

### SS SERIES ▪ 5MM HEIGHT, STANDARD 85°C TYPE

#### KEY FEATURES

- ALUMINUM ELECTROLYTIC CAPACITOR ▪ THT type
- Endurance: 85°C ▪ 1 000 hours
- Optimized for high density insertion
- Low height ▪ 5mm
- Miniaturized for space critical applications



#### SPECIFICATIONS

Items		Performance Characteristics							
Operating Temperature Range		-40 ~ +85°C							
Rated Voltage Range	$V_R$	4 ~ 50V DC							
Surge Voltage	$V_S$	$V_S = 1.15 \cdot V_R$							
Capacitance Range	$C_R$	1 ~ 330 $\mu$ F							
Cap. Tolerance	$\Delta C$	$\pm 20\%$ (120Hz ▪ 20°C)							
Leakage Current (20°C ▪ $V_R$ applied)	$I_{LEAK}$	$\leq 0.01 \cdot C_R \cdot V_R$ or 3 $\mu$ A, whichever is greater ▪ After 1 minute [ $I_{LEAK}$ ( $\mu$ A) ; $C_R$ ( $\mu$ F) ; $V_R$ (V) ]							
Dissipation Factor % (20°C ▪ 120Hz)	$\tan \delta$	$V_R$ (V DC)	4	6.3	10	16	25	35	50
		$\tan \delta$ (%)	35	24	20	16	14	12	10
Low Temperature Characteristics at 120Hz	Z ratio max.	$V_R$ (V DC)	4	6.3	10	16	25	35	50
		Z-25°C/Z+20°C	7	4	3	2	2	2	2
		Z-40°C/Z+20°C	15	8	8	4	4	3	3

Lifetime Test			
Endurance 85°C ( $V_R$ applied)	Test	<b>1 000 hours</b>	
	$\Delta C/C_R$	$\leq \pm 20\%$ of initial measured value	6.3 ~ 50 V
		$\leq \pm 30\%$ of initial measured value	4V
	$\tan \delta$	$\leq 200\%$ of initial specified value	
$I_{Leak}$	$\leq$ the initial specified value		
Shelf Life 85°C ( $V_R = 0$ )	Test	<b>1 000 hours</b>	
	$\Delta C/C_R$	$\leq \pm 20\%$ of initial measured value	6.3 ~ 50 V
		$\leq \pm 30\%$ of initial measured value	4V
	$\tan \delta$	$\leq 200\%$ 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

$C_R$ ( $\mu$ F) / Frequency (Hz)	50/60	100/120	1k	$\geq 10k$
1 ~ 68	0.8	1	1.3	1.5
100 ~ 330	0.8	1	1.15	1.2

## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	∅ D (mm)	L (mm)	I <sub>r</sub> - Max. Ripple Current +85°C - 120Hz (mA rms)	CapXon Part Number
4	10	4	5	11	SS100M004B050A
	15	4	5	17	SS150M004B050A
	22	4	5	21	SS220M004B050A
	33	4	5	28	SS330M004B050A
	47	4	5	33	SS470M004B050A
	68	5	5	43	SS680M004C050A
	68	6.3	5	48	SS680M004E050A
	100	5	5	52	SS101M004C050A
	220	6.3	5	78	SS221M004E050A
	330	8	5	142	SS331M004F050A
6.3	10	4	5	14	SS100M6R3B050A
	15	4	5	17	SS150M6R3B050A
	22	4	5	24	SS220M6R3B050A
	33	4	5	33	SS330M6R3B050A
	33	5	5	37	SS330M6R3C050A
	47	5	5	39	SS470M6R3C050A
	68	6.3	5	53	SS680M6R3E050A
	100	6.3	5	65	SS101M6R3E050A
	220	6.3	5	90	SS221M6R3E050A
	220	8	5	115	SS221M6R3F050A
330	8	5	145	SS331M6R3F050A	
10	6.8	4	5	11	SS6R8M010B050A
	10	4	5	17	SS100M010B050A
	15	4	5	21	SS150M010B050A
	22	4	5	30	SS220M010B050A
	22	5	5	33	SS220M010C050A
	33	5	5	39	SS330M010C050A
	47	5	5	42	SS470M010C050A
	47	6.3	5	46	SS470M010E050A
	68	6.3	5	56	SS680M010E050A
	100	6.3	5	76	SS101M010E050A
220	8	5	138	SS221M010F050A	
16	4.7	4	5	11	SS4R7M016B050A
	6.8	4	5	13	SS6R8M016B050A
	10	4	5	20	SS100M016B050A
	15	5	5	26	SS150M016C050A
	22	4	5	33	SS220M016B050A
	22	5	5	35	SS220M016C050A
	33	5	5	42	SS330M016C050A
	33	6.3	5	46	SS330M016E050A
	47	6.3	5	58	SS470M016E050A
	68	6.3	5	65	SS680M016E050A
100	6.3	5	86	SS101M016E050A	
100	8	5	92	SS101M016F050A	

See "PACKAGING INFORMATION" to taped or formed products.

