GH SERIES ▪ LOW IMPEDANCE, AUTOMOTIVE 105°C TYPE

KEY FEATURES

AEC-Q 200 LOW IMPEDANCE

- **ALUMINUM ELECTROLYTIC CAPACITOR** ▪ THT type
- Endurance: 105°C ▪ 3 000 hours up to 10 000 hours
- Low impedance and high ripple current
- Wide capacitance range
- AEC-Q200 version available

HF Halogen Free RoHS & REACH COMPLIANT

SPECIFICATIONS

Items		Performance Characteristics								
Operating Temperature Range		-55 ~ +105°C								
Rated Voltage Range	**V_R**	6.3 ~ 100V DC								
Surge Voltage	**V_S**	$V_S = 1.15 \cdot V_R$								
Capacitance Range	**C_R**	1 ~ 12000µF								
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)	6.3	10	16	25	35	50	63	80	100
		tanδ (%)	22	19	16	14	12	10	9	9	10
		For C_R > 1000µF, add 2% per every multiple 1000µF of rated capacitance value									
Low Temperature Characteristics at 120Hz	**Z ratio max.**	V_R (V DC)	6.3	10	16	25	35	50	63	80	100
		Z-25°C/Z+20°C	4	3	2	2	1.5	1.5	1.5	1.5	1.5
		Z-40°C/Z+20°C	6	4	3	3	2	2	2	2	2
		Z-55°C/Z+20°C	8	6	5	5	4	4	4	4	4
		For capacitance > 1000µF									
		Z-25°C/Z+20°C	Add 0.5 for every multiple 1000µF of rated capacitance value								
		Z-40°C/Z+20°C	Add 1 for every multiple 1000µF of rated capacitance value								
		Z-55°C/Z+20°C	Add 1.5 for every multiple 1000µF of rated capacitance value								

Lifetime Test			
Endurance 105°C (V_R & I_R applied)	Test	**5 000 hours**	ø D 5 ~ 6.3 mm
		7 000 hours	ø D 8 ~ 12 mm
		10 000 hours	ø D ≥ 13 mm
	△C/C_R	≤ ±25% of initial measured value	
	tanδ	≤ 200% 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	≤ 200% 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)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
6.3	82	5	11	1630	198	GH820M6R3C110A [ ] [ ]
	100	5	11	1450	210	GH101M6R3C110A [ ] [ ]
	120	5	11	1280	222	GH121M6R3C110A [ ] [ ]
	150	6.3	11	1160	240	GH151M6R3E110A [ ] [ ]
	180	6.3	11	1040	282	GH181M6R3E110A [ ] [ ]
	220	6.3	11	890	378	GH221M6R3E110A [ ] [ ]
	270	6.3	11	770	396	GH271M6R3E110A [ ] [ ]
	330	6.3	11	770	396	GH331M6R3E110A [ ] [ ]
	330	6.3	15	680	426	GH331M6R3E150A [ ] [ ]
	330	8	11.5	680	444	GH331M6R3F115A [ ] [ ]
	390	6.3	15	580	462	GH391M6R3E150A [ ] [ ]
	390	8	11.5	520	480	GH391M6R3F115A [ ] [ ]
	470	6.3	15	410	504	GH471M6R3E150A [ ] [ ]
	470	8	11.5	380	534	GH471M6R3F115A [ ] [ ]
	470	10	12.5	380	564	GH471M6R3G125A [ ] [ ]
	560	8	11.5	360	570	GH561M6R3F115A [ ] [ ]
	560	8	16	360	600	GH561M6R3F160A [ ] [ ]
	560	10	12.5	360	612	GH561M6R3G125A [ ] [ ]
	680	8	11.5	330	582	GH681M6R3F115A [ ] [ ]
	680	8	16	330	618	GH681M6R3F160A [ ] [ ]
	680	10	12.5	330	642	GH681M6R3G125A [ ] [ ]
	820	8	11.5	250	666	GH821M6R3F115A [ ] [ ]
	820	10	12.5	250	720	GH821M6R3G125A [ ] [ ]
	1000	8	16	220	690	GH102M6R3F160A [ ] [ ]
	1000	8	20	220	756	GH102M6R3F200A [ ] [ ]
	1000	10	12.5	220	708	GH102M6R3G125A [ ] [ ]
	1200	8	20	180	840	GH122M6R3F200A [ ] [ ]
	1200	10	16	180	888	GH122M6R3G160A [ ] [ ]
	1500	8	20	150	1056	GH152M6R3F200A [ ] [ ]
	1500	10	16	120	1128	GH152M6R3G160A [ ] [ ]
	1500	10	20	120	1176	GH152M6R3G200A [ ] [ ]
	1800	8	25	110	1230	GH182M6R3F250A [ ] [ ]
	1800	10	20	110	1308	GH182M6R3G200A [ ] [ ]
	2200	10	20	100	1350	GH222M6R3G200A [ ] [ ]
	2200	10	25	100	1362	GH222M6R3G250A [ ] [ ]
	2700	10	25	90	1488	GH272M6R3G250A [ ] [ ]
	2700	10	30	90	1560	GH272M6R3G300A [ ] [ ]
	2700	13	20	90	1512	GH272M6R3I200A [ ] [ ]
	3300	10	30	85	1620	GH332M6R3G300A [ ] [ ]
	3300	13	20	85	1584	GH332M6R3I200A [ ] [ ]
	3900	13	25	80	1860	GH392M6R3I250A [ ] [ ]
	4700	13	25	75	1938	GH472M6R3I250A [ ] [ ]
	4700	13	30	70	1992	GH472M6R3I300A [ ] [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
6.3	5600	13	30	68	1992	GH562M6R3I300A [ ]
	5600	16	25	68	2196	GH562M6R3J250A [ ] [ ]
	6800	13	30	63	2520	GH682M6R3I300A [ ]
	6800	16	25	63	2718	GH682M6R3J250A [ ] [ ]
10	22	5	11	3080	66	GH220M010C110A [ ] [ ]
	27	5	11	2670	72	GH270M010C110A [ ] [ ]
	33	5	11	2330	72	GH330M010C110A [ ] [ ]
	39	5	11	2020	120	GH390M010C110A [ ] [ ]
	47	5	11	1710	132	GH470M010C110A [ ] [ ]
	56	5	11	1470	144	GH560M010C110A [ ] [ ]
	68	5	11	1300	162	GH680M010C110A [ ] [ ]
	82	5	11	1150	192	GH820M010C110A [ ] [ ]
	100	5	11	1020	222	GH101M010C110A [ ] [ ]
	100	6.3	11	1020	240	GH101M010E110A [ ] [ ]
	120	5	11	1020	246	GH121M010C110A [ ] [ ]
	120	6.3	11	1020	258	GH121M010E110A [ ] [ ]
	150	6.3	11	950	282	GH151M010E110A [ ] [ ]
	180	6.3	11	680	318	GH181M010E110A [ ] [ ]
	220	6.3	11	600	366	GH221M010E110A [ ] [ ]
	220	6.3	15	580	390	GH221M010E150A [ ] [ ]
	270	6.3	15	560	414	GH271M010E150A [ ] [ ]
	270	8	11.5	530	420	GH271M010F115A [ ] [ ]
	330	6.3	11	500	402	GH331M010E110A [ ] [ ]
	330	6.3	15	470	462	GH331M010E150A [ ] [ ]
	330	8	11.5	450	492	GH331M010F115A [ ] [ ]
	390	6.3	15	420	456	GH391M010E150A [ ] [ ]
	390	8	11.5	420	516	GH391M010F115A [ ] [ ]
	470	6.3	15	370	480	GH471M010E150A [ ] [ ]
	470	8	11.5	300	552	GH471M010F115A [ ] [ ]
	560	8	11.5	280	588	GH561M010F115A [ ] [ ]
	560	8	16	250	636	GH561M010F160A [ ] [ ]
	560	10	12.5	250	636	GH561M010G125A [ ] [ ]
	680	8	16	210	660	GH681M010F160A [ ] [ ]
	680	8	20	200	684	GH681M010F200A [ ] [ ]
	680	10	12.5	200	684	GH681M010G125A [ ] [ ]
	820	8	16	200	732	GH821M010F160A [ ] [ ]
	820	8	20	180	828	GH821M010F200A [ ] [ ]
	820	10	12.5	160	876	GH821M010G125A [ ] [ ]
	820	10	16	160	936	GH821M010G160A [ ] [ ]
	1000	8	16	160	1020	GH102M010F160A [ ] [ ]
	1000	8	20	140	1122	GH102M010F200A [ ] [ ]
	1000	10	12.5	140	1032	GH102M010G125A [ ] [ ]
	1000	10	16	130	1140	GH102M010G160A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

