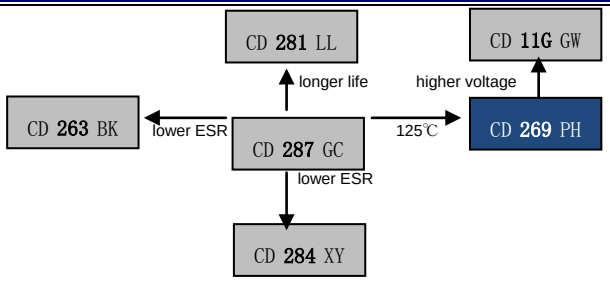
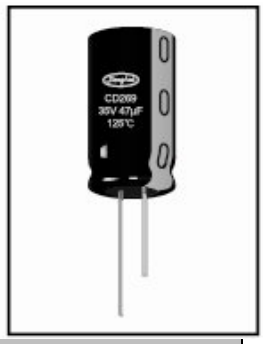
CD 269 PH Series

2000h at 125℃

- High Reliability at High Temperature
- Automotive
- Professional Long-Life Applications





Items	Characteristics
Operating Temperature Range(°C)	-40 ~ +125
Rated Voltage Range(V)	10 ~63
Capacitance Range(μF)	47 ~3300
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 0.04CV C:Nominal Capacitance(μF) V:Rated Voltage(V)
Dissipation Factor (20°C, 120Hz)	See table below

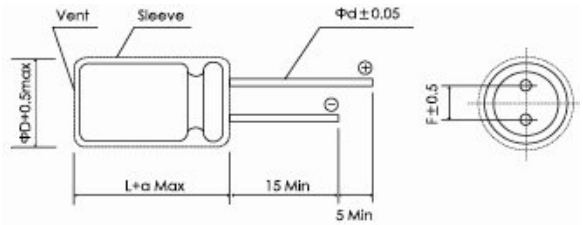
Rated Voltage(V)	10	16	25	35	50	63
Tan δ(max)	0.20	0.16	0.14	0.12	0.10	0.09

For Capacitances>1000μF add 0.02 to every 1000μF

	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	4000h	>180000h	2000h	3000h	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 ±50% of initial value		Within ± 30% of initial value	Within ±30% of initial value	Within ±30% of initial value
Dissipation Factor	Not more than 500% of specified value		Not more than 300% of specified value	Not more than 300% of specified value	Not more than 300% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	U_R I_R 125°C	U_R 1.4 x I_R 60°C	U_R I_R 125°C	U_R I_R = 0 125°C	U_R =0 I_R = 0 125°C

After test: U_R to be applied for 30min>24h before measurement

Dimensions mm



ΦD	8	10	12.5	16
F	3.5	5.0		7.5
Φd	0.6			8.0
a	2.0			

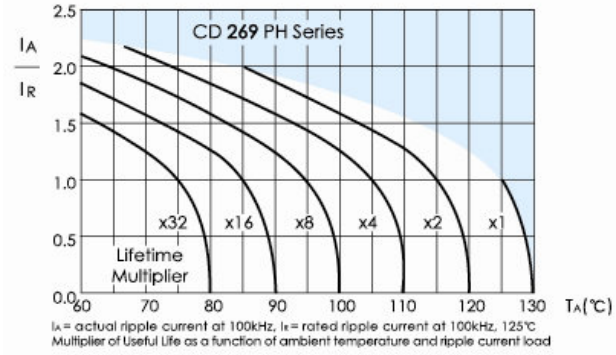
Frequency Coefficient

Frequency / Cap(μF)	120Hz	1kHz	10kHZ	100KHZ
47~100	0.40	0.75	0.90	1.00
220~330	0.50	0.85	0.95	1.00
470~1000	0.60	0.88	0.96	1.00
2200~3300	0.75	0.90	0.98	1.00

Temperature Coefficient

Temperature(℃)	+65	+85	+105	+125
Coefficient	2.2	2.0	1.7	1.0

Lifetime Diagram



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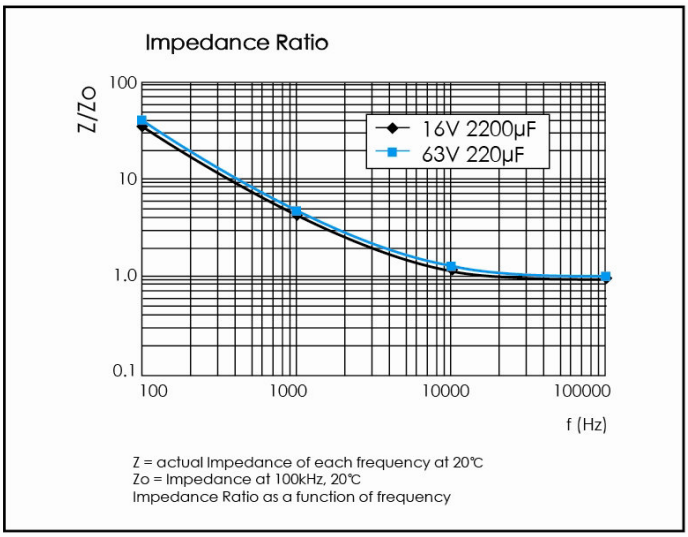
Ratings for CD 269 PH Series

