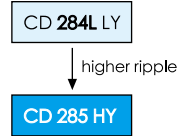


CD 285 HY SERIES



6000 - 10000h at 105°C

- Higher ripple current capability and smaller sizes than CD284L series
- Lower Impedance at high frequency
- Load life of 6000 to 10000hrs

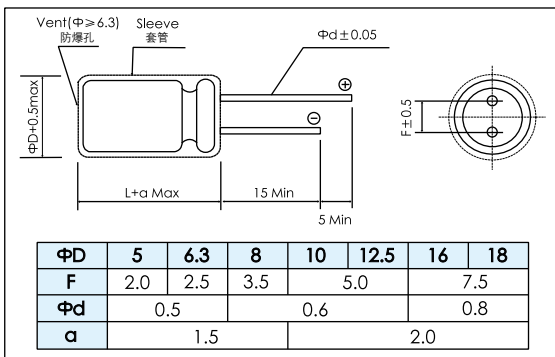


Items	Characteristics																				
Operating Temperature Range (°C)	-40 ~ +105																				
Rated Voltage Range (V)	6.3 ~ 100																				
Capacitance Range (μF)	8.2 ~ 8200																				
Capacitance Tolerance (20°C, 120Hz)	± 20%																				
Leakage Current (μA)	After 2 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 3uA, whichever is greater. C: Nominal Capacitance (μF) V: Rated Voltage (V)																				
Dissipation Factor (20°C, 120Hz)	<table border="1"> <thead> <tr> <th>WV (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>80</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> <td>0.08</td> </tr> </tbody> </table>	WV (V)	6.3	10	16	25	35	50	63	80	100	Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08
	WV (V)	6.3	10	16	25	35	50	63	80	100											
Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08												
For Capacitances >1000μF add 0.02 to every 1000μF																					
Stability at Low Temperature (Impedance ratio at 120Hz)	Rated Voltage	6.3	10	16	25	35	50	63	80	100											
	Z _{-25°C} / Z _{+20°C}	4	3	2	2	2	2	2	2	2											
	Z _{-40°C} / Z _{+20°C}	12	10	8	6	4	3	3	3	3											

	Useful Life		Load Life	Endurance Life	Shelf Life
Life Time	Φ ≤ 6.3 : 8000h Φ = 8 : 10000h Φ ≥ 10 : 12000h	Φ > 8 : 110000h	Φ ≤ 6.3 : 6000h Φ = 8 : 8000h Φ ≥ 10 : 10000h	Φ ≤ 6.3 : 7000h Φ = 8 : 10000h Φ ≥ 10 : 12000h	500h
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 (6.3V, 10V: ± 40%)		Within ± 25% of initial value (6.3V, 10V: ± 30%)	Within ± 25% of initial value (6.3V, 10V: ± 30%)	Within ± 20% of initial value
Dissipation Factor	Not more than 300% of specified value (6.3V, 10V: 400%)		Not more than 200% of specified value (6.3V, 10V: 300%)	Not more than 200% of specified value (6.3V, 10V: 300%)	Not more than 200% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	U _R I _R 105°C	U _R 1.4 x I _R 60°C	U _R I _R 105°C	U _R I _R = 0 105°C	U _R = 0 105°C After test: U _R to be applied for 30min >24h before measurement

Dimensions

mm



Frequency Coefficient

Cap (μF)	Freq(Hz)			
	120	1k	10k	100k
8.2 ~ 33	0.42	0.70	0.90	1.00
47 ~ 270	0.50	0.73	0.92	1.00
330 ~ 680	0.55	0.77	0.94	1.00
820 ~ 1800	0.60	0.80	0.96	1.00
2200 ~ 8200	0.70	0.85	0.98	1.00

Temperature Coefficient

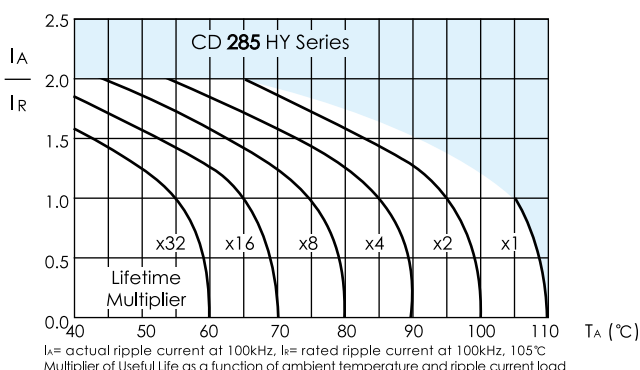
Temperature(°C)	<65	+85	+105
Coefficient	2.0	1.7	1.0