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)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
10	1200	8	20	130	1248	GH122M010F200A [ ]
	1200	10	16	130	1272	GH122M010G160A [ ]
	1200	10	20	120	1368	GH122M010G200A [ ]
	1500	10	20	106	1536	GH152M010G200A [ ]
	1500	13	16	110	1619	GH152M010I160A [ ]
	1800	10	25	102	1650	GH182M010G250A [ ]
	1800	13	20	98	1704	GH182M010I200A [ ]
	2200	10	25	95	1776	GH222M010G250A [ ]
	2200	10	30	93	1860	GH222M010G300A [ ]
	2200	13	20	93	1872	GH222M010I200A [ ]
	2200	16	16	93	1926	GH222M010J160A [ ]
	2700	10	30	84	2076	GH272M010G300A [ ]
	2700	13	20	84	2028	GH272M010I200A [ ]
	2700	13	25	84	2124	GH272M010I250A [ ]
	2700	18	16	84	2240	GH272M010K160A [ ]
	3300	10	30	70	2232	GH332M010G300A [ ]
	3300	13	25	70	2268	GH332M010I250A [ ]
	3300	16	25	70	2316	GH332M010J250A [ ]
	3900	13	25	65	2304	GH392M010I250A [ ]
	3900	13	30	65	2376	GH392M010I300A [ ]
	3900	16	20	70	2362	GH392M010J200A [ ]
	3900	16	25	65	2544	GH392M010J250A [ ]
	4700	13	30	65	2484	GH472M010I300A [ ]
	4700	13	35	60	2568	GH472M010I350A [ ]
	4700	16	25	57	2634	GH472M010J250A [ ]
	5600	13	35	54	2640	GH562M010I350A [ ]
	5600	16	25	54	2472	GH562M010J250A [ ]
	5600	16	31.5	50	2736	GH562M010J315A [ ]
	5600	18	20	57	2459	GH562M010K200A [ ]
	6800	16	31.5	46	2964	GH682M010J315A [ ]
	6800	18	25	52	2865	GH682M010K250A [ ]
	8200	16	35.5	43	3350	GH822M010J355A [ ]
	8200	18	31.5	44	3392	GH822M010K315A [ ]
	10000	16	40	40	3850	GH103M010J400A [ ]
	10000	18	35.5	41	3850	GH103M010K355A [ ]
	12000	18	40	37	4150	GH123M010K400A [ ]
16	10	5	11	3900	36	GH100M016C110A [ ]
	15	5	11	3320	72	GH150M016C110A [ ]
	22	5	11	2640	72	GH220M016C110A [ ]
	27	5	11	2370	132	GH270M016C110A [ ]
	33	5	11	2000	144	GH330M016C110A [ ]
	39	5	11	1610	168	GH390M016C110A [ ]
	47	5	11	1350	186	GH470M016C110A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
16	56	5	11	1240	210	GH560M016C110A [ ]
	68	5	11	1180	228	GH680M016C110A [ ]
	82	6.3	11	1030	264	GH820M016E110A [ ]
	100	5	11	1100	228	GH101M016C110A [ ]
	100	6.3	11	860	264	GH101M016E110A [ ]
	120	6.3	11	660	312	GH121M016E110A [ ]
	150	6.3	11	580	336	GH151M016E110A [ ]
	150	6.3	15	580	396	GH151M016E150A [ ]
	180	6.3	15	560	420	GH181M016E150A [ ]
	180	8	11.5	540	426	GH181M016F115A [ ]
	220	6.3	15	520	504	GH221M016E150A [ ]
	220	8	11.5	460	540	GH221M016F115A [ ]
	270	6.3	15	420	540	GH271M016E150A [ ]
	270	8	11.5	380	582	GH271M016F115A [ ]
	330	6.3	15	340	588	GH331M016E150A [ ]
	330	8	11.5	370	588	GH331M016F115A [ ]
	330	8	16	350	618	GH331M016F160A [ ]
	390	8	11.5	330	612	GH391M016F115A [ ]
	390	8	16	330	654	GH391M016F160A [ ]
	390	10	12.5	330	648	GH391M016G125A [ ]
	470	8	16	290	846	GH471M016F160A [ ]
	470	8	20	280	900	GH471M016F200A [ ]
	470	10	12.5	280	882	GH471M016G125A [ ]
	560	8	16	260	864	GH561M016F160A [ ]
	560	8	20	240	936	GH561M016F200A [ ]
	560	10	12.5	240	882	GH561M016G125A [ ]
	560	10	16	200	960	GH561M016G160A [ ]
	680	8	20	200	960	GH681M016F200A [ ]
	680	10	16	180	1044	GH681M016G160A [ ]
	820	8	20	170	1104	GH821M016F200A [ ]
	820	10	16	150	1254	GH821M016G160A [ ]
	820	10	20	150	1320	GH821M016G200A [ ]
	1000	10	16	140	1404	GH102M016G160A [ ]
	1000	10	20	120	1476	GH102M016G200A [ ]
	1200	10	20	130	1500	GH122M016G200A [ ]
	1200	10	25	110	1578	GH122M016G250A [ ]
	1500	10	25	96	1620	GH152M016G250A [ ]
	1500	13	20	95	1728	GH152M016I200A [ ]
	1500	16	16	95	1778	GH152M016J160A [ ]
	1800	10	30	97	1776	GH182M016G300A [ ]
	1800	13	20	94	1854	GH182M016I200A [ ]
	1800	13	25	90	1956	GH182M016I250A [ ]
	2200	13	20	90	2082	GH222M016I200A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
