GT SERIES ▪ MINIATURIZED, AUTOMOTIVE 105°C TYPE

KEY FEATURES

AEC-Q 200 · MINIATURIZED · LONG LIFE

- **ALUMINUM ELECTROLYTIC CAPACITOR** ▪ THT type
- Endurance: 105°C ▪ 10 000 hours
- Miniaturized for space critical applications
- High reliability
- AEC-Q200 version available

HF Halogen Free · RoHS & REACH COMPLIANT

SPECIFICATIONS

Items		Performance Characteristics							
Operating Temperature Range		-40 ~ +105°C							
Rated Voltage Range	V_R	10 ~ 100V DC							
Surge Voltage	V_S	$V_S = 1.15 \cdot V_R$							
Capacitance Range	C_R	1 ~ 330µF							
Cap. Tolerance	ΔC	±20% (120Hz ▪ 20°C)							
Leakage Current (20°C ▪ V_R applied)	I_{LEAK}	≤ $0.01 \cdot C_R \cdot V_R$ 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)	10	16	25	35	50	63	100
		tanδ (%)	45	35	30	22	19	17	15
Low Temperature Characteristics at 120Hz	Z ratio max.	V_R (V DC)	10	16	25	35	50	63	100
		Z-25°C/Z+20°C	10	8	6	6	5	5	5
		Z-40°C/Z+20°C	14	10	8	8	8	8	6

Lifetime Test		
Endurance 105°C (V_R & I_R applied)	Test	**10 000 hours**
	△C/C_R	≤ ±25% of initial measured value
	tanδ	≤ 300% of initial specified value
	I_{Leak}	≤ the initial specified value
Shelf Life 105°C (V_R = 0)	Test	**1 000 hours**
	△C/C_R	≤ ±25% of initial measured value
	tanδ	≤ 300% of initial specified value
	I_{Leak}	≤ the initial specified value
	Before measurement: Restore capacitor to 20°C, apply V_R for 30 min according JIS-C-5101-4	

For further information please contact sales@capxon.org

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
10	100	5	11	140	GT101M010C110A ☐
	220	6.3	11	220	GT221M010E110A ☐
	330	8	11.5	340	GT331M010F115A ☐
16	47	5	11	140	GT470M016C110A ☐
	100	6.3	11	220	GT101M016E110A ☐
	220	8	11.5	340	GT221M016F115A ☐
25	33	5	11	140	GT330M025C110A ☐
	47	5	11	140	GT470M025C110A ☐
	100	6.3	11	220	GT101M025E110A ☐
35	33	5	11	90	GT330M035C110A ☐
	47	6.3	11	220	GT470M035E110A ☐
	100	8	11.5	340	GT101M035F115A ☐
50	1	5	11	26	GT010M050C110A ☐
	2.2	5	11	36	GT2R2M050C110A ☐
	3.3	5	11	75	GT3R3M050C110A ☐
	4.7	5	11	85	GT4R7M050C110A ☐
	10	5	11	95	GT100M050C110A ☐
	22	5	11	140	GT220M050C110A ☐
	33	6.3	11	200	GT330M050E110A ☐
	47	6.3	11	200	GT470M050E110A ☐
	100	8	11.5	280	GT101M050F115A ☐
63	10	5	11	85	GT100M063C110A ☐
	22	6.3	11	180	GT220M063E110A ☐
	33	6.3	11	180	GT330M063E110A ☐
	47	8	11.5	250	GT470M063F115A ☐
100	1	5	11	40	GT010M100C110A ☐
	2.2	5	11	50	GT2R2M100C110A ☐
	3.3	5	11	60	GT3R3M100C110A ☐
	4.7	5	11	70	GT4R7M100C110A ☐
	10	6.3	11	150	GT100M100E110A ☐
	22	8	11.5	230	GT220M100F115A ☐

☐: Enter **blank** for Standard version ☐: Enter **X** for AEC-Q200 version

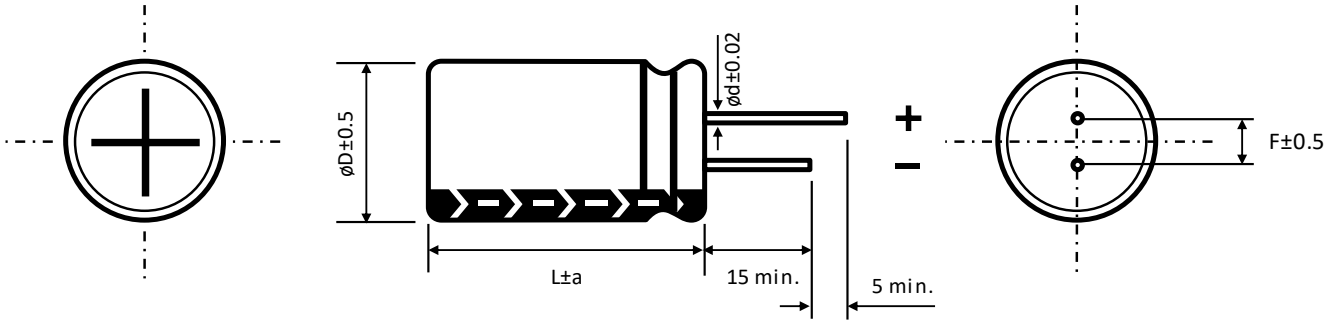
See "PACKAGING INFORMATION" to taped or formed products.

