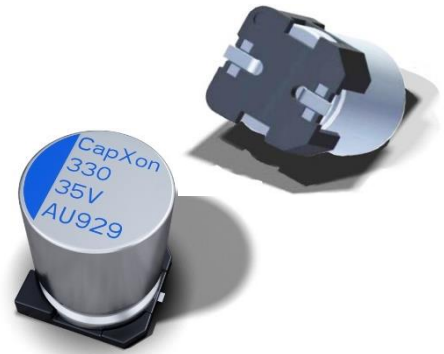


AU SERIES ▀ HIGH RIPPLE CURRENT TYPE

KEY FEATURES



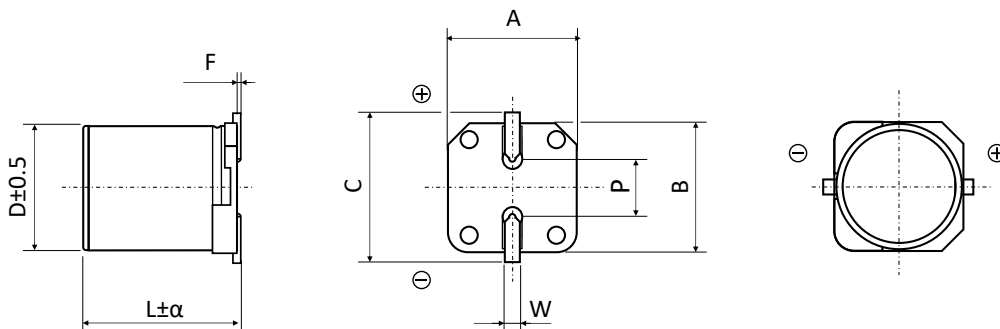
- **HYBRID CONDUCTIVE POLYMER** ▀ SMD type
- Endurance: 135°C ▀ 4 000 hours
- Ultra-low ESR and highest ripple current
- Vibration Proof (VP) version (up to 30g) available
- AEC-Q200 version available



SPECIFICATIONS

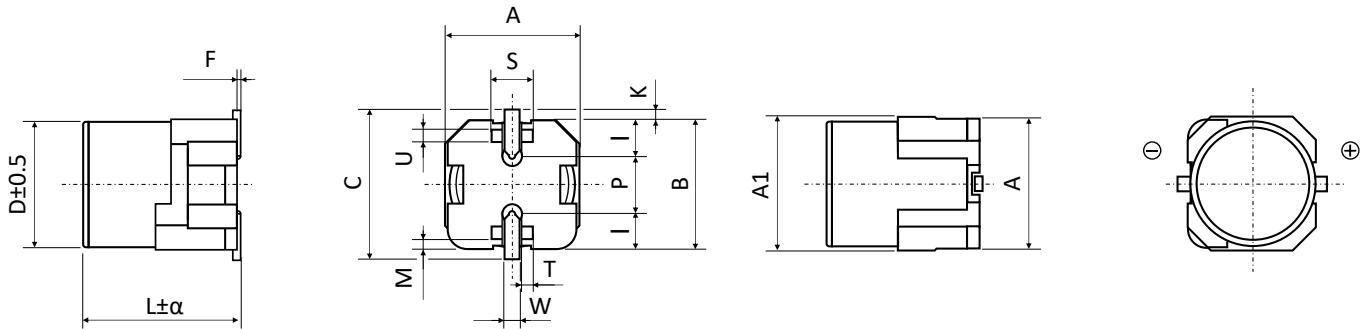
Items		Performance Characteristics
Operating Temperature Range		-55 ~ +135°C
Rated Voltage Range	V_R	25 ~ 100V DC
Surge Voltage	V_S	($V_R \leq 100V$): $V_S = 1.25 \cdot V_R$
Capacitance Range	C_R	22 ~ 680 μ F
Cap. Tolerance	ΔC	$\pm 20\%$ (120Hz ▀ 20°C)
Leakage Current (20°C ▀ V_R applied)	I_{LEAK}	Not to exceed the values shown in standard ratings After 2 minutes
Dissipation Factor % (20°C ▀ 120Hz)	$\tan\delta$	Not to exceed the values shown in standard ratings
Equivalent Series Resistance (20°C ▀ 100kHz)	ESR	Not to exceed the values shown in standard ratings
Lifetime Test		
Endurance 135°C (V_R & I_R applied)	Test	4 000 hours
	$\Delta C/C_R$	Within $\pm 30\%$ of the initial value
	$\tan\delta$	Less than 200% of the specified value
	ESR	Less than 200% of the specified value
	I_{Leak}	Less than the specified value