16	2200	13	25	85	2340	GH222M016I250A [ ]
	2200	18	16	90	2300	GH222M016K160A [ ]
	2700	13	25	76	2436	GH272M016I250A [ ]
	2700	13	30	72	2496	GH272M016I300A [ ]
	2700	16	20	74	2362	GH272M016J200A [ ]
	2700	16	25	72	2544	GH272M016J250A [ ]
	3300	13	30	68	2562	GH332M016I300A [ ]
	3300	13	35	66	2628	GH332M016I350A [ ]
	3300	16	25	64	2700	GH332M016J250A [ ]
	3900	13	35	50	2664	GH392M016I350A [ ]
	3900	16	25	60	2736	GH392M016J250A [ ]
	3900	16	31.5	58	2856	GH392M016J315A [ ]
	3900	18	20	60	2721	GH392M016K200A [ ]
	4700	16	31.5	50	2886	GH472M016J315A [ ]
	4700	18	25	55	2844	GH472M016K250A [ ]
	5600	16	35.5	46	2968	GH562M016J355A [ ]
	5600	18	31.5	48	3084	GH562M016K315A [ ]
	5600	18	35.5	45	3168	GH562M016K355A [ ]
	6800	16	40	40	3252	GH682M016J400A [ ]
	6800	18	35.5	40	3252	GH682M016K355A [ ]
	8200	18	35.5	38	3750	GH822M016K355A [ ]
	10000	18	40	36	4150	GH103M016K400A [ ]
25	10	5	11	3010	66	GH100M025C110A [ ]
	15	5	11	2640	120	GH150M025C110A [ ]
	22	5	11	2300	144	GH220M025C110A [ ]
	27	5	11	2030	156	GH270M025C110A [ ]
	33	5	11	1720	174	GH330M025C110A [ ]
	39	5	11	1500	174	GH390M025C110A [ ]
	47	5	11	1370	222	GH470M025C110A [ ]
	47	6.3	11	1280	240	GH470M025E110A [ ]
	56	5	11	1250	264	GH560M025C110A [ ]
	68	6.3	11	970	300	GH680M025E110A [ ]
	82	6.3	11	790	312	GH820M025E110A [ ]
	100	6.3	11	680	360	GH101M025E110A [ ]
	100	8	11.5	540	516	GH101M025F115A [ ]
	120	6.3	11	580	402	GH121M025E110A [ ]
	120	6.3	15	560	462	GH121M025E150A [ ]
	150	6.3	15	540	510	GH151M025E150A [ ]
	150	8	11.5	520	528	GH151M025F115A [ ]
	180	6.3	15	510	546	GH181M025E150A [ ]
	180	8	11.5	460	552	GH181M025F115A [ ]
	220	8	11.5	420	618	GH221M025F115A [ ]
	220	8	16	400	642	GH221M025F160A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
25	270	8	11.5	340	750	GH271M025F115A [ ]
	270	8	16	320	756	GH271M025F160A [ ] [ ]
	270	10	12.5	320	816	GH271M025G125A [ ] [ ]
	330	8	16	250	960	GH331M025F160A [ ] [ ]
	330	10	12.5	240	924	GH331M025G125A [ ] [ ]
	470	8	20	230	1056	GH471M025F200A [ ] [ ]
	470	10	12.5	210	1020	GH471M025G125A [ ] [ ]
	470	10	16	210	1080	GH471M025G160A [ ] [ ]
	560	8	20	170	1224	GH561M025F200A [ ] [ ]
	560	10	16	150	1260	GH561M025G160A [ ] [ ]
	680	10	20	110	1470	GH681M025G200A [ ] [ ]
	680	13	16	100	1550	GH681M025I160A [ ]
	820	10	20	110	1668	GH821M025G200A [ ] [ ]
	820	10	25	100	1704	GH821M025G250A [ ] [ ]
	1000	10	25	93	1812	GH102M025G250A [ ] [ ]
	1000	13	20	90	1872	GH102M025I200A [ ]
	1000	16	16	88	1926	GH102M025J160A [ ] [ ]
	1200	13	20	82	2028	GH122M025I200A [ ]
	1200	18	16	80	2240	GH122M025K160A [ ] [ ]
	1500	13	20	67	2124	GH152M025I200A [ ]
	1500	13	25	65	2190	GH152M025I250A [ ] [ ]
	1800	13	30	58	2310	GH182M025I300A [ ]
	1800	16	20	56	2172	GH182M025J200A [ ] [ ]
	1800	16	25	58	2340	GH182M025J250A [ ] [ ]
	2200	13	30	52	2592	GH222M025I300A [ ] [ ]
	2200	16	25	50	2712	GH222M025J250A [ ] [ ]
	2200	18	20	52	2697	GH222M025K200A [ ] [ ]
	2700	13	35	50	2850	GH272M025I350A [ ]
	2700	16	25	48	2673	GH272M025J250A [ ] [ ]
	2700	16	31.5	46	2958	GH272M025J315A [ ] [ ]
	3300	16	31.5	38	3204	GH332M025J315A [ ] [ ]
	3300	16	35.5	36	3288	GH332M025J355A [ ] [ ]
	3300	18	25	41	3156	GH332M025K250A [ ] [ ]
	3900	16	35.5	36	3500	GH392M025J355A [ ] [ ]
	3900	18	31.5	36	3544	GH392M025K315A [ ] [ ]
	4700	16	40	34	3800	GH472M025J400A [ ] [ ]
	4700	18	35.5	34	3800	GH472M025K355A [ ] [ ]
	5600	18	40	30	4100	GH562M025K400A [ ] [ ]
35	10	5	11	2650	84	GH100M035C110A [ ]
	15	5	11	2290	144	GH150M035C110A [ ]
	22	5	11	1900	162	GH220M035C110A [ ]
	27	5	11	1580	174	GH270M035C110A [ ]
	27	6.3	11	1420	198	GH270M035E110A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

