

SJ SERIES ▪ 7MM HEIGHT 105°C TYPE

KEY FEATURES

- ALUMINUM ELECTROLYTIC CAPACITOR ▪ THT type
- Endurance: 105°C ▪ 2 000 hours
- Miniaturized for space critical applications
- Low height ▪ 7mm
- Low voltage version



SPECIFICATIONS

Items		Performance Characteristics							
Operating Temperature Range		-40 ~ +105°C							
Rated Voltage Range	V_R	6.3 ~ 63V DC							
Surge Voltage	V_S	$V_S = 1.15 \cdot V_R$							
Capacitance Range	C_R	1 ~ 220 μ F							
Cap. Tolerance	ΔC	$\pm 20\%$ (120Hz ▪ 20°C)							
Leakage Current (20°C ▪ V_R applied)	I_{LEAK}	$\leq 0.01 \cdot C_R \cdot V_R$ or 3 μ A, whichever is greater ▪ After 2 minutes [I_{LEAK} (μ A) ; C_R (μ F) ; V_R (V)]							
Dissipation Factor % (20°C ▪ 120Hz)	$\tan \delta$	V_R (V DC)	6.3	10	16	25	35	50	63
		$\tan \delta$ (%)	22	20	16	14	12	10	9
Low Temperature Characteristics at 120Hz	Z ratio max.	V_R (V DC)	6.3	10	16	25	35	50	63
		Z-25°C/Z+20°C	4	3	2	2	2	2	2
		Z-40°C/Z+20°C	8	6	4	4	3	3	3

Lifetime Test			
Endurance 105°C (V_R applied)	Test	2 000 hours	
	$\Delta C/C_R$	$\leq \pm 20\%$ of initial measured value	
	$\tan \delta$	$\leq 200\%$ of initial specified value	
	I_{Leak}	\leq the initial specified value	
Shelf Life 105°C ($V_R = 0$)	Test	1 000 hours	
	$\Delta C/C_R$	$\leq \pm 20\%$ of initial measured value	
	$\tan \delta$	$\leq 200\%$ 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 (μ F) / Frequency (Hz)	50/60	100/120	400	1k	10k	50k - 100k
$C_R \leq 10$	0.8	1	1.3	1.45	1.65	1.7
$10 < C_R \leq 220$	0.8	1	1.23	1.36	1.48	1.53

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (μ F)	ϕ D (mm)	L (mm)	I_R - Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
6.3	22	4	7	28	SJ220M6R3B070A
	33	4	7	32	SJ330M6R3B070A
	33	5	7	35	SJ330M6R3C070A
	47	5	7	47	SJ470M6R3C070A
	68	5	7	50	SJ680M6R3C070A
	100	6.3	7	75	SJ101M6R3E070A
	220	8	7	92	SJ221M6R3F070A
10	15	4	7	26	SJ150M010B070A
	22	4	7	32	SJ220M010B070A
	33	5	7	48	SJ330M010C070A
	47	5	7	51	SJ470M010C070A
	68	6.3	7	68	SJ680M010E070A
	100	6.3	7	80	SJ101M010E070A
	100	8	7	95	SJ101M010F070A
16	220	8	7	130	SJ221M010F070A
	6.8	4	7	19	SJ6R8M016B070A
	10	4	7	28	SJ100M016B070A
	15	4	7	30	SJ150M016B070A
	22	4	7	35	SJ220M016B070A
	22	5	7	42	SJ220M016C070A
	33	5	7	50	SJ330M016C070A
	47	6.3	7	67	SJ470M016E070A
	68	6.3	7	70	SJ680M016E070A
68	8	7	78	SJ680M016F070A	
25	100	8	7	110	SJ101M016F070A
	4.7	4	7	17	SJ4R7M025B070A
	6.8	4	7	19	SJ6R8M025B070A
	10	4	7	28	SJ100M025B070A
	10	5	7	33	SJ100M025C070A
	15	5	7	35	SJ150M025C070A
	22	5	7	43	SJ220M025C070A
	22	6.3	7	45	SJ220M025E070A
	33	6.3	7	62	SJ330M025E070A
	47	8	7	75	SJ470M025F070A
	68	8	7	80	SJ680M025F070A
35	100	8	7	115	SJ101M025F070A
	4.7	4	7	22	SJ4R7M035B070A
	6.8	4	7	24	SJ6R8M035B070A
	6.8	5	7	28	SJ6R8M035C070A
	10	5	7	35	SJ100M035C070A
	15	5	7	38	SJ150M035C070A
	15	6.3	7	45	SJ150M035E070A
	22	6.3	7	60	SJ220M035E070A
33	6.3	7	50	SJ330M035E070A	