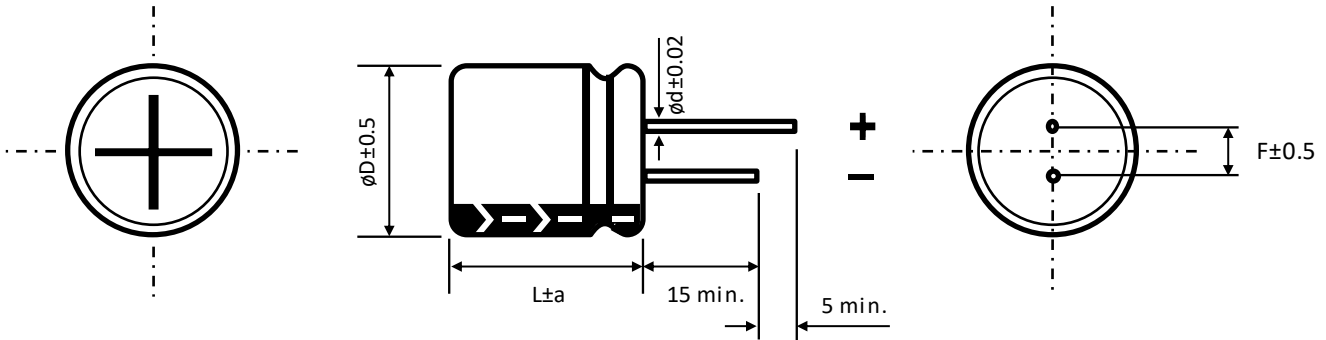
**STANDARD RATINGS**

Part number shows bulk version with straight leads

$V_R$ (V)	$C_R$ ( $\mu$ F)	$\phi$ D (mm)	L (mm)	$I_R$ - Max. Ripple Current +85°C - 120Hz (mA rms)	CapXon Part Number
25	3.3	4	5	10	SS3R3M025B050A
	4.7	4	5	15	SS4R7M025B050A
	6.8	4	5	17	SS6R8M025B050A
	10	4	5	27	SS100M025B050A
	10	5	5	28	SS100M025C050A
	15	5	5	30	SS150M025C050A
	15	6.3	5	33	SS150M025E050A
	22	6.3	5	44	SS220M025E050A
	33	6.3	5	52	SS330M025E050A
	47	6.3	5	62	SS470M025E050A
	68	8	5	90	SS680M025F050A
100	8	5	108	SS101M025F050A	
35	2.2	4	5	8.4	SS2R2M035B050A
	3.3	4	5	11	SS3R3M035B050A
	4.7	4	5	18	SS4R7M035B050A
	6.8	5	5	20	SS6R8M035C050A
	10	5	5	29	SS100M035C050A
	15	6.3	5	33	SS150M035E050A
	22	6.3	5	46	SS220M035E050A
	33	8	5	63	SS330M035F050A
47	8	5	83	SS470M035F050A	
50	1	4	5	6.2	SS010M050B050A
	1.5	4	5	7	SS1R5M050B050A
	2.2	4	5	9	SS2R2M050B050A
	3.3	4	5	14	SS3R3M050B050A
	4.7	5	5	20	SS4R7M050C050A
	6.8	6.3	5	25	SS6R8M050E050A
	10	6.3	5	30	SS100M050E050A
	15	6.3	5	37	SS150M050E050A
	22	6.3	5	48	SS220M050E050A
	22	8	5	52	SS220M050F050A
33	8	5	70	SS330M050F050A	

See "PACKAGING INFORMATION" to taped or formed products.





### DIMENSIONS ▪ All dimensions in mm



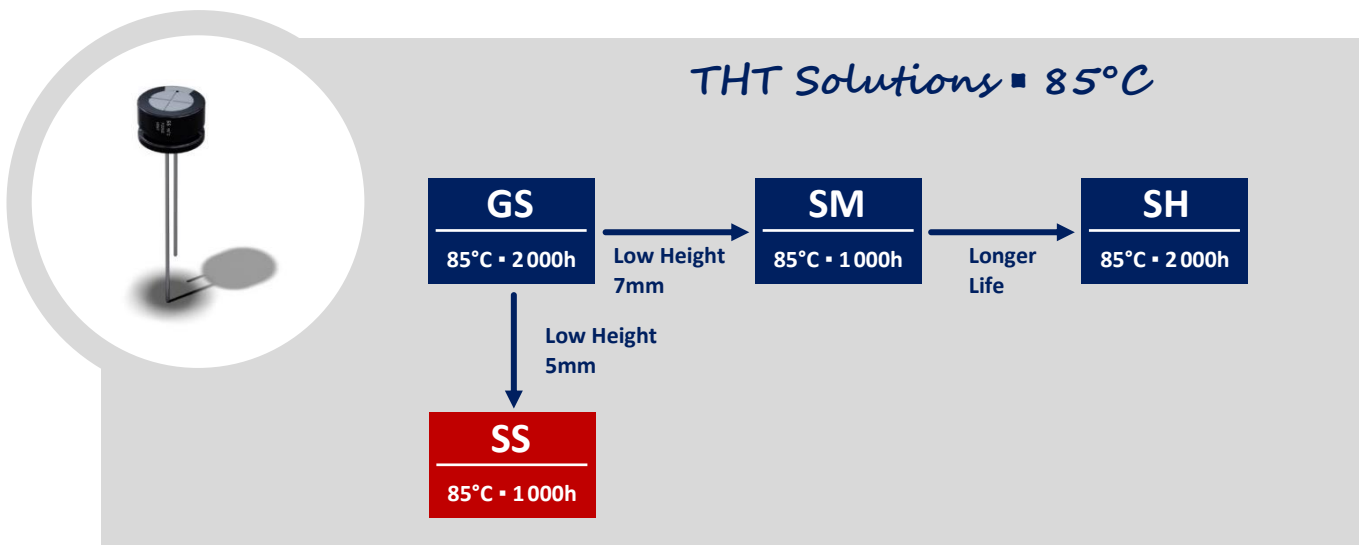
$\phi D$	4	5	6.3	8
F	1.5	2	2.5	3.5
$\phi d$	0.45	0.45	0.45	0.45
a	1	1	1	1

### 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.

			
<a href="#">General Precautions &amp; Guidelines</a>	<a href="#">Packaging Information</a>	<a href="#">3D Models</a>	<a href="#">Reliability Tests</a>

### 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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