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)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
35	33	5	11	1250	222	GH330M035C110A [ ]
	33	6.3	11	1250	240	GH330M035E110A [ ] [ ]
	39	6.3	11	1100	252	GH390M035E110A [ ] [ ]
	47	5	11	96	232	GH470M035C110A [ ]
	47	6.3	11	920	264	GH470M035E110A [ ] [ ]
	56	6.3	11	750	282	GH560M035E110A [ ] [ ]
	56	6.3	15	680	306	GH560M035E150A [ ] [ ]
	68	6.3	11	620	312	GH680M035E110A [ ] [ ]
	68	6.3	15	550	348	GH680M035E150A [ ] [ ]
	82	6.3	15	510	354	GH820M035E150A [ ] [ ]
	82	8	11.5	470	384	GH820M035F115A [ ] [ ]
	100	6.3	11	490	329	GH101M035E110A [ ] [ ]
	100	6.3	15	470	378	GH101M035E150A [ ] [ ]
	100	8	11.5	450	414	GH101M035F115A [ ] [ ]
	120	8	11.5	420	546	GH121M035F115A [ ] [ ]
	120	8	16	380	612	GH121M035F160A [ ] [ ]
	150	8	11.5	380	618	GH151M035F115A [ ] [ ]
	150	8	16	350	714	GH151M035F160A [ ] [ ]
	150	10	12.5	350	720	GH151M035G125A [ ] [ ]
	180	8	16	320	792	GH181M035F160A [ ] [ ]
	180	10	12.5	320	804	GH181M035G125A [ ] [ ]
	220	8	16	260	864	GH221M035F160A [ ] [ ]
	220	8	20	240	936	GH221M035F200A [ ] [ ]
	220	10	12.5	240	888	GH221M035G125A [ ] [ ]
	270	8	20	220	1056	GH271M035F200A [ ] [ ]
	270	10	12.5	240	984	GH271M035G125A [ ] [ ]
	270	10	16	210	1068	GH271M035G160A [ ] [ ]
	330	8	20	160	1140	GH331M035F200A [ ] [ ]
	330	10	16	150	1176	GH331M035G160A [ ] [ ]
	470	10	20	110	1302	GH471M035G200A [ ] [ ]
	470	10	25	100	1398	GH471M035G250A [ ] [ ]
	470	13	16	110	1272	GH471M035I160A [ ] [ ]
	470	13	20	100	1398	GH471M035I200A [ ] [ ]
	560	10	25	96	1572	GH561M035G250A [ ] [ ]
	560	13	20	96	1584	GH561M035I200A [ ] [ ]
	680	10	25	84	1680	GH681M035G250A [ ] [ ]
	680	13	20	82	1692	GH681M035I200A [ ] [ ]
	680	16	16	80	1740	GH681M035J160A [ ] [ ]
	820	13	20	68	1818	GH821M035I200A [ ] [ ]
	820	13	25	62	1944	GH821M035I250A [ ] [ ]
	1000	10	30	60	2136	GH102M035G300A [ ] [ ]
	1000	13	25	60	2184	GH102M035I250A [ ] [ ]
	1000	13	30	58	2280	GH102M035I300A [ ] [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
35	1000	18	16	56	2189	GH102M035K160A ☐☐
	1200	13	25	52	2292	GH122M035I250A ☐☐
	1200	16	20	52	2384	GH122M035J200A ☐☐
	1200	16	25	50	2568	GH122M035J250A ☐☐
	1500	13	35	48	2820	GH152M035I350A ☐☐
	1500	16	31.5	48	2928	GH152M035J315A ☐☐
	1800	13	35	45	2976	GH182M035I350A ☐☐
	1800	16	25	48	2722	GH182M035J250A ☐☐
	1800	16	31.5	45	3012	GH182M035J315A ☐☐
	1800	18	20	48	2707	GH182M035K200A ☐☐
	2200	16	31.5	36	3228	GH222M035J315A ☐☐
	2200	18	25	36	3132	GH222M035K250A ☐☐
	2700	16	35.5	32	3294	GH272M035J355A ☐☐
	2700	18	31.5	32	3336	GH272M035K315A ☐☐
	3300	16	40	29	3800	GH332M035J400A ☐☐
	3300	18	35.5	29	3800	GH332M035K355A ☐☐
	3900	18	40	26	4100	GH392M035K400A ☐☐
50	1	5	11	4310	24	GH010M050C110A ☐☐
	2.2	5	11	3600	36	GH2R2M050C110A ☐☐
	3.3	5	11	3500	48	GH3R3M050C110A ☐☐
	4.7	5	11	3300	66	GH4R7M050C110A ☐☐
	5.6	5	11	3200	96	GH5R6M050C110A ☐☐
	6.8	5	11	3000	96	GH6R8M050C110A ☐☐
	8.2	5	11	2800	108	GH8R2M050C110A ☐☐
	10	5	11	2600	120	GH100M050C110A ☐☐
	15	5	11	1870	150	GH150M050C110A ☐☐
	22	5	11	1600	162	GH220M050C110A ☐☐
	22	6.3	11	1270	168	GH220M050E110A ☐☐
	27	6.3	11	1020	192	GH270M050E110A ☐☐
	33	6.3	11	870	282	GH330M050E110A ☐☐
	33	6.3	15	850	296	GH330M050E150A ☐☐
	39	6.3	11	720	306	GH390M050E110A ☐☐
	39	6.3	15	700	330	GH390M050E150A ☐☐
	47	6.3	11	580	303	GH470M050E110A ☐☐
	47	6.3	15	550	348	GH470M050E150A ☐☐
	47	8	11.5	550	366	GH470M050F115A ☐☐
	56	6.3	11	490	323	GH560M050E110A ☐☐
	56	8	11.5	470	378	GH560M050F115A ☐☐
	68	8	11.5	470	420	GH680M050F115A ☐☐
	82	6.3	15	460	462	GH820M050E150A ☐☐
	82	8	11.5	460	492	GH820M050F115A ☐☐
	82	8	16	450	528	GH820M050F160A ☐☐

