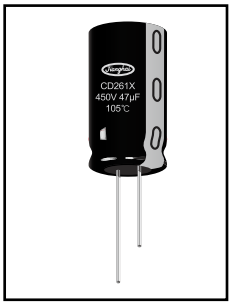
CD261X QX SERIES

5000-10000h at 105℃

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

CD11G GW
125℃ ↑
CD266 FK → downsized → CD261X QX



MINIATURE

Items	Characteristics
Operating Temperature Range (℃)	-40 ~ +105
Voltage range (V)	160 ~ 500
Capacitance Range (μF)	1.0 ~ 330
Capacitance Tolerance(20℃, 120Hz)	± 20%
Leakage Current (μA)	After 1 minutes 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)

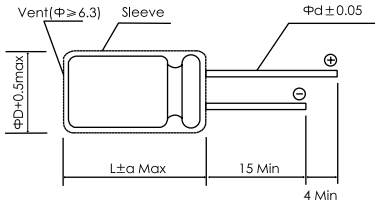
Rated Voltage (V)	160	200	250	350	400	450	500
Tan δ (max)	0.15			0.20			

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	Φ6.3x11.5 :7000h Φ8~10 :10000h Φ ⩾ 12.5 :12000h	⩾ 100000h	Φ6.3x11.5 :5000h Φ8~10 :8000h Φ ⩾ 12.5 :10000h	Φ6.3x11.5 :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 ± 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℃	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 30 min > 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

Frequency / Cap (μF)	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 ~ 330	0.45	0.75	0.9	0.96	1.0

