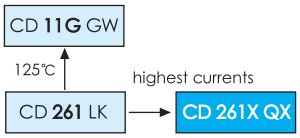
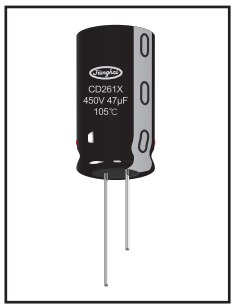
CD 261X QX SERIES

5000 - 10000h at 105℃

- Extra high Ripple Current
- Downsized
- Electronic Ballast, LED Lighting





Items	Characteristics
Operating Temperature Range (℃)	-40 ~ +105
Voltage Range (V)	160 ~ 500
Capacitance Range (μF)	1.0 ~ 220
Capacitance Tolerance (20℃, 120Hz)	± 20%
Leakage Current (μA)	After 1 minute at 20℃ application of rated voltage, leakage current is not more than 0.04CV + 100. C: Nominal Capacitance (μF) V: Rated Voltage (V)

Dissipation Factor (20℃, 120Hz)

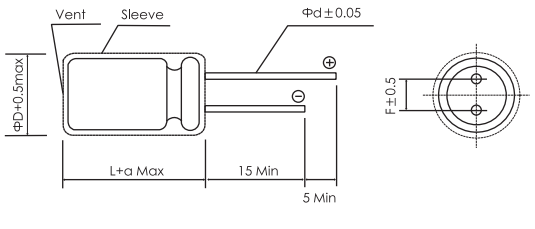
Rated Voltage (V)	160	200	250	350	400	450	500
Tan δ (max)	0.15			0.20			

Stability at Low Temperature (Impedance Ratio at 120Hz)

Rated Voltage (V)	160	200	250	350	400	450	500
$Z_{-25℃} / Z_{+20℃}$	3			6			
$Z_{-40℃} / Z_{+20℃}$	6			8			10

	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	Φ6.3×11.5 : 7000h Φ8~10 :10000h Φ ⩾ 12.5 :12000h	⩾100000h	Φ6.3×11.5 : 5000h Φ8~10 : 8000h Φ ⩾ 12.5 :10000h	Φ6.3×11.5 : 7000h Φ8~10 :10000h Φ ⩾ 12.5 :12000h	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 ± 20% of initial value	Within ± 20% of initial value
Dissipation Factor	Not more than 500% of specified value		Not more than 300% 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℃	U_R $1.6 \times I_R$ 50℃	U_R I_R 105℃	U_R $I_R = 0$ 105℃	$U_R = 0$ $I_R = 0$ 105℃ After test: U_R to be applied for 30min >24h before measurement

Dimensions mm



ΦD	6.3	8	10	12.5	16	18	20	
F	2.5	3.5	5.0		7.5		7.5	10
Φd	0.5	0.6			0.8			
a	1.5	2.0						

Frequency Coefficient

Cap (μF) \ Frequency	120Hz	1kHz	10kHz	50kHz	100kHz
1 ~ 5.6	0.2	0.4	0.8	0.92	1.0
6.8 ~ 15	0.3	0.6	0.9	0.96	1.0
22 ~ 82	0.4	0.7	0.9	0.96	1.0
100 ~ 220	0.45	0.75	0.9	0.96	1.0