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

See "PACKAGING INFORMATION" to taped or formed products.

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)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
50	100	8	11.5	450	540	GH101M050F115A [ ]
	100	8	16	250	576	GH101M050F160A [ ]
	120	8	16	250	630	GH121M050F160A [ ]
	150	8	16	240	696	GH151M050F160A [ ]
	150	8	20	240	756	GH151M050F200A [ ]
	150	10	12.5	250	702	GH151M050G125A [ ]
	150	10	16	240	780	GH151M050G160A [ ]
	180	8	20	240	864	GH181M050F200A [ ]
	180	10	16	240	912	GH181M050G160A [ ]
	220	10	16	240	1056	GH221M050G160A [ ]
	220	10	20	200	1122	GH221M050G200A [ ]
	270	10	20	100	1212	GH271M050G200A [ ]
	270	10	25	100	1284	GH271M050G250A [ ]
	270	13	16	100	1278	GH271M050I160A [ ]
	330	10	25	95	1404	GH331M050G250A [ ]
	330	13	20	82	1500	GH331M050I200A [ ]
	470	10	30	78	1749	GH471M050G300A [ ]
	470	13	20	78	1776	GH471M050I200A [ ]
	470	13	25	78	1860	GH471M050I250A [ ]
	470	16	16	78	1827	GH471M050J160A [ ]
	560	13	20	75	2094	GH561M050I200A [ ]
	560	13	25	70	2172	GH561M050I250A [ ]
	560	18	16	73	2313	GH561M050K160A [ ]
	680	13	25	57	2304	GH681M050I250A [ ]
	680	16	25	57	2376	GH681M050J250A [ ]
	820	13	30	52	2412	GH821M050I300A [ ]
	820	16	20	54	2084	GH821M050J200A [ ]
	820	16	31.5	52	2484	GH821M050J315A [ ]
	1000	13	40	48	2750	GH102M050I400A [ ]
	1000	16	25	50	2676	GH102M050J250A [ ]
	1000	16	31.5	48	2736	GH102M050J315A [ ]
	1000	18	20	50	2661	GH102M050K200A [ ]
	1200	16	31.5	45	2952	GH122M050J315A [ ]
	1200	16	35.5	42	3048	GH122M050J355A [ ]
	1200	18	25	47	2854	GH122M050K250A [ ]
	1500	16	35.5	38	3216	GH152M050J355A [ ]
	1800	16	40	35	3550	GH182M050J400A [ ]
	1800	18	31.5	35	3367	GH182M050K315A [ ]
	2200	18	35.5	32	3550	GH222M050K355A [ ]
	2700	18	40	30	3790	GH272M050K400A [ ]
	3300	18	40	28	3810	GH332M050K400A [ ]
63	10	5	11	3015	116	GH100M063C110A [ ]
	15	5	11	2370	130	GH150M063C110A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
63	22	5	11	1770	151	GH220M063C110A [ ]
	22	6.3	11	1391	194	GH220M063E110A [ ] [ ]
	27	6.3	11	1290	201	GH270M063E110A [ ] [ ]
	33	6.3	11	1013	227	GH330M063E110A [ ] [ ]
	39	6.3	11	890	242	GH390M063E110A [ ] [ ]
	47	6.3	11	755	263	GH470M063E110A [ ] [ ]
	47	8	11.5	730	313	GH470M063F115A [ ] [ ]
	56	8	11.5	700	319	GH560M063F115A [ ] [ ]
	68	8	11.5	500	378	GH680M063F115A [ ] [ ]
	68	8	16	420	476	GH680M063F160A [ ] [ ]
	82	8	11.5	470	390	GH820M063F115A [ ] [ ]
	82	8	16	420	476	GH820M063F160A [ ] [ ]
	82	10	12.5	430	480	GH820M063G125A [ ] [ ]
	100	8	16	360	514	GH101M063F160A [ ] [ ]
	100	10	12.5	375	514	GH101M063G125A [ ] [ ]
	120	8	16	365	511	GH121M063F160A [ ] [ ]
	120	8	20	320	603	GH121M063F200A [ ] [ ]
	120	10	12.5	357	527	GH121M063G125A [ ] [ ]
	120	10	16	300	639	GH121M063G160A [ ] [ ]
	150	8	20	320	603	GH151M063F200A [ ] [ ]
	150	10	16	276	666	GH151M063G160A [ ] [ ]
	180	8	25	260	741	GH181M063F250A [ ] [ ]
	180	10	16	280	662	GH181M063G160A [ ] [ ]
	180	10	20	260	757	GH181M063G200A [ ] [ ]
	220	8	25	230	788	GH221M063F250A [ ] [ ]
	220	10	16	230	730	GH221M063G160A [ ] [ ]
	220	10	20	200	891	GH221M063G200A [ ] [ ]
	220	13	16	200	910	GH221M063I160A [ ]
	270	10	20	164	986	GH271M063G200A [ ] [ ]
	270	13	20	130	1241	GH271M063I200A [ ] [ ]
	330	10	25	126	1242	GH331M063G250A [ ] [ ]
	330	13	16	150	1086	GH331M063I160A [ ] [ ]
	330	13	20	130	1281	GH331M063I200A [ ] [ ]
	330	13	25	100	1611	GH331M063I250A [ ] [ ]
	390	13	25	93	1618	GH391M063I250A [ ] [ ]
	470	13	20	93	1516	GH471M063I200A [ ] [ ]
	470	13	25	90	1698	GH471M063I250A [ ] [ ]
	470	13	30	88	1863	GH471M063I300A [ ] [ ]
	470	16	20	82	1856	GH471M063J200A [ ] [ ]
	560	13	25	87	1727	GH561M063I250A [ ] [ ]
	560	13	30	81	1942	GH561M063I300A [ ] [ ]
	560	16	20	82	1857	GH561M063J200A [ ] [ ]
