195	0.050	0.1	1210	16×20	
820	0.162	0.044	0.088	1590	12.5×40	
	0.162	0.048	0.096	1490	16×25	
	0.162	0.046	0.092	1450	18×20	
1000	0.133	0.040	0.08	1890	16×31.5	
1200	0.133	0.040	0.08	1720	18×25	
1500	0.111	0.032	0.064	2140	16×35.5	
	0.088	0.026	0.052	2410	16×40	
1800	0.088	0.026	0.052	1970	18×31.5	
	0.074	0.025	0.050	2310	18×35.5	
2200	0.072	0.024	0.048	2530	18×40	
12	9.952	1.2	3.6	120	5×11.5	
	6.635	0.85	2.6	135	5×15	
27	4.423	0.55	1.7	148	6.3×11.5	
39	3.062	0.38	1.1	153	6.3×15	
47	2.541	0.32	0.96	360	8×11.5	
56	2.133	0.23	0.69	448	10×12.5	
68	1.756	0.24	0.72	469	8×16	
	1.756	0.17	0.51	553	10×16	
82	1.456	0.17	0.51	682	8×20	
120	0.995	0.12	0.36	676	10×20	
150	0.796	0.10	0.30	876	10×25	
	0.796	0.11	0.33	745	12.5×15	
180	0.663	0.085	0.26	1020	10×30	
220	0.543	0.075	0.23	979	12.5×20	
	0.543	0.080	0.24	928	16×15	
270	0.442	0.065	0.20	1180	12.5×25	
330	0.362	0.065	0.20	1200	18×15	
	0.306	0.055	0.17	1310	12.5×30	
390	0.306	0.057	0.17	1210	16×20	
	0.254	0.048	0.14	1470	12.5×35	
470	0.254	0.052	0.16	1490	16×25	
	0.254	0.058	0.17	1460	18×20	
	0.213	0.042	0.13	1590	12.5×40	
560	0.176	0.042	0.13	1890	16×31.5	
	0.176	0.050	0.15	1740	18×25	
680	0.146	0.036	0.11	2140	16×35.5	
	0.146	0.042	0.13	1990	18×31.5	
1000	0.119	0.032	0.096	2410	16×40	
	0.119	0.035	0.11	2340	18×35.5	
1200	0.100	0.032	0.096	2560	18×40	

U_s (Surge Voltage) Code	Rated Capa- cittance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Max Imp -10°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Size $\Phi D \times L$	
(V)	(μF)	(Ω)	(Ω)	(Ω)	(mArms)	(mm)	
100 (125) 2A	5.6	18.957	1.9	7.6	57	5×11.5	
		8.2	12.946	1.3	5.2	74	5×15
		12	8.846	1.1	4.4	78	6.3×11.5
	18	5.898	0.62	2.5	85	6.3×15	
		22	4.825	0.53	2.1	275	8×11.5
	27	3.932	0.47	1.9	319	10×12.5	
		33	3.217	0.35	1.4	360	8×16
	3.217		0.32	1.3	424	10×16	
	39	2.722	0.27	1.1	490	8×20	
	56	1.896	0.25	1.0	499	10×20	
	68	1.561	0.18	0.72	634	10×25	
		1.561	0.20	0.80	613	12.5×15	
	100	1.062	0.15	0.60	739	10×30	
1.062		0.13	0.52	805	12.5×20		
120	0.885	0.11	0.44	857	12.5×25		
	0.885	0.13	0.50	706	16×15		
150	0.708	0.12	0.48	871	18×15		
180	0.590	0.090	0.36	1120	12.5×30		
	0.590	0.11	0.44	916	16×20		
220	0.483	0.075	0.30	1240	12.5×35		
	0.483	0.081	0.32	1290	16×25		
270	0.393	0.060	0.24	1330	12.5×40		
	0.393	0.085	0.34	1170	18×20		
330	0.322	0.059	0.23	1630	16×31.5		
	0.322	0.071	0.28	1500	18×25		
390	0.272	0.052	0.21	1750	16×35.5		
	0.272	0.058	0.23	1630	18×31.5		
470	0.226	0.045	0.18	1920	16×40		
560	0.190	0.054	0.22	1920	18×35.5		
680	0.156	0.041	0.16	2100	18×40		

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Lifetime Diagram



Typical Curves