DIMENSIONS STANDARD PACKAGE ▀ All dimensions in mm



ϕD	L	α	$A \pm 0.2$	$B \pm 0.2$	$C \pm 0.2$	F	$P \pm 0.2$	W
10	12.4	0.3	10.3	10.3	11.0	0.3 max.	4.5	1.0 to 1.4
10	16.5	0.3	10.3	10.3	11.0	0.3 max.	4.5	1.0 to 1.4

DIMENSIONS VP PACKAGE (VIBRATION PROOF) ▪ All dimensions in mm



ϕD	L	α	A ± 0.2	A1 (max.)	B ± 0.2	C (max.)	F	K
10	12.4	$^{-0.3}_{+0.7}$	10.3	10.8	10.3	12.0	0 to 0.15	0.7 ± 0.2
10	16.5	$^{-0.3}_{+0.7}$	10.3	10.8	10.3	12.0	0 to 0.15	0.7 ± 0.2

ϕD	L	P ± 0.2	S ± 0.1	I ± 0.1	T ± 0.1	U ± 0.1	W ± 0.1	M ± 0.1
10	12.4	4.6	3.3	3.5	1.5	0.8	1.2	0.9
10	16.5	4.6	3.3	3.5	1.5	0.8	1.2	0.9

STANDARD RATINGS

Part number shows blister tape on paper reel

V_R (V)	Standard	Vibration-proof	C_R (μF)	ϕD (mm)	L (mm)	I_{LEAK} (μA , 2min)	$\tan \delta$ +20°C ▪ 120Hz (%)	Max. ESR +20°C ▪ 100kHz (m Ω)	I_R ▪ Max. Ripple Current ▪ 100kHz (mA rms)		CapXon Part Number
									+125°C	+135°C	
25	•	•	470	10	12.4	117.5	14	10	5000	3500	AU471M025G124PTR
	•	•	560	10	16.5	140	14	8	5800	4000	AU561M025G165PTR
	•	•	680	10	16.5	170	14	8	5800	4000	AU681M025G165PTR
35	•	•	330	10	12.4	115.5	12	11	4800	3300	AU331M035G124PTR
	•	•	470	10	16.5	164.5	12	9	5500	3800	AU471M035G165PTR
50	•	•	68	10	12.4	34	10	15	4000	2800	AU680M050G124PTR
	•	•	100	10	12.4	50	10	15	4000	2800	AU101M050G124PTR
	•	•	120	10	12.4	60	10	12	4600	3200	AU121M050G124PTR
	•	•	150	10	12.4	75	10	12	4600	3200	AU151M050G124PTR
	•	•	180	10	16.5	90	10	10	5200	3600	AU181M050G165PTR
	•	•	220	10	16.5	110	10	10	5200	3600	AU221M050G165PTR
63	•	•	47	10	12.4	29.6	8	15	4000	2800	AU470M063G124PTR
	•	•	56	10	12.4	35.3	8	15	4000	2800	AU560M063G124PTR
	•	•	68	10	12.4	42.8	8	15	4000	2800	AU680M063G124PTR
	•	•	100	10	12.4	63.0	8	12	4600	3200	AU101M063G124PTR
	•	•	120	10	12.4	75.6	8	12	4600	3200	AU121M063G124PTR
	•	•	150	10	16.5	94.5	8	10	5200	3600	AU151M063G165PTR

see description at end of standard ratings

STANDARD RATINGS

Part number shows blister tape on paper reel

V _R (V)	Standard	Vibration-proof	C _R (μF)	ø D (mm)	L (mm)	I _{LEAK} (μA, 2min)	tanδ +20°C • 120Hz (%)	Max. ESR +20°C • 100kHz (mΩ)	I _r - Max. Ripple Current • 100kHz (mA rms)		CapXon Part Number
									+125°C	+135°C	
80	•	•	47	10	12.4	37.6	8	18	3600	2500	AU470M080G124PTR <input type="checkbox"/>
	•	•	56	10	12.4	44.8	8	15	3600	2500	AU560M080G124PTR <input type="checkbox"/>
	•	•	68	10	12.4	54.5	8	15	4000	2800	AU680M080G124PTR <input type="checkbox"/>
	•	•	100	10	16.5	80	8	12	4700	3300	AU101M080G165PTR <input type="checkbox"/>
100	•	•	22	10	12.4	22	8	25	3000	2100	AU220M100G124PTR <input type="checkbox"/>
	•	•	33	10	12.4	33	8	20	3400	2400	AU330M100G124PTR <input type="checkbox"/>
	•	•	47	10	16.5	47	8	15	4100	2900	AU470M100G165PTR <input type="checkbox"/>

