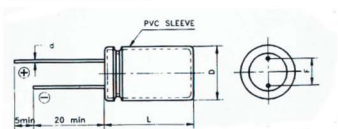


Features

- Ultra low E.S.R. and high ripple current at high frequency range.
- Load life of 3,000 hours(2,000 hours for case dia.8mm) at 105°C.
- Wide operating temperature range, from -40°C to +105°C.
- Suitable for CPU driver.
- Having safety vents.

Characteristics

Item	Characteristics				
Operating temperature range	-40~+105°C				
Rated voltage range	6.3~25V				
Capacitance range	150~6,800μF				
Capacitance tolerance (at20°C,120Hz)	±20%(M)				
Leakage current(I) (at20°C)	After 2 minute application of rated voltage. I≤0.01CV (μA) Where C: Nominal capacitance in μF,V:Rated voltage in V.				
Dissipation factor(Tan δ) (at 20°C,120Hz)	W.V.(V)	6.3	10	16	25
	Tan δ (max.)	0.15	0.13	0.12	0.10
For capacitance of more than 1,000μF, add 0.02 for every increase of 1,000μF.					
Low temperature characteristics (at 120Hz)	W.V.(v)	6.3~10		16~63	
	impedance ratio ZT/Z+20°C(max)	Z-25°C/Z+20°C	2	1.5	
Load life	Capacitance change		≤20% of the initial value		
	tan δ		≤200% of the initial specified value		
	I		≤The initial specified value		
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with max. ripple current has been applied for 3,000 hours(2,000 hours for case dia.8 mm) at 105°C				
	Capacitance change		≤20% of the initial value		
	tan δ		≤150% of the initial specified value		
Others	I		≤200% of the initial specified value		
	Satisfies characteristic W of JIS C5141				

Dimensions


D±0.5	8			10			13			16		
L	±1.0			±2.0								
	12	15	16	20	25	20	25	25	25	25	25	25
F±0.5	3.5			5.0			7.5					
d±0.05	0.5			0.6			0.8					

Case Size DxL(mm),E.S.R.(mΩ/at 20°C,100KHz) And Maximum Ripple Current(A rms/at 105°C,100KHz)

W.V.(v) Cap.(μF)	6.3			10			16			25		
	Size	E.S.R.	Ripple	Size	E.S.R.	Ripple	Size	E.S.R.	Ripple	Size	E.S.R.	Ripple
150										8×12	100	0.63
220							8×12	100	0.63	8×12	58	0.83
330							8×12	58	0.83	8×15	42	1.05
470				8×12	42	0.98	8×15	38	1.10	10×16	32	1.43
680	8×12	40	1.00	8×15	30	1.24	10×16	24	1.65	10×20	20	1.94
1,000	8×15	30	1.24	10×16	30	1.47	10×20	18	2.04	10×25	15	2.42
1,500	10×16	23	1.68	10×20	18	2.04	10×25	15	2.42	13×25	13	3.08
2,200	10×20	18	2.04	10×25	15	2.42	13×25	13	3.08	16×25	13	3.55
2,700	10×25	15	2.42	13×20	13	2.87	16×25	13	3.55			
3,300	13×20	13	2.87	13×25	13	3.08	16×25	13	3.55			
4,700	13×25	13	3.08	16×25	13	3.55						
6,800	16×25	13	3.55									

Ripple Current Multipliers
Frequency multiplying factor

Cap.(μF)	Freq(Hz)				
	50	120	1k	10k	100k
150~1,000	0.40	0.53	0.65	0.79	1.00
1,500~6,800	0.41	0.54	0.67	0.83	1.00

Temperature multiplying factor

Temperature (°C)	55	65	85	105
Factor	2.44	2.23	1.73	1.00