Temperature Coefficient

Ambient Temperature(℃)	+65	+85	+105
Coefficient	2.1	1.7	1.0

CD 261X QX SERIES

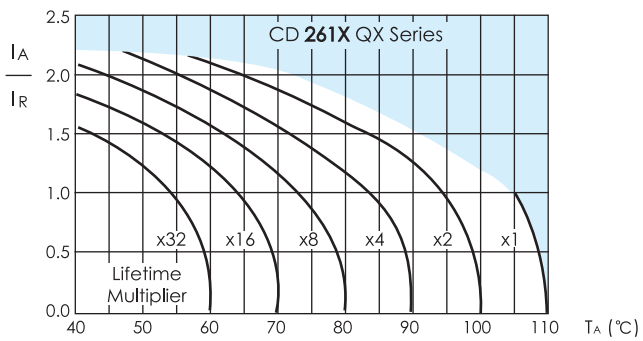
Ratings for CD **261X** QX Series

U_R (Surge Voltage) & Code	Rated Capa-citance	Max ESR 20℃, 120Hz	Typ ESR 20℃, 120Hz	Rated Ripple Current 105℃, 100kHz	Size ΦD x L	P/N
(V)	(μF)	(Ω)	(Ω)	(mArms)	(mm)	-
160 (200) 2C	10	19.9	8	320	10×16	ECR2CQX100M□□100016
	22	9	3.6	500	10×20	ECR2CQX220M□□100020
	33	6	2.4	650	10×20	ECR2CQX330M□□100020
	47	4.2	1.7	750	10×20	ECR2CQX470M□□100020
	68	2.9	1.2	1180	12.5×20	ECR2CQX680M□□125020
		2.9	1.2	1180	16×20	ECR2CQX680M□□160020
	100	2	0.8	1420	12.5×25	ECR2CQX101M□□125025
		2	0.8	1420	16×20	ECR2CQX101M□□160020
	150	1.3	0.5	1890	16×25.5	ECR2CQX151M□□160025
	220	0.9	0.4	2370	18×25.5	ECR2CQX221M□□180025
200 (250) 2D	4.7	42.3	16.9	160	8×11.5	ECR2DQX4R7M□□080011
		42.3	16.9	200	10×12.5	ECR2DQX4R7M□□100012
	6.8	29.3	11.7	220	10×16	ECR2DQX6R8M□□100016
	10	19.9	8	320	10×16	ECR2DQX100M□□100016
	22	9	3.6	500	10×20	ECR2DQX220M□□100020
	33	6	2.4	650	10×20	ECR2DQX330M□□100020
	47	4.2	1.7	980	12.5×20	ECR2DQX470M□□125020
	68	2.9	1.2	1300	12.5×25	ECR2DQX680M□□125025
		2.9	1.2	1300	16×20	ECR2DQX680M□□160020
	100	2	0.8	1420	16×20	ECR2DQX101M□□160020
	150	1.3	0.5	1890	16×25.5	ECR2DQX151M□□160025
250 (300) 2E	4.7	42.3	16.9	160	8×11.5	ECR2EQX4R7M□□080011
		42.3	16.9	200	10×12.5	ECR2EQX4R7M□□100012
	6.8	29.3	11.7	250	10×12.5	ECR2EQX6R8M□□100012
	10	19.9	8	320	10×16	ECR2EQX100M□□100016
	22	9	3.6	470	10×16	ECR2EQX220M□□100016
		9	3.6	500	10×20	ECR2EQX220M□□100020
	33	6	2.4	760	12.5×16	ECR2EQX330M□□125016
		6	2.4	800	12.5×20	ECR2EQX330M□□125020
	47	4.2	1.7	980	12.5×20	ECR2EQX470M□□125020
	68	2.9	1.2	1300	16×20	ECR2EQX680M□□160020
		2.9	1.2	1300	12.5×25	ECR2EQX680M□□125025
	100	2	0.8	1530	16×25.5	ECR2EQX101M□□160025
		2	0.8	1440	18×20.5	ECR2EQX101M□□180020
	150	1.3	0.5	1960	18×25.5	ECR2EQX151M□□180025
350 (400) 2V	1.5	176.9	53.1	80	6.3×11.5	ECR2VQX1R5M□□063011
		176.9	53.1	90	8×11.5	ECR2VQX1R5M□□080011
	2.2	120.6	36.2	120	8×11.5	ECR2VQX2R2M□□080011
		120.6	36.2	140	10×12.5	ECR2VQX2R2M□□100012
	3.3	80.4	24.1	150	8×11.5	ECR2VQX3R3M□□080011
		80.4	24.1	180	10×12.5	ECR2VQX3R3M□□100012
	4.7	56.5	16.9	150	10×12.5	ECR2VQX4R7M□□100012
	5.6	47.4	14.2	180	10×12.5	ECR2VQX5R6M□□100012
	6.8	39	11.7	280	10×16	ECR2VQX6R8M□□100016
	10	26.5	8	350	10×20	ECR2VQX100M□□100020
	22	12.1	3.6	650	12.5×20	ECR2VQX220M□□125020
	33	8	2.4	900	16×20	ECR2VQX330M□□160020
	47	5.6	1.7	1080	16×20	ECR2VQX470M□□160020
	68	3.9	1.2	1470	18×25.5	ECR2VQX680M□□180025
	82	3.2	0.97	1530	18×25.5	ECR2VQX820M□□180025
400 (450) 2G	1	265.4	79.6	50	6.3×11.5	ECR2GQX010M□□063011
		265.4	79.6	60	8×11.5	ECR2GQX010M□□080011
	1.5	176.9	53.1	70	6.3×11.5	ECR2GQX1R5M□□063011
		176.9	53.1	80	8×11.5	ECR2GQX1R5M□□080011
	2.2	120.6	36.2	95	8×11.5	ECR2GQX2R2M□□080011
		120.6	36.2	140	10×12.5	ECR2GQX2R2M□□100012
	3.3	80.4	24.1	150	10×12.5	ECR2GQX3R3M□□100012
		80.4	24.1	180	10×16	ECR2GQX3R3M□□100016
	4.7	56.5	16.9	220	10×16	ECR2GQX4R7M□□100016
	5.6	47.4	14.2	250	10×20	ECR2GQX5R6M□□100020
	6.8	39	11.7	280	10×20	ECR2GQX6R8M□□100020
	10	26.5	8	350	10×20	ECR2GQX100M□□100020
	15	17.7	5.3	550	12.5×20	ECR2GQX150M□□125020
	22	12.1	3.6	760	12.5×25	ECR2GQX220M□□125025
		12.1	3.6	760	16×20	ECR2GQX220M□□160020
	33	8	2.4	900	16×20	ECR2GQX330M□□160020

