

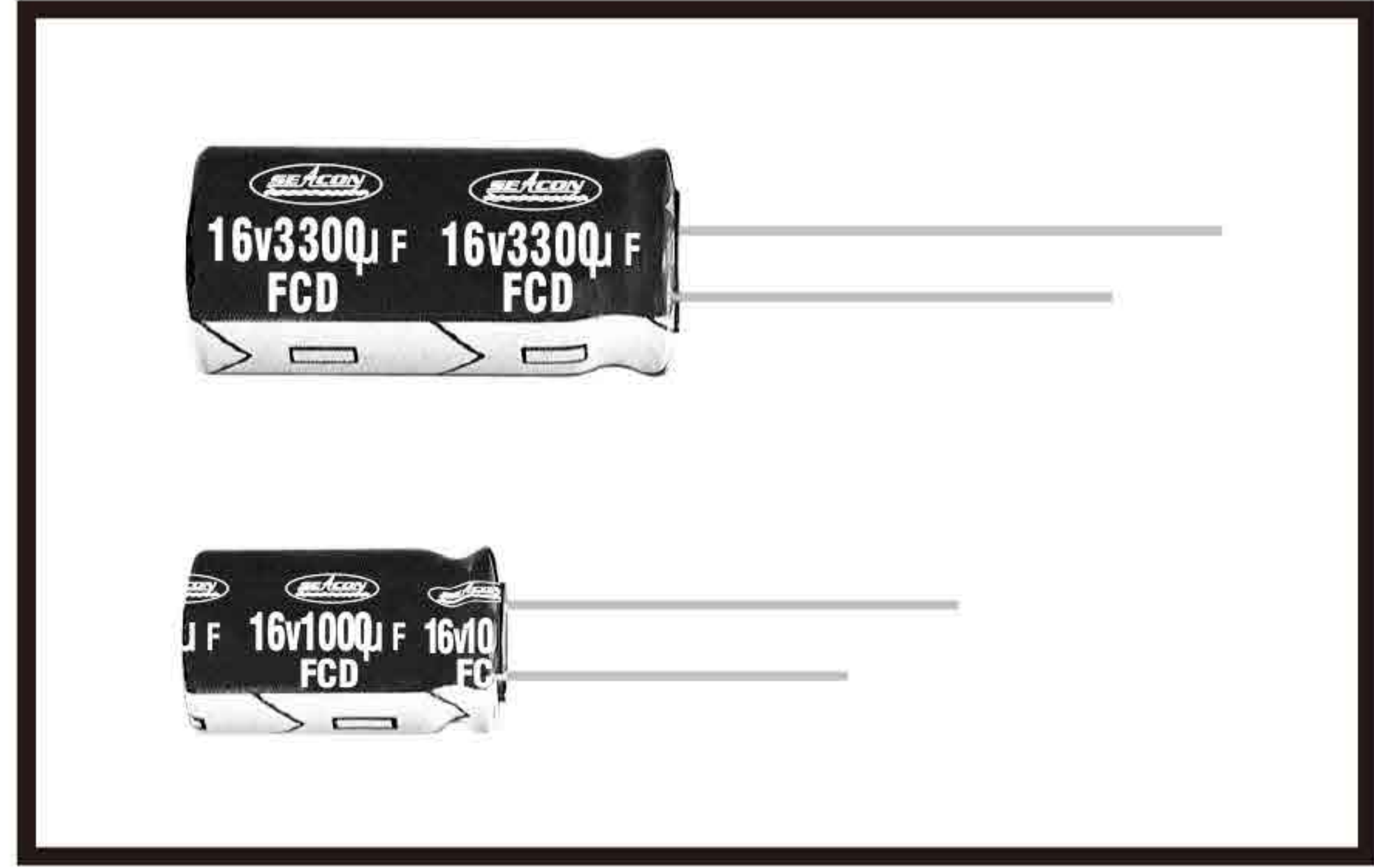
FCD SERIES

105°C Standard

FCD

Low Impedance

PXF, YXG, ZL, ZLH



◆ SPECIFICATIONS

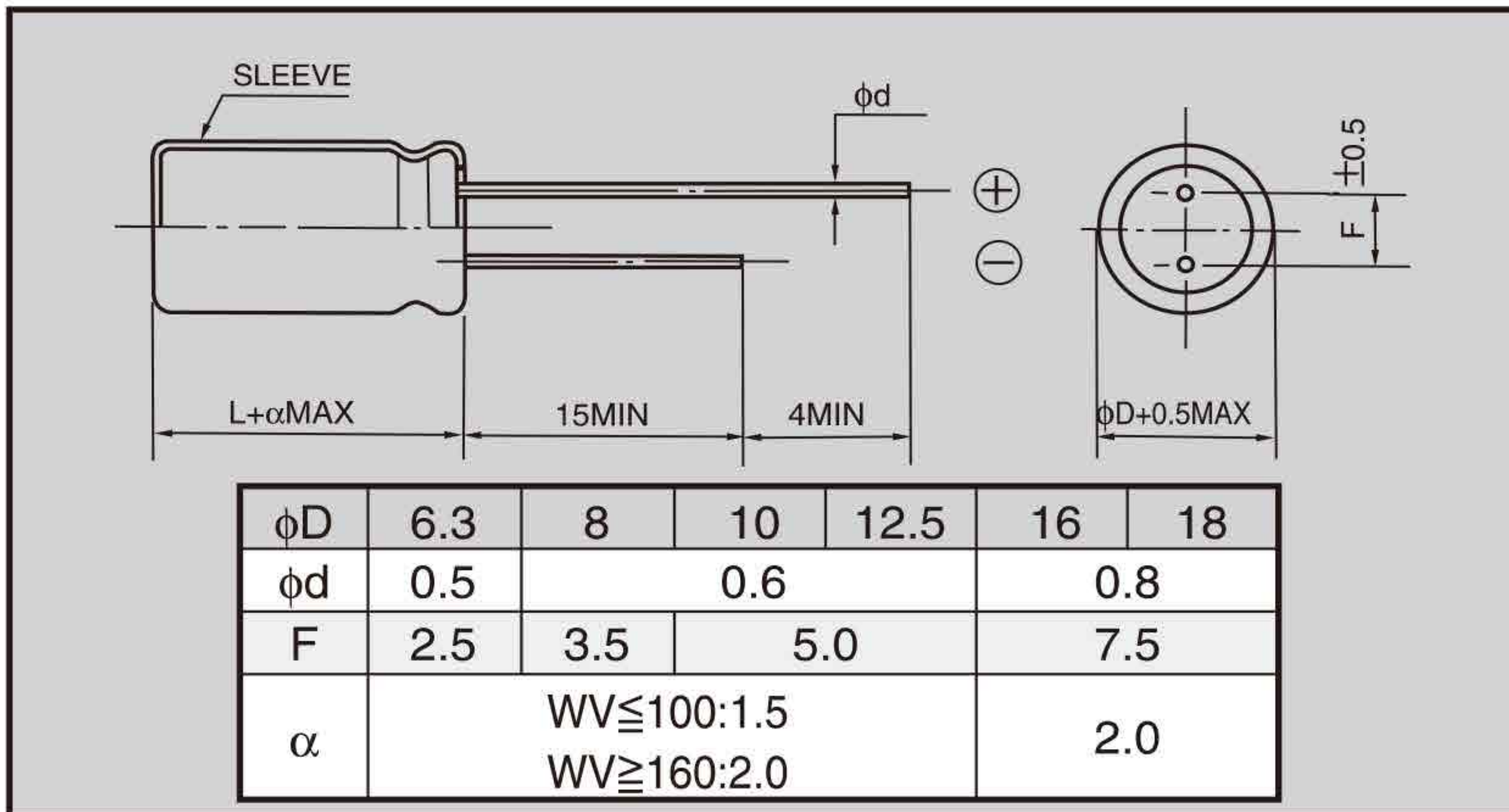
Items	Characteristics																																																											
	-55~+105°C	-40~+105°C	-25~+105°C																																																									
Category Temperature Range	-55~+105°C	-40~+105°C	-25~+105°C																																																									
Rated Voltage Range	6.3~100V.DC	160~250V.DC	350~450V.DC																																																									
Capacitance Tolerance	±20%(20°C, 120Hz)																																																											
Leakage Current(MAX)	6.3~100V.DC	160~450V.DC																																																										
	I=0.01CV or 3µA whichever is greater. (After 2 minutes application of rated voltage)	CV≤1000	CV>1000																																																									
		I=0.1CV+40µA (1minute) I=0.03CV+15µA (5minutes)	I=0.04CV+100µA (1minute) I=0.02CV+25µA (5minutes)																																																									
	I=Leakage Current(µA)	C=Rated Capacitance(F)	V=Rated Voltage(V)																																																									
Dissipation Factor(MAX)	<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><th>160</th><th>200</th><th>250</th><th>350</th><th>400</th><th>450</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td>0.26</td><td>0.22</td><td>0.18</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.08</td><td>0.20</td><td>0.20</td><td>0.20</td><td>0.24</td><td>0.24</td><td>0.24</td> </tr> </tbody> </table>															Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	tanδ	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.08	0.20	0.20	0.20	0.24	0.24	0.24															
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tanδ	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.08	0.20	0.20	0.20	0.24	0.24	0.24																																														
When rated capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.																																																												
Endurance	After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements.																																																											
	Capacitance Change		Within ±25% of the initial value.										Case Dia		Life Time(hrs)																																													
	Dissipation Factor		Not more than 200% of the specified value.										φD≤8		1000																																													
	Leakage Current		Not more than the specified value.										φD=10		2000																																													
Low Temperature Stability Impedance Ratio(MAX)	<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><th>160</th><th>200</th><th>250</th><th>350</th><th>400</th><th>450</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>3</td><td>3</td><td>3</td><td>6</td><td>6</td><td>6</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td><td>6</td><td>4</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td> </tr> </tbody> </table>															Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2	3	3	3	6	6	6	Z(-40°C)/Z(20°C)	8	6	4	4	3	3	3	3	-	-	-	-	-	-
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																																													
	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2	3	3	3	6	6	6																																													
	Z(-40°C)/Z(20°C)	8	6	4	4	3	3	3	3	-	-	-	-	-	-																																													
(120Hz)																																																												