: Leave **blank** for Standard package
: Enter **W** for Vibration proof version

: Enter **X** for AEC-Q200
: Enter **XW** for AEC-Q200 and Vibration proof version

MULTIPLIER K_f for RIPPLE CURRENT vs. FREQUENCY

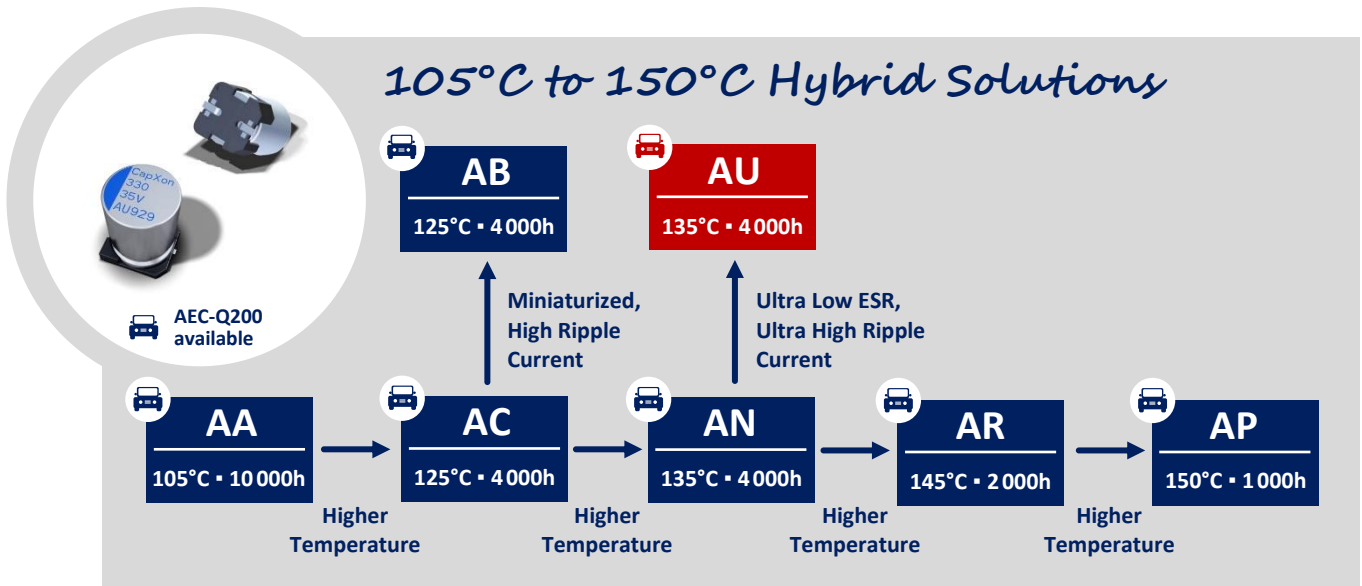
Frequency (Hz)	100 ≤ Freq. < 120	120 ≤ Freq. < 200	200 ≤ Freq. < 300	300 ≤ Freq. < 500
Coefficient K _f	0.15	0.15	0.20	0.25
Frequency (Hz)	500 ≤ Freq. < 1k	1k ≤ Freq. < 2k	2k ≤ Freq. < 3k	3k ≤ Freq. < 5k
Coefficient K _f	0.30	0.40	0.45	0.55
Frequency (Hz)	5k ≤ Freq. < 10k	10k ≤ Freq. < 15k	15k ≤ Freq. < 20k	20k ≤ Freq. < 40k
Coefficient K _f	0.60	0.70	0.75	0.80
Frequency (Hz)	40k ≤ Freq. < 50k	50k ≤ Freq. < 100k	100k ≤ Freq. < 500k	500k ≤ Freq. < 1M
Coefficient K _f	0.85	0.90	1.00	1.00

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	Vibration Test Profiles	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.