Ratings for CD 285 HY Series

U _r (Surge Voltage Code)	Rated Capa- cance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Max Imp -10°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Size ΦD x L	P/N
(V)	(μF)	(Ω)	(Ω)	(Ω)	(mA _{rms})	(mm)	-
63 (79) 1J	18	6.635	0.71	3.2	240	5×11.5	ECR1JHY180M□□050011
	47	2.541	0.28	1.3	420	6.3×11.5	ECR1JHY470M□□063011
	82	1.456	0.18	0.79	720	8×11.5	ECR1JHY820M□□080011
	100	1.194	0.13	0.39	1000	8×11.5	ECR1JHY101M□□080011
		1.194	0.13	0.58	990	8×16	ECR1JHY101M□□080016
	120	0.995	0.095	0.29	1300	8×16	ECR1JHY121M□□080016
		0.995	0.11	0.44	990	10×12.5	ECR1JHY121M□□100012
	150	0.796	0.096	0.43	1200	8×20	ECR1JHY151M□□080020
		0.796	0.08	0.24	1300	10×12.5	ECR1JHY151M□□100012
	180	0.663	0.069	0.21	1600	8×20	ECR1JHY181M□□080020
		0.663	0.076	0.31	1200	10×16	ECR1JHY181M□□100016
	220	0.543	0.058	0.17	1700	10×16	ECR1JHY221M□□100016
	270	0.442	0.056	0.23	1570	10×20	ECR1JHY271M□□100020
		0.442	0.072	0.27	1570	12.5×16	ECR1JHY271M□□125016
	330	0.362	0.042	0.13	2000	10×20	ECR1JHY331M□□100020
		0.362	0.046	0.19	1990	10×25	ECR1JHY331M□□100025
		0.362	0.045	0.14	1900	12.5×16	ECR1JHY331M□□125016
	390	0.306	0.035	-0.11	2400	10×25	ECR1JHY391M□□100025
		0.306	0.041	0.13	1990	12.5×20	ECR1JHY391M□□125020
	470	0.254	0.033	0.099	2400	12.5×20	ECR1JHY471M□□125020
		0.254	0.031	0.093	2460	12.5×25	ECR1JHY471M□□125025
	560	0.213	0.028	0.084	2760	12.5×30	ECR1JHY561M□□125030
		0.213	0.032	0.096	2380	16×20	ECR1JHY561M□□160020
	680	0.176	0.025	0.075	2800	12.5×25	ECR1JHY681M□□125025
		0.176	0.024	0.072	3040	1 2.5×35	ECR1JHY681M□□125035
	820	0.146	0.022	0.066	3200	12.5×30	ECR1JHY821M□□125030
		0.146	0.025	0.075	2900	16×20	ECR1JHY821M□□160020
		0.146	0.025	0.075	2890	16×25	ECR1JHY821M□□160025
	1000	0.120	0.018	0.054	3500	12.5×35	ECR1JHY102M□□125035
		0.120	0.02	0.06	3200	16×25	ECR1JHY102M□□160025
	1200	0.100	0.021	0.063	3800	12.5×40	ECR1JHY122M□□125040
		0.100	0.032	0.096	3000	18×20	ECR1JHY122M□□180020
	1500	0.080	0.02	0.06	3500	16×31.5	ECR1JHY152M□□160031
		0.080	0.024	0.072	3200	18×25	ECR1JHY152M□□180025
	1800	0.067	0.017	0.051	3800	16×35.5	ECR1JHY182M□□160035
		0.067	0.02	0.06	3700	18×31.5	ECR1JHY182M□□180031
	2200	0.055	0.015	0.045	4100	16×40	ECR1JHY222M□□160040
		0.055	0.017	0.051	3900	18×35.5	ECR1JHY222M□□180035
	2700	0.044	0.015	0.045	4300	18×40	ECR1JHY272M□□180040