	680	13	30	71	2081	GH681M063I300A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
63	680	13	35	68	2273	GH681M063I350A [ ]
	680	16	20	84	1834	GH681M063J200A [ ] [ ]
	820	13	40	66	2453	GH821M063I400A [ ] [ ]
	820	16	25	66	2229	GH821M063J250A [ ] [ ]
	820	18	20	73	2108	GH821M063K200A [ ] [ ]
	1000	13	45	63	2652	GH102M063I450A [ ] [ ]
	1000	16	31.5	56	2689	GH102M063J315A [ ] [ ]
	1000	18	25	71	2307	GH102M063K250A [ ] [ ]
	1200	16	31.5	54	2726	GH122M063J315A [ ] [ ]
	1200	18	25	62	2470	GH122M063K250A [ ] [ ]
	1500	18	31.5	51	2996	GH152M063K315A [ ] [ ]
	1500	18	35.5	48	3256	GH152M063K355A [ ] [ ]
	1800	16	40	36	3759	GH182M063J400A [ ] [ ]
	1800	18	35.5	42	3480	GH182M063K355A [ ] [ ]
	2200	18	40	35	3937	GH222M063K400A [ ] [ ]
80	10	5	11	4070	99	GH100M080C110A [ ] [ ]
	15	5	11	3200	112	GH150M080C110A [ ] [ ]
	22	6.3	11	1878	167	GH220M080E110A [ ] [ ]
	27	6.3	11	1742	173	GH270M080E110A [ ] [ ]
	33	6.3	11	1367	195	GH330M080E110A [ ] [ ]
	39	8	11.5	1202	244	GH390M080F115A [ ] [ ]
	47	8	11.5	1019	265	GH470M080F115A [ ] [ ]
	56	8	11.5	945	275	GH560M080F115A [ ] [ ]
	56	8	16	900	325	GH560M080F160A [ ] [ ]
	68	8	16	660	380	GH680M080F160A [ ] [ ]
	68	10	12.5	660	388	GH680M080G125A [ ] [ ]
	82	8	16	630	389	GH820M080F160A [ ] [ ]
	82	10	12.5	660	389	GH820M080G125A [ ] [ ]
	100	8	20	450	509	GH101M080F200A [ ] [ ]
	100	10	16	450	521	GH101M080G160A [ ] [ ]
	100	13	16	440	634	GH101M080I160A [ ] [ ]
	120	10	16	430	533	GH121M080G160A [ ] [ ]
	150	10	20	345	657	GH151M080G200A [ ] [ ]
	150	13	16	400	664	GH151M080I160A [ ] [ ]
	180	10	20	330	677	GH181M080G200A [ ] [ ]
	180	10	25	320	755	GH181M080G250A [ ] [ ]
	180	13	16	340	721	GH181M080I160A [ ] [ ]
	220	10	25	310	766	GH221M080G250A [ ] [ ]
	220	13	20	310	830	GH221M080I200A [ ] [ ]
	270	13	20	270	889	GH271M080I200A [ ] [ ]
	270	13	25	250	1018	GH271M080I250A [ ] [ ]
	330	13	20	190	1060	GH331M080I200A [ ] [ ]
	330	16	20	180	1253	GH331M080J200A [ ] [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
80	390	13	30	150	1427	GH391M080I300A [ ]
	470	13	30	130	1533	GH471M080I300A [ ]
	470	13	35	120	1711	GH471M080I350A [ ]
	470	16	25	160	1431	GH471M080J250A [ ]
	470	18	20	150	1470	GH471M080K200A [ ]
	560	13	40	140	1684	GH561M080I400A [ ]
	560	16	25	150	1478	GH561M080J250A [ ]
	560	18	20	150	1470	GH561M080K200A [ ]
	680	16	31.5	130	1757	GH681M080J315A [ ]
	680	18	25	150	1581	GH681M080K250A [ ]
	820	16	35.5	120	1929	GH821M080J355A [ ]
	820	18	25	130	1699	GH821M080K250A [ ]
	1000	16	35.5	120	1929	GH102M080J355A [ ]
	1000	16	40	110	2150	GH102M080J400A [ ]
	1000	18	31.5	110	2040	GH102M080K315A [ ]
	1200	16	40	90	2377	GH122M080J400A [ ]
	1200	18	35.5	95	2314	GH122M080K355A [ ]
	1500	16	40	84	2461	GH152M080J400A [ ]
	1500	18	40	83	2641	GH152M080K400A [ ]
	1800	18	40	82	2657	GH182M080K400A [ ]
100	4.7	5	11	5750	54	GH4R7M100C110A [ ]
	5.6	5	11	5000	90	GH5R6M100C110A [ ]
	6.8	5	11	4360	96	GH6R8M100C110A [ ]
	8.2	5	11	3675	105	GH8R2M100C110A [ ]
	10	6.3	11	2625	141	GH100M100E110A [ ]
	10	8	11.5	2200	180	GH100M100F115A [ ]
	15	6.3	11	2313	150	GH150M100E110A [ ]
	22	6.3	11	1850	168	GH220M100E110A [ ]
	22	8	11.5	1375	228	GH220M100F115A [ ]
	27	8	11.5	1310	233	GH270M100F115A [ ]
	33	8	11.5	1238	240	GH330M100F115A [ ]
	39	8	16	1200	281	GH390M100F160A [ ]
	47	8	16	850	335	GH470M100F160A [ ]
	47	10	12.5	810	350	GH470M100G125A [ ]
	47	10	16	780	357	GH470M100G160A [ ]
	56	8	16	760	354	GH560M100F160A [ ]
	56	8	20	680	414	GH560M100F200A [ ]
	56	10	12.5	750	364	GH560M100G125A [ ]
	68	8	20	650	423	GH680M100F200A [ ]
	68	10	16	680	424	GH680M100G160A [ ]
	82	8	20	520	473	GH820M100F200A [ ]
	82	10	16	520	485	GH820M100G160A [ ]
	100	8	30	420	635	GH101M100F300A [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

