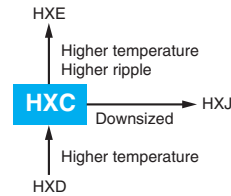




HXC Series Upgrade!

- 80WV (φ 10×12.5L) model has been introduced to the product range.
- High reliability and high voltage are realized by hybrid electrolyte
- Endurance with ripple current : 4,000 hours at 125°C
- Rated voltage range : 16 to 80V_{dc}, Capacitance range : 6.8 to 560μF
- For high temperature and high reliability applications.
(Automotive equipment, Base station equipment, etc.)
- RoHS2 Compliant
- Halogen Free
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

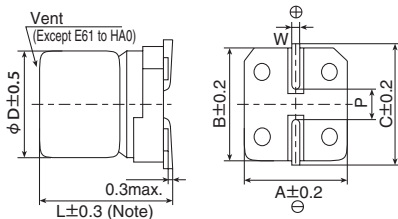


SPECIFICATIONS

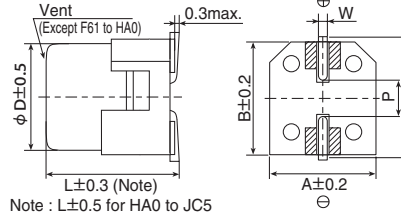
Items	Characteristics							
Category	-55 to +125°C							
Temperature Range	-55 to +125°C							
Rated Voltage Range	16 to 80V _{dc}							
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)							
Leakage Current	I=0.01CV or 3μA, whichever is greater Where, I : Max. leakage current (μA), C: Nominal capacitance(μF), V : Rated voltage(V) (at 20°C after 2 minutes)							
Dissipation Factor (tan δ)	Rated voltage(V _{dc})	16V	25V	35V	50V	63V	80V	(at 20°C, 120Hz)
	tan δ (Max.)	0.16	0.14	0.12	0.10	0.08	0.08	
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25°C)/Z(+20°C) ≤ 1.5 Z(-55°C)/Z(+20°C) ≤ 2.0 (at 100kHz)							
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 4,000 hours at 125°C.							
	Capacitance change	≤ ±30% of the initial value						
	D.F. (tan δ)	≤ 200% of the initial specified value						
	ESR	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to item 4.1 of JIS C 5101-4.							
	Capacitance change	≤ ±30% of the initial value						
	D.F. (tan δ)	≤ 200% of the initial specified value						
	ESR	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						
Bias Humidity Test	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to the DC rated voltage at 85°C, 85% RH for 2,000 hours (80V (JC5 size): 1,000 hours).							
	Appearance	No significant damage						
	Capacitance change	≤ ±30% of the initial value						
	D.F. (tan δ)	≤ 200% of the initial specified value						
	ESR	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						

DIMENSIONS [mm]

- Terminal Code : A
- Size code : E61 to JC5
- Terminal Code : G (Vibration resistant structure)
- Size code : F61 to JC5



Note : L±0.5 for HA0 to JC5

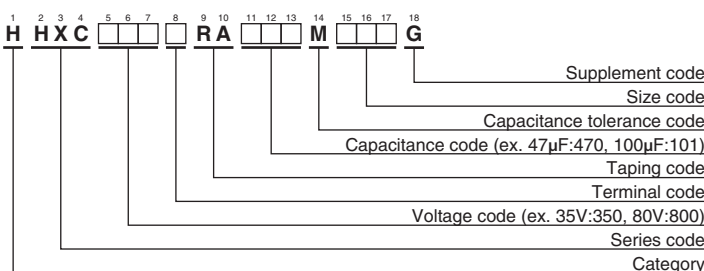


Note : L±0.5 for HA0 to JC5

▨ : Supportive terminals

Size Code	φD	L	A	B	C	W	P
E61	5	5.8	5.3	5.3	5.9	0.5 to 0.8	1.4
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5
JC5	10	12.5	10.3	10.3	11.0	0.7 to 1.1	4.5