Temperature Coefficient

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

CD261X QX SERIES

MINIATURE

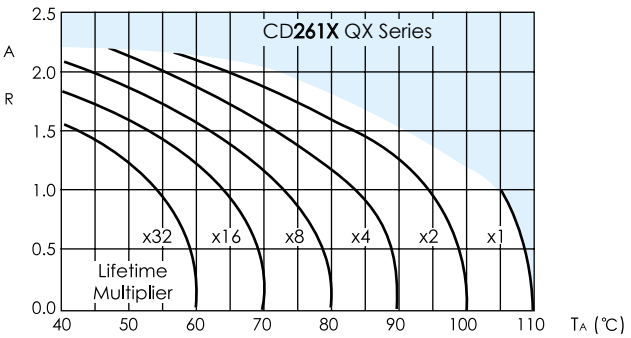
Ratings for CD**261X** QX Series

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	10X16	ECR2CQX100M □□ 100016
	22	9	3.6	500	10X20	ECR2CQX220M □□ 100020
	33	6	2.4	650	10X20	ECR2CQX330M □□ 100020
	47	4.2	1.7	750	10X20	ECR2CQX470M □□ 100020
	68	2.9	1.2	1180	12.5X20	ECR2CQX680M □□ 125020
		2.9	1.2	1180	16X20	ECR2CQX680M □□ 160020
	100	2	0.8	1420	12.5X25	ECR2CQX101M □□ 125025
		2	0.8	1420	16X20	ECR2CQX101M □□ 160020
	150	1.3	0.5	1890	16X25.5	ECR2CQX151M □□ 160025
	220	0.9	0.4	2370	18X25.5	ECR2CQX221M □□ 180025
	330	0.6	0.2	3130	18X31.5	ECR2CQX331M □□ 180031
200 (250) 2D	4.7	42.3	16.9	160	8X11.5	ECR2DQX4R7M □□ 080011
	6.8	29.3	11.7	200	10X12.5	ECR2DQX6R8M □□ 100012
	10	19.9	8	220	8X11.5	ECR2DQX100M □□ 080011
		19.9	8	280	10X12.5	ECR2DQX100M □□ 100012
	22	9	3.6	400	10X12.5	ECR2DQX220M □□ 100012
		9	3.6	500	10X20	ECR2DQX220M □□ 100020
	33	6	2.4	650	10X20	ECR2DQX330M □□ 100020
	47	4.2	1.7	980	12.5X20	ECR2DQX470M □□ 125020
	68	2.9	1.2	1300	12.5X25	ECR2DQX680M □□ 125025
		2.9	1.2	1300	16X20	ECR2DQX680M □□ 160020
	100	2	0.8	1420	16X20	ECR2DQX101M □□ 160020
	150	1.3	0.5	1890	16X25.5	ECR2DQX151M □□ 160025
	220	0.9	0.4	2330	18X25.5	ECR2DQX221M □□ 180025
	330	0.6	0.2	3220	18X35.5	ECR2DQX331M □□ 180035
250 (300) 2E	4.7	42.3	16.9	160	8X11.5	ECR2EQX4R7M □□ 080011
	6.8	29.3	11.7	250	10X12.5	ECR2EQX6R8M □□ 100012
	10	19.9	8	320	10X16	ECR2EQX100M □□ 100016
	22	9	3.6	470	10X16	ECR2EQX220M □□ 100016
		9	3.6	500	10X20	ECR2EQX220M □□ 100020
	33	6	2.4	760	12.5X16	ECR2EQX330M □□ 125016
		6	2.4	800	12.5X20	ECR2EQX330M □□ 125020
	47	4.2	1.7	980	12.5X20	ECR2EQX470M □□ 125020
	68	2.9	1.2	1300	16X20	ECR2EQX680M □□ 160020
		2.9	1.2	1300	12.5X25	ECR2EQX680M □□ 125025
	100	2	0.8	1530	16X25.5	ECR2EQX101M □□ 160025
		2	0.8	1440	18X20.5	ECR2EQX101M □□ 180020
	150	1.3	0.5	1960	18X25.5	ECR2EQX151M □□ 180025
	220	0.9	0.4	2545	18X31.5	ECR2EQX221M □□ 180031
350 (400) 2V	3.3	80.4	24.1	130	8X11.5	ECR2VQX3R3M □□ 100012
	4.7	56.5	16.9	150	10X12.5	ECR2VQX4R7M □□ 100012
	5.6	47.4	14.2	150	8X11.5	ECR2VQX5R6M □□ 080011
		47.4	14.2	180	10X12.5	ECR2VQX5R6M □□ 100012
	6.8	39	11.7	280	10X16	ECR2VQX6R8M □□ 100016
	10	26.5	8	280	10X12.5	ECR2VQX100M □□ 100012
	22	12.1	3.6	650	12.5X20	ECR2VQX220M □□ 125020
	33	8	2.4	850	12.5X25	ECR2VQX330M □□ 125025
	47	5.6	1.7	1080	16X20	ECR2VQX470M □□ 160020
	68	3.9	1.2	1350	18X20.5	ECR2VQX680M □□ 180020
	82	3.2	0.97	1530	18X25.5	ECR2VQX820M □□ 180025
400 (450) 2G	1	265.4	79.6	50	6.3X11.5	ECR2GQX010M □□ 063011
	1.5	176.9	53.1	70	6.3X11.5	ECR2GQX1R5M □□ 063011
		176.9	53.1	80	8X11.5	ECR2GQX1R5M □□ 080011
	2.2	120.6	36.2	95	8X11.5	ECR2GQX2R2M □□ 080011
		120.6	36.2	140	10X12.5	ECR2GQX2R2M □□ 100012
	3.3	80.4	24.1	150	10X12.5	ECR2GQX3R3M □□ 100012
		80.4	24.1	180	10X16	ECR2GQX3R3M □□ 100016
	4.7	56.5	16.9	160	8X11.5	ECR2GQX4R7M □□ 080011
		56.5	16.9	220	10X16	ECR2GQX4R7M □□ 100016
	5.6	47.4	14.2	200	10X12.5	ECR2GQX5R6M □□ 100012