See "PACKAGING INFORMATION" to taped or formed products.

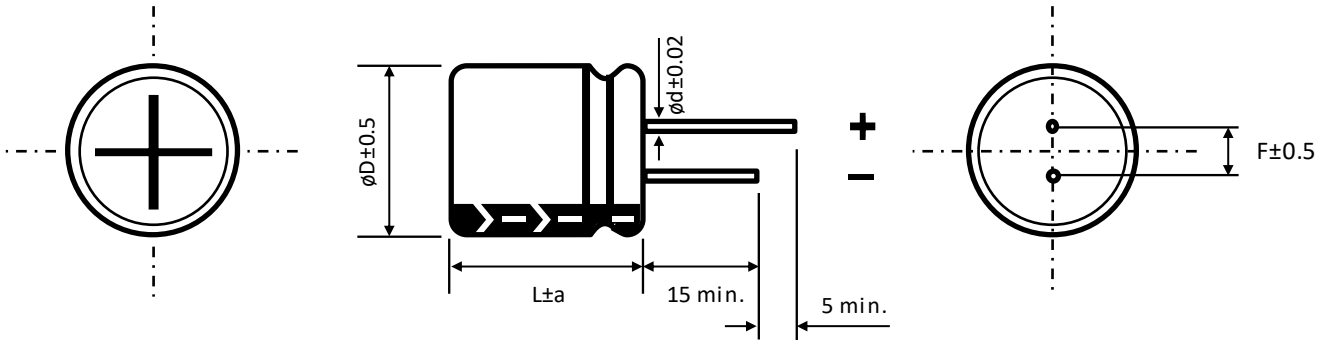
STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (μ F)	ϕ D (mm)	L (mm)	I_R - Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
35	33	8	7	68	SJ330M035F070A
	47	8	7	80	SJ470M035F070A
	68	8	7	85	SJ680M035F070A
50	1	4	7	10	SJ010M050B070A
	1.5	4	7	13	SJ1R5M050B070A
	2.2	4	7	20	SJ2R2M050B070A
	3.3	4	7	26	SJ3R3M050B070A
	4.7	4	7	27	SJ4R7M050B070A
	4.7	5	7	29	SJ4R7M050C070A
	6.8	5	7	32	SJ6R8M050C070A
	6.8	6.3	7	33	SJ6R8M050E070A
	10	6.3	7	38	SJ100M050E070A
	15	6.3	7	52	SJ150M050E070A
	22	8	7	63	SJ220M050F070A
	33	8	7	78	SJ330M050F070A
63	1	4	7	12	SJ010M063B070A
	1.5	4	7	14	SJ1R5M063B070A
	2.2	4	7	20	SJ2R2M063B070A
	3.3	5	7	28	SJ3R3M063C070A
	4.7	5	7	29	SJ4R7M063C070A
	4.7	6.3	7	33	SJ4R7M063E070A
	6.8	6.3	7	35	SJ6R8M063E070A
	10	6.3	7	40	SJ100M063E070A
	15	8	7	55	SJ150M063F070A
	22	8	7	65	SJ220M063F070A

See "PACKAGING INFORMATION" to taped or formed products.