◆ DIMENSIONS

(mm)

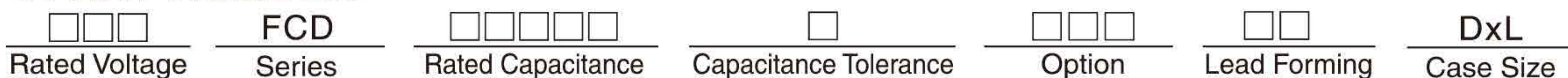
◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient



Frequency (Hz)		60(50)	120	500	1k	10k≤
Coefficient	0.1~1µF	0.50	1.00	1.20	1.30	1.50
	2.2~4.7µF	0.65	1.00	1.20	1.30	1.50
	10~47µF	0.80	1.00	1.20	1.30	1.50
	100~1000µF	0.80	1.00	1.10	1.15	1.20
	2200~22000µF	0.80	1.00	1.05	1.10	1.15

◆ PART NUMBER



◆ STANDARD SIZE, RATED RIPPLE CURRENT

Size φDxL(mm), Ripple Current (mA r.m.s./105°C, 120Hz)

WV(V.DC) Cap(μF)	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)		
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
0.1											5X11	1			
0.15											5X11	1.5			
0.22											5X11	2.5			
0.33											5X11	4			
0.47											5X11	7			
1											5X11	13			
2.2											5X11	20			
3.3											5X11	25			
4.7											5X11	32			
10											5X11	47	5X11	48	
22										5X11	64	5X11	70	5X11	80
33								5X11	69	5X11	77	5X11	94	6.3X11	100
47					5X11	80	5X11	84	5X11	100	6.3X11	115	6.3X11	140	
100	5X11	96	5X11	105	5X11	130	6.3X11	140	6.3X11	170	8X11.5	200	10X12.5	230	
220	5X11	160	6.3X11	175	6.3X11	220	8X11.5	240	10X12.5	300	10X12.5	360	10X16	390	
330	6.3X11	210	6.3X11	235	8X11.5	270	10X12.5	335	10X12.5	400	10X16	470	10X20	540	
470	6.3X11	275	8X11.5	295	8X11.5	375	10X12.5	440	10X16	525	10X20	600	12.5X20	700	
1000	8X11.5	460	10X12.5	540	10X16	640	10X20	740	12.5X20	865	12.5X25	1060	16X25	1200	
2200	10X20	775	10X20	860	12.5X20	1050	12.5X25	1230	16X25	1370	16X35.5	1600	18X35.5	1650	
3300	10X20	985	12.5X20	1100	12.5X25	1300	16X25	1500	16X35.5	1680	18X35.5	1780			
4700	12.5X20	1150	12.5X25	1350	16X25	1650	16X31.5	1800	18X35.5	1920					
6800	12.5X25	1480	16X25	1700	16X31.5	1900	18X35.5	2050							
10000	16X25	1700	16X35.5	1950	18X35.5	2070									
15000	16X35.5	2090	18X35.5	2180											
22000	18X40	2350													

WV(V.DC) Cap(μF)	100 (2A)		160 (2C)		200 (2D)		250 (2E)		350 (2V)		400 (2G)		450 (2W)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47	5X11	8					6.3X11	8	6.3X11	8				
1	5X11	15					6.3X11	16	6.3X11	16	6.3X11	16	8X11.5	15
2.2	5X11	21					6.3X11	30	8X11.5	31	10X12.5	31	10X12.5	25
3.3	5X11	30			6.3X11	36	8X11.5	43	10X12.5	45	10X12.5	41	10X16	33
4.7	5X11	35	6.3X11	43	8X11.5	50	8X11.5	53	10X12.5	55	10X16	55	10X20	42
10	5X11	60	8X11.5	77	10X12.5	80	10X16	90	10X20	95	12.5X20	85	12.5X20	67
22	6.3X11	98	10X16	125	10X20	135	12.5X20	150	12.5X25	175	12.5X25	170	16X25	115
33	8X11.5	140	10X20	170	12.5X20	200	12.5X20	200	16X25	220	16X25	220	16X31.5	155
47	10X12.5	185	12.5X20	210	12.5X20	220	12.5X25	240	16X31.5	260	16X31.5	275	16X35.5	185
100	10X20	290	12.5X25	320	16X25	340	16X31.5	400	18X40	415	18X40	415		
220	12.5X25	560	16X35.5	580	18X35.5	580								
330	12.5X25	690	18X35.5	700										
470	16X25	880												
1000	18X40	985												