

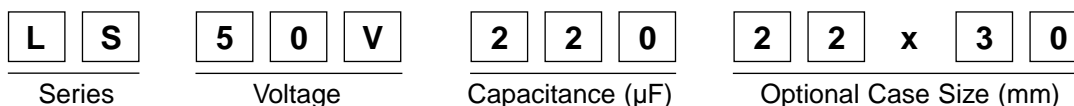
## ■ FEATURES

- Has snap-in terminals, which can be soldered to the PCB directly
- Suitable for electronic equipment with middle-high voltage circuits
- Vented cans for safety
- Excellent temperature performance

## ■ CHARACTERISTICS

Item	Characteristics										
Operating Temperature Range	16WV ~ 100WV is -40°C ~ +85°C; 160WV ~ 250WV is -25°C ~ +85°C										
Capacitance Tolerance	±20% at 20°C, 120Hz										
Leakage Current	For 16WV ~ 100WV: $I = 0.04CWV + 30\mu A$ or 3mA; for 160WV ~ 250WV: $I = 0.06CWV + 200\mu A$ or 5mA whichever is smaller after 5 minutes of applied rated DC working voltage at 20°C Where: C = rated capacitance in $\mu F$ ; WV = rated DC working voltage										
Dissipation Factor (Tan $\delta$ , at 20°C 120Hz)	Working voltage (WV)	16	25	35	50	63	100	160	200	250	
	Tan $\delta$	C ≤ 100,000	0.40	0.40	0.30	0.30	0.30	0.20	0.20	0.18	0.18
		C > 100,000; ≤ 330,000	0.50	0.50	0.40	0.40	0.40	0.35	0.35	0.30	0.30
	C > 330,000	0.60	0.60	0.50	0.50	0.50	0.45	0.45	0.40	0.40	
Temperature Characteristics	Imp. Ratio	Z -25°C / Z +20°C	4	4	4	4	4	4	8	8	8
		Z -40°C / Z +20°C	12	12	12	12	12	12	---	---	---
Life Test	When returned to +20°C after 1,000 hours application of working voltage at +85°C, the capacitor will meet the following limits: Capacitance change is ≤ ±20%; tan $\delta$ is <200% of initial specified value; leakage current is within initial specified value										
Shelf Test	When returned to +20°C after 500 hours at +85°C with no voltage applied, the capacitor will meet the following limits: Capacitance change is ±20%; tan $\delta$ is <200% of initial specified value; leakage current is within initial specified value										

## PART NUMBERING SYSTEM



## ■ RIPPLE CURRENT AND FREQUENCY MULTIPLIERS

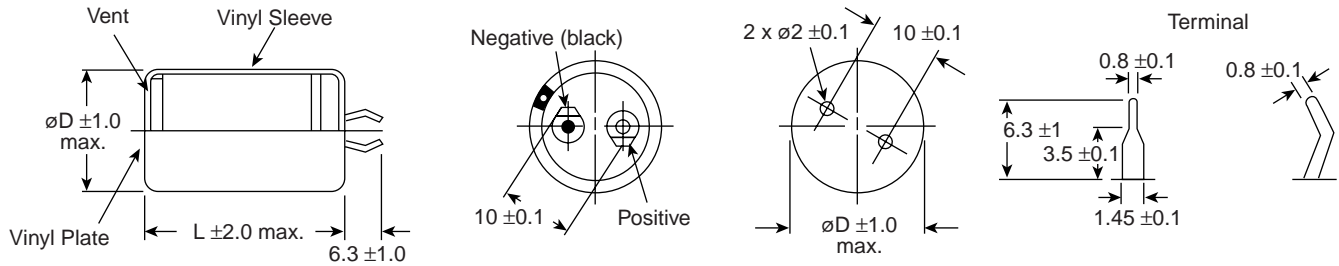
Working Voltage (WV)	Frequency (Hz)				
	60 (50)	120	1K	10K	20K
≤100	0.95	1.0	1.10	1.30	1.33
≥160	0.90	1.0	1.20	1.50	1.55

## ■ RIPPLE CURRENT AND TEMPERATURE MULTIPLIERS

Temperature (°C)	40	55	70	85
Multiplier	2.1	1.8	1.5	1.0



## ■ DIMENSIONS AND PERMISSIBLE RIPPLE CURRENT



Value ( $\mu\text{F}$ )	Working Voltage (WV); Dimensions: $\varnothing D \times L$ (mm); Ripple Current A/RMS @ 120Hz, 85°C																		
	16		25		35		50		63		100		160		200		250		
	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	$\varnothing D \times L$	A/rms	
150													22 x 25	0.4	22 x 30	0.4	22 x 30	0.4	
220													22 x 30	0.5	22 x 40	0.6	22 x 40	0.6	
													22 x 40	0.6	22 x 53	0.7	22 x 59	0.7	
330													22 x 40	0.7	25 x 40	0.8	25 x 40	0.8	
													22 x 51	0.8	25 x 65	1.0	25 x 65	1.0	
470												22 x 25	0.6	25 x 40	0.9	25 x 40	0.9	25 x 50	0.8
												22 x 30	0.7	25 x 64	1.1	25 x 64	1.1		
680									22 x 25	0.6	22 x 30	0.9	25 x 50	0.8	25 x 50	0.9	30 x 50	1.0	
											22 x 40	1.0	30 x 64	1.0					
1000					22 x 25	0.8	22 x 25	0.8	22 x 25	0.7	22 x 40	1.2	30 x 40	1.0	30 x 50	1.2	30 x 60	1.34	
											22 x 30	0.8							25 x 40
1500					22 x 25	1.0	22 x 30	1.0	22 x 30	1.0	22 x 40	1.1							
											22 x 40	1.2	25 x 52	1.3					
2200			22 x 25	1.0	22 x 25	1.1	22 x 30	1.1	25 x 40	1.3	30 x 40	1.5							
							22 x 40	1.2	22 x 40	1.2	30 x 52	1.7							
3300	22 x 25	1.2	22 x 25	1.2	22 x 30	1.3	22 x 40	1.5	25 x 40	1.6	30 x 50	2.1							
			22 x 30	2.0	22 x 40	1.5	25 x 40	1.6	25 x 52	1.8									
4700	22 x 25	1.4	22 x 30	1.4	22 x 40	1.8	25 x 40	1.9	30 x 40	2.1									
			22 x 40	1.6	25 x 40	1.9	25 x 50	2.1	30 x 52	2.3									
6800	22 x 40	1.9	22 x 40	1.9	25 x 40	2.3	30 x 40	2.2	30 x 40	2.2									
			25 x 40	2.0	25 x 52	2.5	30 x 52	2.5	30 x 52	2.5									
10000	22 x 40	2.3	25 x 40	2.5	30 x 40	2.7	30 x 50	3.0	30 x 50	3.0									
	25 x 40	2.5	25 x 52	2.7	30 x 52	3.0													
15000	25 x 40	3.0	30 x 40	3.0	30 x 50	3.7													
	30 x 40	3.3	30 x 52	3.4															
22000	30 x 40	4.0	30 x 50	3.7															
	30 x 52	4.5																	