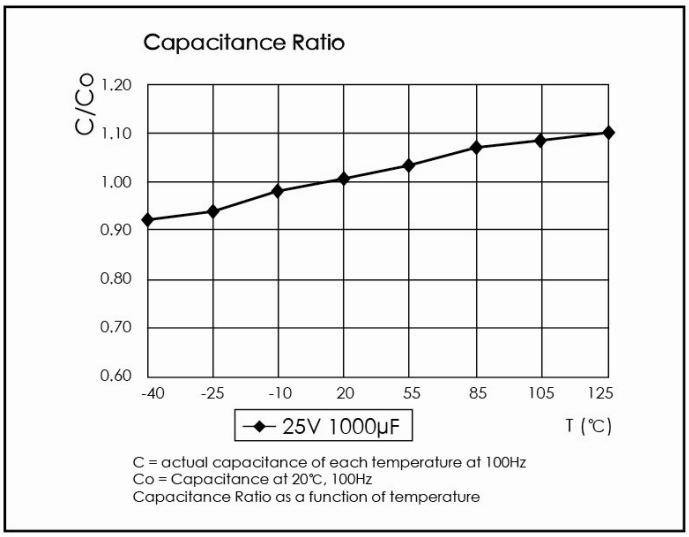
U_R (Surge Voltage) Code	Rated Capacitance	Max ESR 20℃, 120Hz	Max Imp 20℃, 100kHz	MAX Imp -10℃, 100kHz	Rated Ripple Current 125℃, 100kHz	Size ΦD×L	P/N
(v)	(μF)	(Ω)	(Ω)	(Ω)	(mArms)	(mm)	-
10 (13) 1A	330	0.8	0.33	0.66	340	8×11.5	ECR1APH331M□□080011
	470	0.57	0.24	0.48	500	10×12.5	ECR1APH471M□□100012
	1000	0.27	0.12	0.24	770	10×20	ECR1APH102M□□100020
	2200	0.14	0.061	0.13	1250	12.5×25	ECR1APH222M□□125025
	3300	0.1	0.05	0.1	1380	16×25	ECR1APH332M□□160025
16 (20) 1C	220	0.97	0.33	0.66	340	8×11.5	ECR1CPH221M□□080011
	330	0.65	0.24	0.48	500	10×12.5	ECR1CPH331M□□100012
	470	0.46	0.2	0.4	630	10×16	ECR1CPH471M□□100016
	1000	0.22	0.077	0.16	920	12.5×20	ECR1CPH102M□□125020
	2200	0.11	0.05	0.1	1380	16×25	ECR1CPH222M□□160025
25 (32) 1E	220	0.85	0.23	0.46	480	8×16	ECR1EPH221M□□080016
	330	0.57	0.2	0.4	630	10×16	ECR1EPH331M□□100016
	470	0.4	0.12	0.24	770	10×20	ECR1EPH471M□□100020
	1000	0.19	0.061	0.13	1250	12.5×25	ECR1EPH102M□□125025
35 (44) 1V	100	1.6	0.33	0.66	340	8×11.5	ECR1VPH101M□□080011
	220	0.73	0.2	0.4	630	10×16	ECR1VPH221M□□100016
	330	0.49	0.12	0.24	770	10×20	ECR1VPH331M□□100020
	470	0.34	0.077	0.16	920	12.5×20	ECR1VPH471M□□125020
	1000	0.16	0.05	0.1	1380	16×25	ECR1VPH102M□□160025
50 (63) 1H	100	1.33	0.36	0.72	420	10×12.5	ECR1HPH101M□□100012
	220	0.61	0.2	0.4	655	10×20	ECR1HPH221M□□100020
	330	0.41	0.12	0.24	780	12.5×20	ECR1HPH331M□□125020
	470	0.29	0.1	0.2	1060	12.5×25	ECR1HPH471M□□125025
63 (79) 1J	47	2.55	0.68	2.1	245	8×11.5	ECR1JPH470M□□080011
	100	1.2	0.38	1.2	425	10×16	ECR1JPH101M□□100016
	220	0.55	0.18	0.54	665	12.5×20	ECR1JPH221M□□125020
	330	0.37	0.14	0.42	900	12.5×25	ECR1JPH331M□□125025

Customer products are available on request.

Typical Curves



Z = actual Impedance of each frequency at 20℃
Zo = Impedance at 100kHz, 20℃
Impedance Ratio as a function of frequency



C = actual capacitance of each temperature at 100Hz
Co = Capacitance at 20℃, 100Hz
Capacitance Ratio as a function of temperature