U_R (Surge Voltage) Code	Rated Capa-citance	Max ESR 20℃, 120Hz	Typ ESR 20℃, 120Hz	Rated Ripple Current 105℃, 100kHz	Size ΦD x L	P/N
(V)	(μF)	(Ω)	(Ω)	(mArms)	(mm)	-
400 (450) 2G	47	5.6	1.7	1180	16×25.5	ECR2GQX470M□□160025
		5.6	1.7	1180	18×20.5	ECR2GQX470M□□180020
	68	3.9	1.2	1470	18×25.5	ECR2GQX680M□□180025
	82	3.2	1	1600	18×31.5	ECR2GQX820M□□180031
	100	2.7	0.8	1778	18×36	ECR2GQX101M□□180036
450 (500) 2W	2.2	120.6	36.2	90	8×11.5	ECR2WQX2R2M□□080011
		120.6	36.2	150	10×12.5	ECR2WQX2R2M□□100012
	3.3	80.4	24.1	180	10×12.5	ECR2WQX3R3M□□100012
		80.4	24.1	190	10×16	ECR2WQX3R3M□□100016
	4.7	56.5	16.9	212	10×16	ECR2WQX4R7M□□100016
		56.5	16.9	220	10×20	ECR2WQX4R7M□□100020
	5.6	47.4	14.2	200	10×16	ECR2WQX5R6M□□100016
		47.4	14.2	250	10×20	ECR2WQX5R6M□□100020
	6.8	39	11.7	230	10×16	ECR2WQX6R8M□□100016
		39	11.7	280	10×20	ECR2WQX6R8M□□100020
	10	26.5	8	330	10×20	ECR2WQX100M□□100020
	15	17.7	5.3	450	12.5×20	ECR2WQX150M□□125020
	22	12.1	3.6	730	16×20	ECR2WQX220M□□160020
		12.1	3.6	600	12.5×25	ECR2WQX220M□□125025
	33	8	2.4	980	16×25.5	ECR2WQX330M□□160025
	47	5.6	1.7	1200	18×25.5	ECR2WQX470M□□180025
	68	3.9	1.2	1575	18×31.5	ECR2WQX680M□□180031
	82	3.2	1	1675	18×36	ECR2WQX820M□□180036
	100	2.7	0.8	1730	18×36	ECR2WQX101M□□180036
	120	2.2	0.7	1820	18×40	ECR2WQX121M□□180040
500 (550) 2H	10	26.5	9.3	360	12.5×20	ECR2HQX100M□□125020
	15	17.7	6.2	480	12.5×25	ECR2HQX150M□□125025
	22	12.1	4.2	580	16×25.5	ECR2HQX220M□□160025
	33	8	2.8	720	16×31.5	ECR2HQX330M□□160031
	47	5.6	2	900	18×31.5	ECR2HQX470M□□180031
	68	3.9	1.4	1250	18×36	ECR2HQX680M□□180036
	82	3.2	1.1	1380	20×41	ECR2HQX820M□□200041
	100	2.7	0.9	1450	20×41	ECR2HQX101M□□200041

Customer products are available on request.

Lifetime Diagram



IA= actual ripple current at 100kHz, IR= rated ripple current at 100kHz, 105℃
Multiplier of Useful Life as a function of ambient temperature and ripple current load

MINIATURE