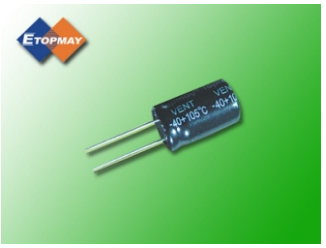
TMCE09 XS SERIES Aluminum Electrolytic Capacitor

Features

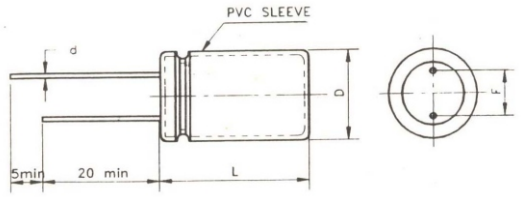


- Ultra low E.S.R.and high ripple current at hight frequency range.
- Load life:3,000 hours (2,000 hours for case dia.8m or less) at 105℃.
- Wide operating temperature range ,from -40℃ to +105℃.
- Suitable for CPU driver
- Having safety vents.

Specifications

Item	Characteristics			
Operating temperature range	-40～+105℃			
Rated voltage range	6.3~25V			
Capacitance range	150~6800μF			
Capacitance tolerance (at20℃,120Hz)	±20%(M)			
Leakage current(I) (at20℃)	After 2 minutes application of rated voltage I≤0.01CA or 3μA,whichever is greater Where c:Nominal capacitance in μF,V:Rated voltage in V			
Dissipation factor(Tan δ) (at 20℃,120Hz)	W.V.(v)	6.3	10	16
	Tan δ (max.)	0.15	0.13	0.12
	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	Z-25℃/Z+20℃	2	1.5
	ZT/Z+20℃(max.)	Z-40℃/Z+20℃	4	3
Load life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage with max.ripple current has been applied for 2,000 hours (1,000 hours for case dia. 8mm or less)at 105℃.			
	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℃ after exposing them at 105℃ for 500 hours without voltage applied			
	Capacitance change	≤20% of the initial value		
	tan δ	≤150% of the initial specified value		
	I	≤200% of the initial specified value		
Others	Satisfies characteristic W of JIS C5141			

Dimensions



D±0.5	5	6.3	8		10		13
L	±1.0		±2.0				
	12	15	16	20	25	20	25	25
F±0.5	3.5		5.0				7.5
d±0.05	0.5		0.6				0.8

Case Size DxL(mm) and Maximun Ripple current(at DC 12V,15.75kHz)

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	40	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	**18**	1.94
1000	8×15	30	1.24	10×16	30	1.47	10×20	**18**	2.04	10×25	**15**	2.42
1500	10×16	23	1.68	10×20	**18**	2.04	10×25	**15**	2.42	13×25	**13**	3.08
2200	10×20	18	2.04	10×25	**15**	2.42	13×25	**13**	3.08	16×25	13	3.55
2700	10×25	15	2.42	13×20	**13**	2.87	16×25	13	3.55			
3300	13×20	13	2.87	13×25	13	3.08	16×25	13	3.55			
4700	13×25	13	3.08	16×25	13	3.55						
6800	16×25	13	3.55									

Note:8×15 can also be 10×12 as per customer′ s request

Ripple Current Multipliers

Frequency multiplying factor

Freq.(Hz) / Cap.(μF)	50	120	1K	10K	100K
150~1000	0.40	0.53	0.65	0.79	1.00
1500~6800	0.41	0.54	0.67	0.83	1.00

Temperature multiplying factor

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