U _r (Surge Voltage Code)	Rated Capa- cance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Max Imp -10°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Size ΦD x L	P/N	
(V)	(μF)	(Ω)	(Ω)	(Ω)	(mA _{rms})	(mm)	-	
80 (100) 1K	12	8.846	1.2	5.4	220	5×11.5	ECR1KHY120M□□050011	
	27	3.932	0.46	2.1	370	6.3×11.5	ECR1KHY270M□□063011	
	47	2.259	0.29	1.3	620	8×11.5	ECR1KHY470M□□080011	
	56	1.896	0.20	0.9	780	8×16	ECR1KHY560M□□080016	
	68	1.561	0.17	0.66	780	10×12.5	ECR1KHY680M□□100012	
	82	1.295	0.16	0.66	1040	8×20	ECR1KHY820M□□080020	
	100	1.062	0.11	0.47	1040	10×16	ECR1KHY101M□□100016	
	150	0.708	0.084	0.34	1430	10×20	ECR1KHY151M□□100020	
		0.708	0.11	0.34	1430	12.5×16	ECR1KHY151M□□125016	
	180	0.590	0.069	0.28	1620	10×25	ECR1KHY181M□□100025	
	220	0.483	0.062	0.18	1750	12.5×20	ECR1KHY221M□□125020	
	270	0.393	0.047	0.14	2210	12.5×25	ECR1KHY271M□□125025	
	330	0.322	0.042	0.13	2400	12.5×30	ECR1KHY331M□□125030	
		0.322	0.048	0.15	1950	16×20	ECR1KHY331M□□160020	
	390	0.272	0.036	0.11	2600	12.5×35	ECR1KHY391M□□125035	
	470	0.226	0.032	0.095	2860	12.5×40	ECR1KHY471M□□125040	
		0.226	0.038	0.12	2430	16×25	ECR1KHY471M□□160025	
	560	0.226	0.045	0.14	2270	18×20	ECR1KHY471M□□180020	
		0.190	0.032	0.095	2640	16×31.5	ECR1KHY561M□□160031	
	680	0.156	0.029	0.086	2860	16×35.5	ECR1KHY681M□□160035	
		0.156	0.036	0.11	2500	18×25	ECR1KHY681M□□180025	
	820	0.129	0.027	0.081	3510	16×40	ECR1KHY821M□□160040	
		0.129	0.030	0.090	2860	18×31.5	ECR1KHY821M□□180031	
	1000	0.106	0.027	0.081	3510	18×35.5	ECR1KHY102M□□180035	
	1200	0.088	0.026	0.076	3860	18×40	ECR1KHY122M□□180040	
	100 (125) 2A	8.2	12.946	1.2	5.4	220	5×11.5	ECR2AHY8R2M□□050011
		18	5.898	0.46	2.1	370	6.3×11.5	ECR2AHY180M□□063011
		33	3.217	0.29	1.3	620	8×11.5	ECR2AHY330M□□080011
		47	2.259	0.20	0.90	780	8×16	ECR2AHY470M□□080016
		56	1.896	0.17	0.66	780	10×12.5	ECR2AHY560M□□100012
		68	1.561	0.16	0.66	1040	8×20	ECR2AHY680M□□080020
		82	1.295	0.11	0.47	1040	10×16	ECR2AHY820M□□100016
		100	1.062	0.084	0.34	1430	10×20	ECR2AHY101M□□100020
			1.062	0.11	0.34	1430	12.5×16	ECR2AHY101M□□125016
		120	0.885	0.069	0.28	1620	10×25	ECR2AHY121M□□100025
		150	0.708	0.062	0.18	1750	12.5×20	ECR2AHY151M□□125020
		220	0.483	0.047	0.14	2210	12.5×25	ECR2AHY221M□□125025
		270	0.393	0.042	0.13	2400	12.5×30	ECR2AHY271M□□125030
			0.393	0.048	0.15	1950	16×20	ECR2AHY271M□□160020
		330	0.322	0.036	0.11	2600	12.5×35	ECR2AHY331M□□125035
			0.272	0.032	0.095	2860	12.5×40	ECR2AHY391M□□125040
		390	0.272	0.038	0.12	2430	16×25	ECR2AHY391M□□160025
0.272			0.045	0.14	2270	18×20	ECR2AHY391M□□180020	
470		0.226	0.032	0.095	2640	16×31.5	ECR2AHY471M□□160031	
		0.226	0.036	0.11	2500	18×25	ECR2AHY471M□□180025	
560		0.190	0.029	0.086	2860	16×35.5	ECR2AHY561M□□160035	
		0.190	0.030	0.090	2860	18×31.5	ECR2AHY561M□□180031	
680		0.156	0.027	0.081	3510	16×40	ECR2AHY681M□□160040	
	0.156	0.027	0.081	3510	18×35.5	ECR2AHY681M□□180035		
820	0.129	0.026	0.076	3860	18×40	ECR2AHY821M□□180040		

Lifetime Diagram



Customer products are available on request.