	6.8	39	11.7	230	10X16	ECR2GQX6R8M □□ 100016
		39	11.7	280	10X20	ECR2GQX6R8M □□ 100020
	10	26.5	8	350	10X20	ECR2GQX100M □□ 100020
	15	17.7	5.3	500	12.5X16	ECR2GQX150M □□ 125016
		17.7	5.3	550	12.5X20	ECR2GQX150M □□ 125020
	22	12.1	3.6	650	12.5X20	ECR2GQX220M □□ 125020
		12.1	3.6	760	12.5X25	ECR2GQX220M □□ 125025
		12.1	3.6	760	16X20	ECR2GQX220M □□ 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	33	8	2.4	900	16X20	ECR2GQX330M □□ 160020
	47	5.6	1.7	1180	16X25.5	ECR2GQX470M □□ 160025
		5.6	1.7	1180	18X20.5	ECR2GQX470M □□ 180020
	68	3.9	1.2	1470	18X25.5	ECR2GQX680M □□ 180025
	82	3.2	1	1600	18X31.5	ECR2GQX820M □□ 180031
	100	2.7	0.8	1778	18X36	ECR2GQX101M □□ 180036
450 (500) 2W	2.2	120.6	36.2	90	8X11.5	ECR2WQX2R2M □□ 080011
		120.6	36.2	90	10X12.5	ECR2WQX2R2M □□ 100012
	3.3	80.4	24.1	180	10X12.5	ECR2WQX3R3M □□ 100012
		80.4	24.1	190	10X16	ECR2WQX3R3M □□ 100016
	4.7	56.5	16.9	212	10X16	ECR2WQX4R7M □□ 100016
	5.6	47.4	14.2	200	10X16	ECR2WQX5R6M □□ 100016
	6.8	39	11.7	230	10X16	ECR2WQX6R8M □□ 100016
		39	11.7	280	10X20	ECR2WQX6R8M □□ 100020
	10	26.5	8	330	10X20	ECR2WQX100M □□ 100020
	15	17.7	5.3	450	12.5X20	ECR2WQX150M □□ 125020
	22	12.1	3.6	730	16X20	ECR2WQX220M □□ 160020
		12.1	3.6	600	12.5X25	ECR2WQX220M □□ 125025
	33	8	2.4	980	16X25.5	ECR2WQX330M □□ 160025
	47	5.6	1.7	1090	16X25.5	ECR2WQX470M □□ 160025
		5.6	1.7	1200	18X25.5	ECR2WQX470M □□ 180025
	68	3.9	1.2	1440	18X25.5	ECR2WQX680M □□ 180025
		3.9	1.2	1575	18X31.5	ECR2WQX680M □□ 180031
	82	3.2	1	1600	18X31.5	ECR2WQX820M □□ 180031
		3.2	1	1675	18X36	ECR2WQX820M □□ 180036
	100	2.7	0.8	1700	18X31.5	ECR2WQX101M □□ 180031
		2.7	0.8	1730	18X36	ECR2WQX101M □□ 180036
	120	2.2	0.7	1750	18X36	ECR2WQX121M □□ 180036
		2.2	0.7	1820	18X40	ECR2WQX121M □□ 180040
	150	1.8	0.5	2020	18X40	ECR2WQX151M □□ 180040
		1.8	0.5	2140	18X45	ECR2WQX151M □□ 180045
	180	1.5	0.4	2380	18X45	ECR2WQX181M □□ 180045
		1.5	0.4	2460	18X50	ECR2WQX181M □□ 180050
	220	1.2	0.36	2600	18X50	ECR2WQX221M □□ 180050
500 (550) 2H	10	26.5	9.3	360	12.5X20	ECR2HQX100M □□ 125020
	15	17.7	6.2	480	12.5X25	ECR2HQX150M □□ 125025
	22	12.1	4.2	580	16X25.5	ECR2HQX220M □□ 160025
	33	8	2.8	720	16X31.5	ECR2HQX330M □□ 160031
	47	5.6	2	900	18X31.5	ECR2HQX470M □□ 180031
	56	4.8	1.6	980	18X31.5	ECR2HQX560M □□ 180031
	68	3.9	1.4	1250	18X36	ECR2HQX680M □□ 180036
	82	3.2	1.1	1330	18X40	ECR2HQX820M □□ 180040
	100	2.7	0.9	1430	18X45	ECR2HQX101M □□ 180045
		2.7	0.9	1450	20X41	ECR2HQX101M □□ 200041
	120	2.3	0.8	1640	18X50	ECR2HQX121M □□ 180050
	150	1.8	0.5	1950	22X45	ECR2HQX151M □□ 220045

Customer products are availabel 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

Part Number System for Radial

E	C	R		2	C	Q	X	2	2	1	M		F	A	1	8	0	0	2	5	E	*
Capacitor Type Code		Terminal Type Code		Rated Voltage Code(V)		Series Code		Capacitance Code (μF)			Capacitance Tolerance Code (%)		Lead Form Code		Dimension Code						Sleeve Code	Speaial Requirement Code
EC= Electrolytic Capacitor		Radial	R	160V	2C	CD261X	QX	220		221	+20	M	Taping	FA	18×25.5			180025			PET E	
											-20	M	Long Lead	LL	12.5×35			125035				