MULTIPLIER K_f for RIPPLE CURRENT vs. FREQUENCY

C_R (µF) / Frequency (Hz)	100/120	1k	10k	100k
1 ~ 10	0.42	0.6	0.8	1
22 ~ 33	0.55	0.75	0.9	1
47 ~ 330	0.7	0.85	0.95	1

For further information please contact sales@capxon.org

DIMENSIONS ▪ All dimensions in mm



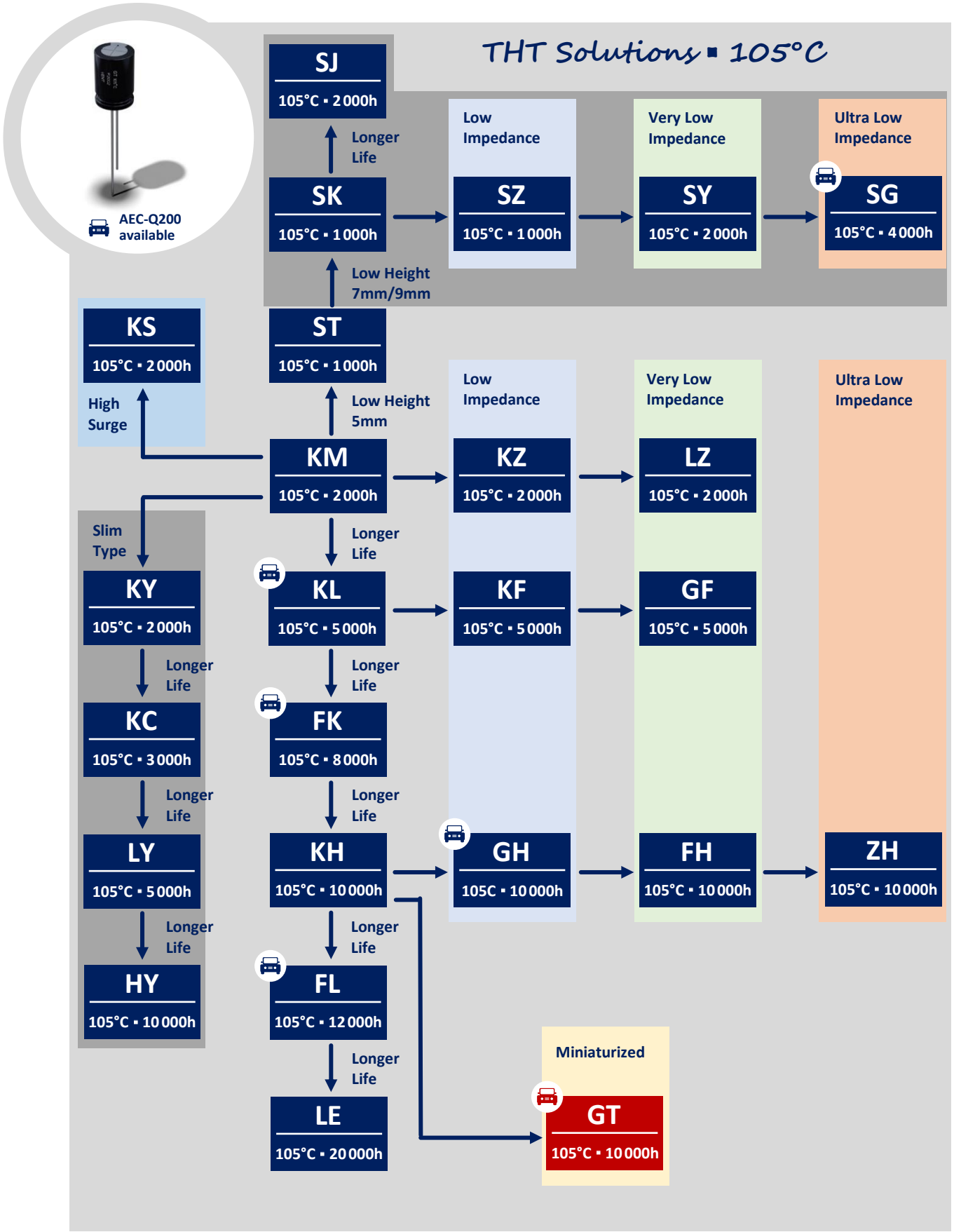
ø D	5	6.3	8
F	2	2.5	3.5
ø d	0.5	0.5	0.5
a	1.5	1.5	1.5

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.

Except for the written expressed warranties, CapXon does not impliedly, by assumption or whatever else, warrant, undertake, promise any other warranty or guaranty for any CapXon product.

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