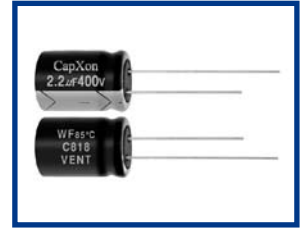


WF Series Flame Retardant Type at 85°C



Features

- ◆ Flame Retardant type capacitor
- ◆ Used in communication equipments, switching power supply, etc.
- ◆ Safety vent construction design.
- ◆ For detail specifications, please refer to Engineering Bulletin NO. E160
- ◆ RoHS Compliant

Specifications

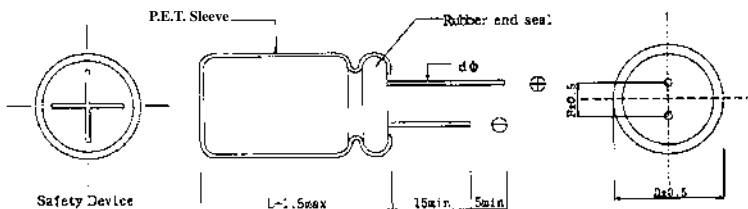
Item	Performance Characteristics									
Operating Temperature Range	-25 to +85°C									
Rated Voltage Range	400、450 VDC									
Capacitance Range	2.2 to 120 µF									
Capacitance Tolerance	±20%(120Hz,+20°C)									
Leakage Current (+20°C,max.)	$I \leq 0.03 CV$ (µA) After 1 minute with rated working voltage applied.									
Dissipation Factor ($\tan \delta$ · at 20°C · 120Hz)	<table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>400</td> <td>450</td> </tr> <tr> <td>D.F.(%)max.</td> <td>18</td> <td>20</td> </tr> </table>	Working Voltage(VDC)	400	450	D.F.(%)max.	18	20			
	Working Voltage(VDC)	400	450							
D.F.(%)max.	18	20								
Low Temperature Characteristics (at 120Hz)	<table border="1"> <tr> <td colspan="3">Impedance ratio max</td> </tr> <tr> <td>Working Voltage(VDC)</td> <td>400</td> <td>450</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>6</td> <td>6</td> </tr> </table>	Impedance ratio max			Working Voltage(VDC)	400	450	Z-25°C / Z+20°C	6	6
	Impedance ratio max									
Working Voltage(VDC)	400	450								
Z-25°C / Z+20°C	6	6								
Load Life	Test condition Duration time :2000 Hrs Ambient temperature :+85°C Applied voltage :Rated DC working voltage After test requirement at +20°C Capacitance change : $\leq \pm 20\%$ of the initial measured value Dissipation factor : $\leq 200\%$ of the initial specified value Leakage current : \leq The initial specified value									
Shelf Life	Test condition Duration time :1000 Hrs Ambient temperature :+85°C Applied voltage :None After test requirement at +20°C:Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.									

Flame Retardant

Multiplier for Ripple Current vs. Frequency

CAP(µF)\Frequency(Hz)	50(60)	120	400	1K	10K	50K-100K
CAP ≤ 10	0.8	1	1.30	1.45	1.65	1.70
10 < CAP ≤ 100	0.8	1	1.23	1.36	1.48	1.53
100 < CAP	0.8	1	1.16	1.25	1.35	1.38

Diagram of Dimensions:(unit:mm)



D φ	10	13	16	18	22
F	5.0	5.0	7.5	7.5	10
d φ	0.6		0.8	0.8	0.8
α	1.5			1.5 (L < 35.5)	2
				2 (L ≥ 35.5)	

Case Size

φ DxL(mm)

Cap(μ F)	WV(SV)	400V (450)		450V (500)	
		Size	Ripple	Size	Ripple
2.2		8X11.5	30	10X12.5	30
3.3		10X16	40	10X16	37
4.7		10X16	60	10X16	50
10		13X20	100	13X25	95
22		13X25	170	16X25	140
33		16X25	210	16X31.5	185
47		16X31.5	240	16X31.5	230
68		18X31.5	360	16X35.5	345
100		18X35.5	420	18X41	390
120		18X41	485	18X45	470

Ripple Current (A, rms) at 85°C 120Hz