

SR SERIES ▪ 7MM HEIGHT, AUDIO 85°C TYPE

KEY FEATURES



- ALUMINUM ELECTROLYTIC CAPACITOR ▪ THT type
- Endurance: 85°C ▪ 1000 hours
- Optimized for high density insertion
- Low height ▪ 7mm
- Especially for audio applications



SPECIFICATIONS

Items		Performance Characteristics							
Operating Temperature Range		-40 ~ +85°C							
Rated Voltage Range		6.3 ~ 50V DC							
Surge Voltage		$V_S = 1.15 \cdot V_R$							
Capacitance Range		1 ~ 220μF							
Cap. Tolerance		±20% (120Hz ▪ 20°C)							
Leakage Current (20°C ▪ V_R applied)		$\leq 0.01 \cdot C_R \cdot V_R$ or 3μA, whichever is greater ▪ After 2 minutes [I_{LEAK} (μA) ; C_R (μF) ; V_R (V)]							
Dissipation Factor % (20°C ▪ 120Hz)		tanδ	V_R (V DC)	6.3	10	16	25	35	
			tanδ (%)	24	20	16	14	12	
Low Temperature Characteristics at 120Hz		Z ratio max.	V_R (V DC)	6.3	10	16	25	35	
			$Z-25^\circ\text{C}/Z+20^\circ\text{C}$	4	3	2	2	2	
			$Z-40^\circ\text{C}/Z+20^\circ\text{C}$	8	6	4	4	3	
Lifetime Test									
Endurance 85°C (V_R applied)		Test	1000 hours						
		$\Delta C/C_R$	$\leq \pm 20\%$ of initial measured value						
		tanδ	$\leq 200\%$ of initial specified value						
		I_{Leak}	\leq the initial specified value						
Shelf Life 85°C ($V_R = 0$)		Test	1000 hours						
		$\Delta C/C_R$	$\leq \pm 20\%$ of initial measured value						
		tanδ	$\leq 200\%$ of initial specified value						
		I_{Leak}	\leq the initial specified value						
		Before measurement: Restore capacitor to 20°C, apply V_R for 30 min according JIS-C-5101-4							

MULTIPLIER K_f for RIPPLE CURRENT vs. FREQUENCY

C_R (μF) / Frequency (Hz)	50/60	100/120	300	1k	≥ 10k
1 ~ 220	0.7	1	1.17	1.36	1.5

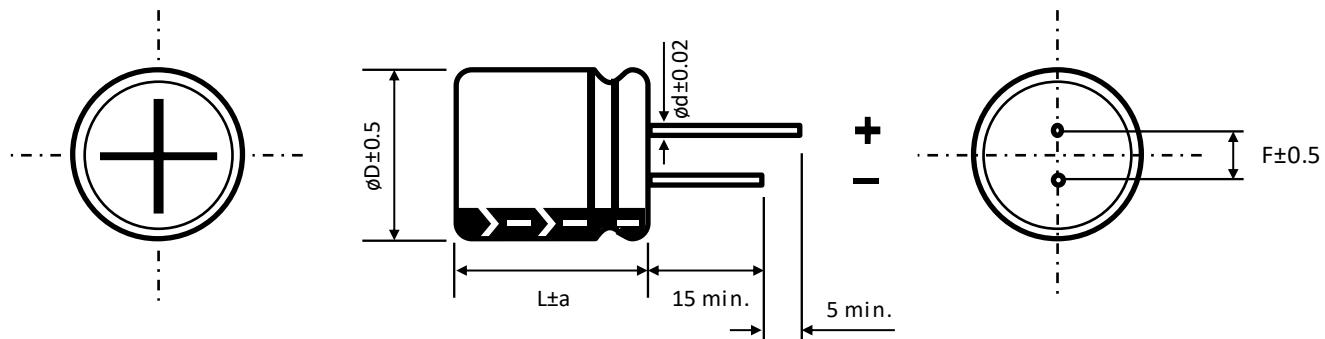
STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (μ F)	ϕD (mm)	L (mm)	I_R • Max. Ripple Current +85°C • 120Hz (mA rms)	CapXon Part Number
6.3	22	4	7	34	SR220M6R3B070A
	33	4	7	40	SR330M6R3B070A
	47	4	7	47	SR470M6R3B070A
	100	5	7	76	SR101M6R3C070A
	220	6.3	7	124	SR221M6R3E070A
10	22	4	7	35	SR220M010B070A
	33	4	7	45	SR330M010B070A
	47	5	7	59	SR470M010C070A
	100	6.3	7	88	SR101M010E070A
16	10	4	7	28	SR100M016B070A
	22	4	7	39	SR220M016B070A
	33	5	7	55	SR330M016C070A
	47	5	7	65	SR470M016C070A
	100	6.3	7	98	SR101M016E070A
25	10	4	7	29	SR100M025B070A
	22	5	7	49	SR220M025C070A
	33	5	7	55	SR330M025C070A
	47	6.3	7	71	SR470M025E070A
35	4.7	4	7	23	SR4R7M035B070A
	10	4	7	31	SR100M035B070A
	22	5	7	49	SR220M035C070A
	33	6.3	7	65	SR330M035E070A
50	1	4	7	10	SR010M050B070A
	2.2	4	7	18	SR2R2M050B070A
	3.3	4	7	23	SR3R3M050B070A
	4.7	4	7	26	SR4R7M050B070A
	10	5	7	35	SR100M050C070A
	22	6.3	7	58	SR220M050E070A

See "PACKAGING INFORMATION" to taped or formed products.

DIMENSIONS ▪ All dimensions in mm



Ø D	4	5	6.3
F	1.5	2	2.5
Ø d	0.45	0.45	0.5
a	1	1	1

PRECAUTIONS, GUIDELINES AND PACKAGING INFORMATION

Unless otherwise agreed in individual specifications, all products are subject to our "General Precautions and Guidelines" as well as our "Packaging Information". Please refer to the following links in the table.

General Precautions & Guidelines	Packaging Information	3D Models	Reliability Tests

DISCLAIMER

All product related data (e.g. specification, statements and general information) are subject to change without any notice. It is necessary that the customer observes all product related technical / application information and handling instructions.

CapXon products are designed and manufactured according to severe quality and safety standards. Under no circumstance, CapXon warrants that any CapXon product is suitable for the purposes intended for your application, even CapXon knows the application. It is customer's duty and obligation to check and make sure that CapXon products are suitable for the purposes intended and select the correct and proper CapXon product. Customers are requested to perform a sufficient validation and reliability evaluation to assure needed safety level and reliability performance by suitable designs and to apply proper safeguards (e.g. redundancies, protective circuits).

Particular operating conditions (ambient temperature, ripple current, voltage, thermal resistance, etc.) as well as storage, production or assembly may affect the performance and the lifetime of the capacitor. Please consult CapXon for lifetime estimation, failure mode considerations or worst-case scenarios according to the product technology, product tolerances / deviations or change of the characteristics of the capacitor due to shipment, storage, handling, production and usage.

For aerospace or military application, life-saving, life-sustaining, safety critical applications or any application where failure may cause severe personal injury or death, please consult us before design-in the capacitor in your application.

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For further information, please visit our website www.capxongroup.com or contact CapXon directly.