STANDARD RATINGS

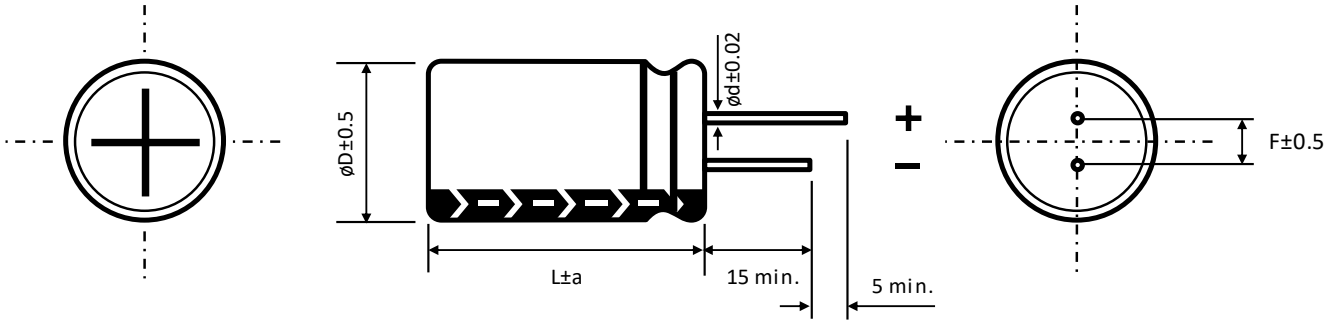
Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
100	100	10	16	450	521	GH101M100G160A [ ]
	100	10	20	420	595	GH101M100G200A [ ] [ ]
	100	13	16	430	641	GH101M100I160A [ ]
	100	13	20	380	749	GH101M100I200A [ ]
	120	8	35	360	738	GH121M100F350A [ ] [ ]
	120	10	20	400	610	GH121M100G200A [ ] [ ]
	120	10	25	370	701	GH121M100G250A [ ] [ ]
	120	13	16	400	664	GH121M100I160A [ ]
	150	10	25	330	743	GH151M100G250A [ ] [ ]
	150	10	30	310	833	GH151M100G300A [ ] [ ]
	150	13	20	330	804	GH151M100I200A [ ]
	180	13	20	290	858	GH181M100I200A [ ]
	180	13	25	280	962	GH181M100I250A [ ] [ ]
	220	13	20	270	889	GH221M100I200A [ ]
	220	13	25	250	108	GH221M100I250A [ ] [ ]
	220	16	16	270	915	GH221M100J160A [ ] [ ]
	220	16	20	250	1063	GH221M100J200A [ ] [ ]
	270	10	40	230	1106	GH271M100G400A [ ] [ ]
	270	13	30	200	1235	GH271M100I300A [ ] [ ]
	270	16	25	200	1280	GH271M100J250A [ ] [ ]
	330	13	30	160	1381	GH331M100I300A [ ] [ ]
	330	13	35	140	1584	GH331M100I350A [ ] [ ]
	330	16	25	140	1530	GH331M100J250A [ ] [ ]
	390	13	40	130	1748	GH391M100I400A [ ] [ ]
	390	18	25	150	1581	GH391M100K250A [ ] [ ]
	470	16	25	150	1478	GH471M100J250A [ ] [ ]
	470	16	31.5	110	1910	GH471M100J315A [ ] [ ]
	470	18	25	140	1637	GH471M100K250A [ ] [ ]
	560	16	35.5	130	1853	GH561M100J355A [ ] [ ]
	560	18	31.5	130	1877	GH561M100K315A [ ] [ ]
	680	16	35.5	120	1929	GH681M100J355A [ ] [ ]
	680	18	35.5	110	2150	GH681M100K355A [ ] [ ]
	820	18	35.5	105	2201	GH821M100K355A [ ] [ ]
	820	18	40	100	2406	GH821M100K400A [ ] [ ]
	1000	18	40	95	2468	GH102M100K400A [ ] [ ]

