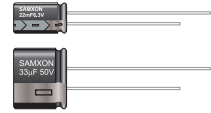


7(9)mmL(高), High CV(高CV化)

FEATURES

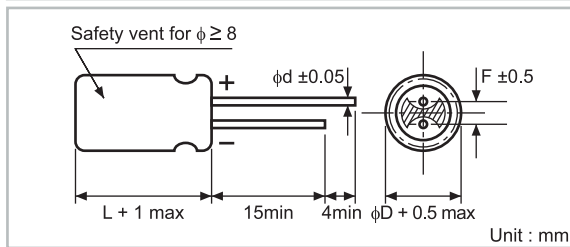
1. The TS series is employing etched foils for higher gain effect.
2. Designed for use in VTRs, car radios, car stereos, micro-cassette tape recorders, pocket calculators and watches.



SPECIFICATIONS

Item	Performance Characteristics							
Operating Temperature Range	-40 to +85°C							
Rated Working Voltage Range	6.3 to 50V							
Nominal Capacitance Range	0.1 to 470µF							
Capacitance Tolerance	±20% (120Hz, +20°C)							
Leakage Current	I ≤ 0.01CV or 3(µA) whichever is greater measured after 2 minutes application of rated working voltage at +20°C							
Dissipation Factor tan δ (120Hz, +20°C)	Working Voltage (V)	6.3	10	16	25	35	50	
	tan δ (max.)	0.24	0.20	0.16	0.14	0.12	0.10	
Low Temperature Characteristics	Impedance ratio max. at 120Hz							
	Working Voltage (V)	6.3	10	16	25	35	50	
	Z-25°C / Z+20°C	4	3	2	2	2	2	
	Z-40°C / Z+20°C	8	6	4	4	3	3	
High Temperature Loading	Test conditions			Post test requirements at +20°C				
	Duration	: 2000 hours			Leakage current : ≤ Initial specified value			
	Ambient temp.	: +85°C			Cap. change : within ±20% of initial measured value			
	Applied voltage	: Rated DC working voltage			tan δ : ≤ 200% of initial specified value			
Shelf Life	Test conditions			Post test requirements at +20°C				
	Duration	: 1000 hours			Same limits for high temperature loading.			
	Ambient temp.	: +85°C						
	Applied voltage	: (None)						
Others	JIS C - 5141 JIS C - 5102							

CASE SIZE TABLE



φD	4	5	6.3	8				
F	1.5	2.0	2.5	3.5				
φd	0.45							

RIPPLE CURRENT MULTIPLIER

Temperature Coefficient					Frequency Coefficient					
Temperature(°C)	~ 55	60	70	85	Cap(µF) \ Freq.(Hz)	50	120	300	1K	10K ~
Factor	1.65	1.50	1.30	1.00	≤ 47	0.75	1.00	1.35	1.57	2.00
					47 ~ 470	0.80	1.00	1.23	1.34	1.50

TS  
Miniature Aluminum Electrolytic Capacitors

7(9)mmL(高), High C/V(高CV化)

**DIMENSIONS**

Voltage (Code)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)	
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.1	104								
0.22	224								
0.33	334								
0.47	474								
1	105								
2.2	225								
3.3	335								
4.7	475								
10	106					4 x 7	28	4 x 7	28
22	226	4 x 7	34	4 x 7	35	4 x 7	39	5 x 7	48
33	336	4 x 7	40	4 x 7	43	(4) 5 x 7	(45) 59	5 x 7	58
47	476	4 x 7	48	(4) 5 x 7	(45) 59	5 x 7	65	6.3 x 7	71
100	107	5 x 7	78	(5) 6.3 x 7	(74) 87	6.3 x 7	98	8 x 7 (9)	115 (130)
220	227	6.3 x 7	120	(6.3) 8 x 7	(138) 145	8 x 9	186		
330	337	8 x 7 (9)	180 (204)	8 x 7	201				
470	477	8 x 7 (9)	215 (243)						

Maximum Allowable Ripple Current (mA rms) at 85°C 120Hz

Case Size φD x L(mm)

Voltage (Code)		35V (1V)		50V (1H)					
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current				
0.1	104			4 x 7	1.0				
0.22	224			4 x 7	2.3				
0.33	334			4 x 7	3.5				
0.47	474			4 x 7	5.0				
1	105			4 x 7	10				
2.2	225			4 x 7	19				
3.3	335			4 x 7	24				
4.7	475	4 x 7	24	4 x 7	28				
10	106	4 x 7	31	5 x 7	38				
22	226	5 x 7	52	6.3 x 7	58				
33	336	6.3 x 7	65	8 x 7 (9)	75 (85)				
47	476	8 x 7 (9)	85 (96)	8 x 9	101				
100	107	8 x 9	141						
220	227								
330	337								
470	477								

Maximum Allowable Ripple Current (mA rms) at 85°C 120Hz

Case Size φD x L(mm)