DIMENSIONS ▪ All dimensions in mm



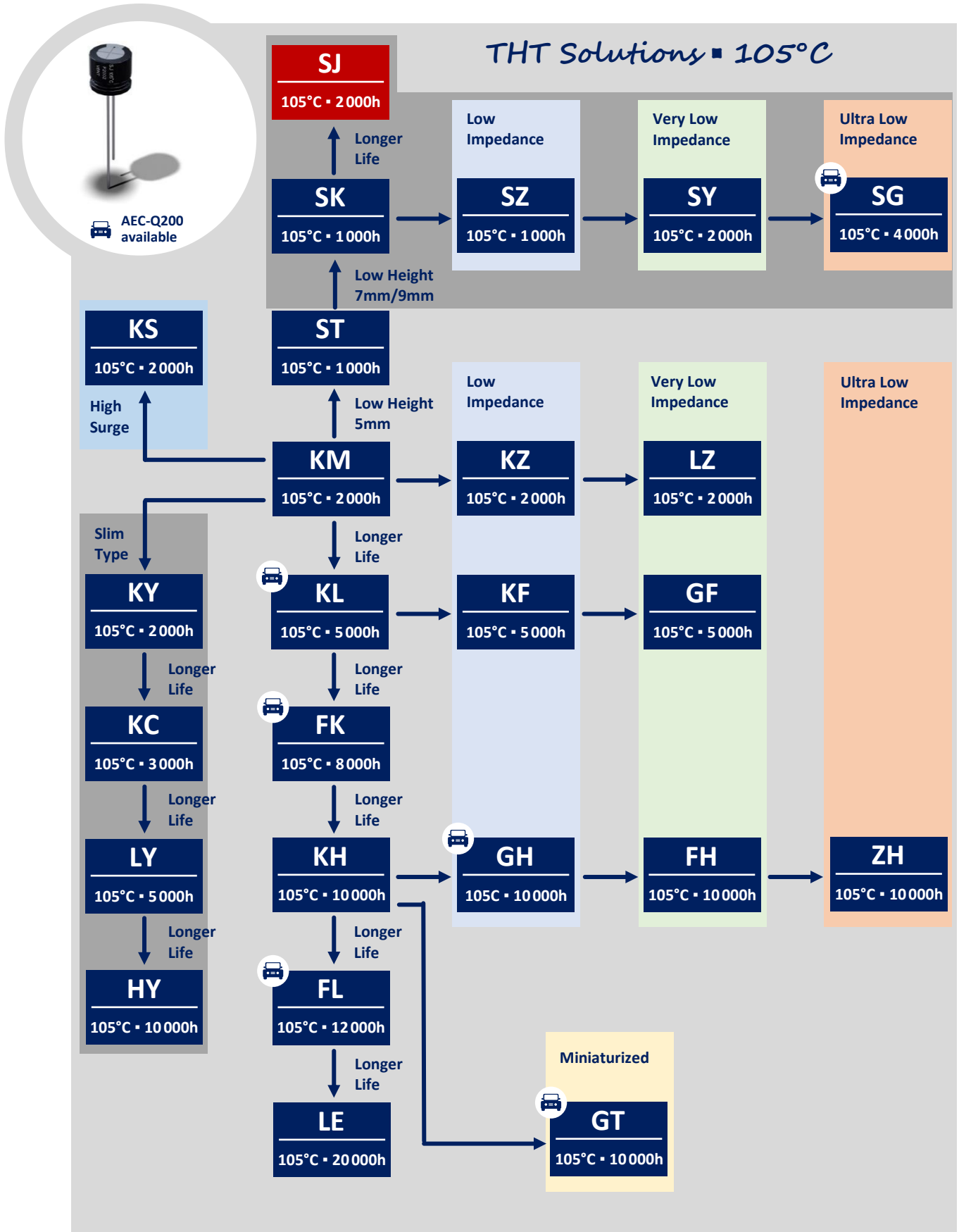
ϕD	4	5	6.3	8
F	1.5	2	2.5	3.5
ϕd	0.45	0.45	0.5	0.5
a	1	1	1	1

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

GROUP CHART





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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