[ ]: Enter **blank** for Standard version [ ]: Enter **X** for AEC-Q200 version

See "PACKAGING INFORMATION" to taped or formed products.

DIMENSIONS ▪ All dimensions in mm



ø D	5	6.3	8		10	13	16	18
F	2	2.5	3.5		5	5	7.5	7.5
ø d	0.5		L < 20	L ≥ 20	0.6		0.8	
			0.5	0.6				

a	ø D < 16	ø D = 16		ø D = 18	
	1.5	L = 25 to 35.5	L < 25 and L ≥ 40	L = 25 to 31.5	L < 25 and L ≥ 35.5
		1.5	2	1.5	2

MULTIPLIER K_f for RIPPLE CURRENT vs. FREQUENCY

C_R (µF) / Frequency (Hz)	100/120	400	1k	10k	100k
$C_R \leq 10$	0.4	0.52	0.6	0.92	1
$10 < C_R \leq 100$	0.67	0.8	0.83	0.94	1
$100 < C_R \leq 1000$	0.75	0.84	0.88	0.95	1
$1000 \leq C_R$	0.82	0.87	0.92	0.95	1

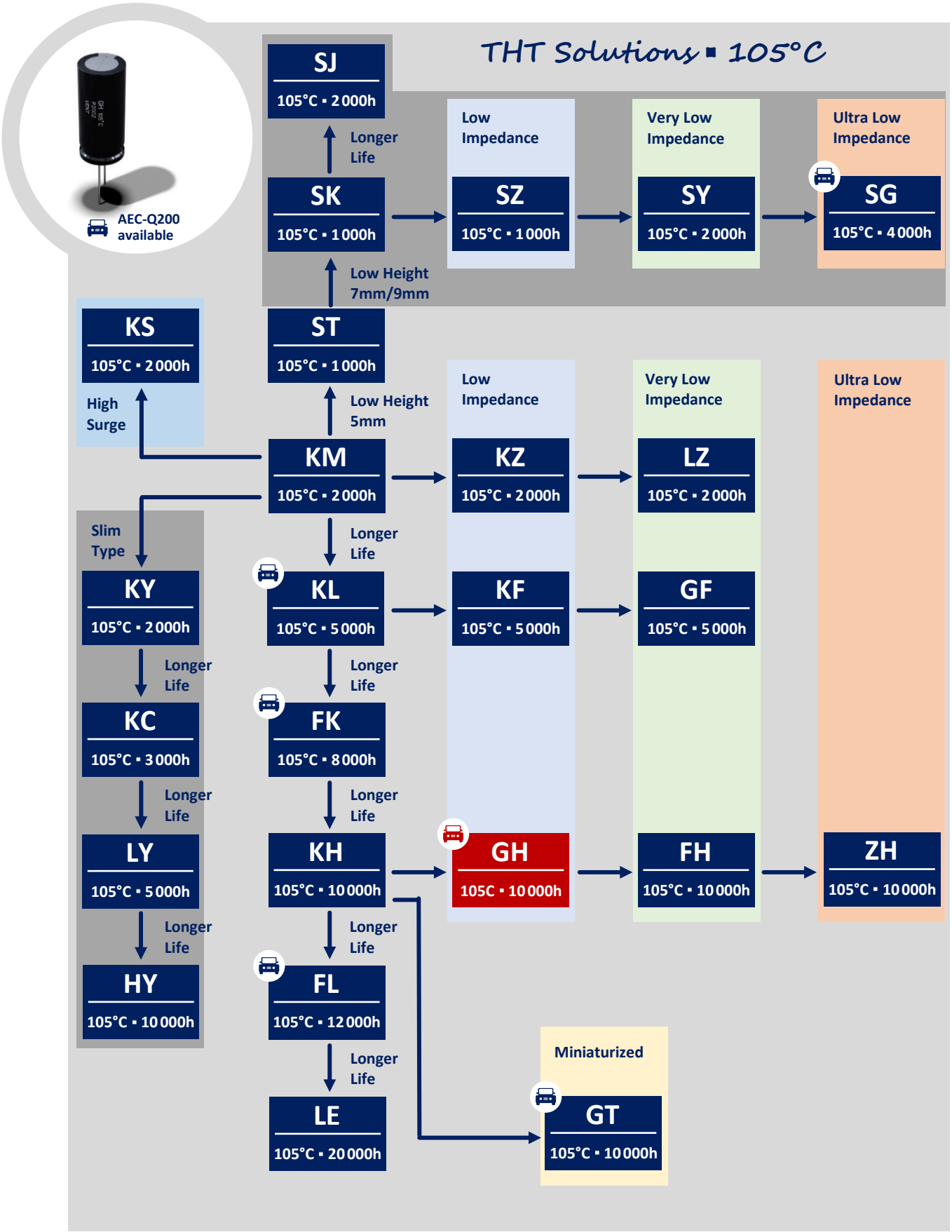
PRECAUTIONS, GUIDELINES AND PACKAGING INFORMATION

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

For further information please contact sales@capxon.org

GROUP CHART



For further information please contact sales@capxon.org

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.