



SS

7mm/9mm height
Series

- Features: 85°C, 1000hrs, Low profile/Miniature, 7mm/9mm height
- Recommended Applications: AV(TV, Video, Audio), Monitor/Computer, OA/HA/Communication, Small signal
- Corresponding product to RoHS

SX
↑ High Temperature
SS



Specifications

Item	Characteristics								
Operating Temperature Range	-40 ~ +85℃								
Rated Voltage Range	4 ~ 63VDC								
Rated Capacitance Range	2.2 ~ 470 μ F								
Capacitance Tolerance	± 20 % at 120Hz , 20℃								
Leakage Current (MAX) (20℃)	I ≤ 0.01CV or 3(μ A) , whichever is greater. (After rated voltage applied for 2 minutes) I= Leakage Current (μ A) C= Nominal Capacitance (μ F) V= Rated Voltage (V)								
Dissipation Factor (MAX) (tan δ) (120Hz ,20℃)	WV	4	6.3	10	16	25	35	50	63
	tan δ	0.35	0.24	0.20	0.16	0.14	0.12	0.10	0.08
Low Temperature Stability Impedance Ratio (MAX)	WV Z(120Hz)	4	6.3	10	16	25	35	50	63
	Z(-25℃) / Z(+20℃)	6	4	3	2	2	2	2	2
	Z(-40℃) / Z(+20℃)	12	8	6	4	4	4	4	4
Endurance	After applying rated voltage for 1000 hours at 85℃ the capacitors shall meet the following requirements.								
	Capacitance Change		Within ± 20 % of initial value						
	Dissipation Factor		Not more than 200% of the specified value						
	Leakage Current		Not more than in specified value						
Shelf Life	After placed at 85℃ without voltage applied for 500 hours, the capacitors shall meet the same requirement as Endurance.								

Dimensions

ϕD	4	5	6.3	8
P	1.5	2	2.5	3.5
ϕd	0.45	0.45	0.45	0.5
a	1.0	1.0	1.0	1.0

Multiplier for Ripple Current

Frequency coefficient

Freq.(Hz) WV(VDC)	50	120	1K	10K
4 ~ 16	0.8	1.0	1.1	1.2
25 ~ 35	0.8	1.0	1.5	1.7
50 ~ 63	0.8	1.0	1.6	1.9

■ Dimensions, Rated Ripple Current

Capacitance (μ F)	Rated (Surge) Voltage											
	4 (5)		6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
2.2							4x7	10				
3.3							4x7	10				
4.7							4x7	20	4x7	20	4x7	25
10							4x7	30	4x7	35	4x7	40
22					4x7	35	4x7	40	5x7	50	5x7	60
33	4x7	35	4x7	40	4x7	45	4x7	50	5x7	65	6.3x7	75
47	4x7	40	4x7	50	4x7	60	5x7	70	6.3x7	75	6.3x7	80
100	5x7	65	5x7	80	5x7	90	6.3x7	110	8x7	120	8x7	145
220	6.3x7	110	6.3x7	120	6.3x7	135	8x7	180				
330			8x7	170	8x9	170	8x9	230				
470			8x9	230	8x9	240	8x9	280				

Capacitance (μ F)	Rated (Surge) Voltage			
	50 (63)		63 (79)	
	Size	Ripple	Size	Ripple
0.1	4x7	1	4x7	1
0.22	4x7	2	4x7	2
0.33	4x7	3	4x7	3
0.47	4x7	5	4x7	5
1	4x7	10	4x7	10
2.2	4x7	20	4x7	20
3.3	4x7	25	4x7	30
4.7	4x7	35	5x7	40
10	5x7	45	6.3x7	55
22	6.3x7	70		
33	8x7	85		
47	8x7	100		

☆ Size: D ϕ x L (mm) ☆ Ripple Current : mA/rms, 85°C, 120Hz