PART NUMBERING SYSTEM



Please refer to "Product code guide (conductive polymer hybrid type)"

MARKING

EX) 35V270μF



Rated voltage symbol

Rated voltage (V _{dc})	Symbol
16	C
25	E
35	V
50	H
63	J
80	K



◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size code	ESR (mΩ max./20°C, 100kHz)	Rated ripple current (mA rms/125°C, 100kHz)	Part No.	WV (V _{dc})	Cap (μF)	Size code	ESR (mΩ max./20°C, 100kHz)	Rated ripple current (mA rms/125°C, 100kHz)	Part No.	
16	47	E61	80	550	HHXC160ARA470ME61G	50	10	F61	80	750	HHXC500□RA100MF61G	
	82	F61	45	950	HHXC160□RA820MF61G		15	F80	40	1,100	HHXC500□RA150MF80G	
	150	F80	27	1,450	HHXC160□RA151MF80G		22	F61	80	750	HHXC500□RA220MF61G	
	270	HA0	22	1,700	HHXC160□RA271MHA0G		33	F80	40	1,100	HHXC500□RA330MF80G	
	470	JA0	18	2,100	HHXC160□RA471MJA0G		33	HA0	30	1,250	HHXC500□RA330MHA0G	
	560	JC5	15	2,550	HHXC160□RA561MJC5G		47	HA0	30	1,250	HHXC500□RA470MHA0G	
25	33	E61	80	550	HHXC250ARA330ME61G		56	JA0	25	1,600	HHXC500□RA560MJA0G	
	47	F61	50	900	HHXC250□RA470MF61G		68	HA0	30	1,250	HHXC500□RA680MHA0G	
	56	F61	50	900	HHXC250□RA560MF61G		100	JA0	25	1,600	HHXC500□RA101MJA0G	
	68	F80	30	1,400	HHXC250□RA680MF80G		120	JA0	25	1,600	HHXC500□RA121MJA0G	
	100	F80	30	1,400	HHXC250□RA101MF80G		150	JC5	19	2,250	HHXC500□RA151MJC5G	
	150	HA0	27	1,600	HHXC250□RA151MHA0G		63	6.8	F61	120	700	HHXC630□RA6R8MF61G
	220	HA0	27	1,600	HHXC250□RA221MHA0G			10	F61	120	700	HHXC630□RA100MF61G
	270	JA0	20	2,000	HHXC250□RA271MJA0G			10	F80	80	900	HHXC630□RA100MF80G
	330	JA0	20	2,000	HHXC250□RA331MJA0G			22	F80	80	900	HHXC630□RA220MF80G
470	JC5	16	2,500	HHXC250□RA471MJC5G	22	HA0		40	1,100	HHXC630□RA220MHA0G		
35	22	E61	100	550	HHXC350ARA220ME61G	33		HA0	40	1,100	HHXC630□RA330MHA0G	
	27	F61	60	900	HHXC350□RA270MF61G	33		JA0	30	1,400	HHXC630□RA330MJA0G	
	47	F61	60	900	HHXC350□RA470MF61G	47		HA0	40	1,100	HHXC630□RA470MHA0G	
	47	F80	35	1,400	HHXC350□RA470MF80G	56		JA0	30	1,400	HHXC630□RA560MJA0G	
	68	F80	35	1,400	HHXC350□RA680MF80G	82		JA0	30	1,400	HHXC630□RA820MJA0G	
	100	HA0	27	1,600	HHXC350□RA101MHA0G	100	JC5	22	2,100	HHXC630□RA101MJC5G		
	150	HA0	27	1,600	HHXC350□RA151MHA0G	80	22	HA0	45	1,100	HHXC800□RA220MHA0G	
	150	JA0	20	2,000	HHXC350□RA151MJA0G		39	JA0	33	1,400	HHXC800□RA390MJA0G	
	270	JA0	20	2,000	HHXC350□RA271MJA0G		47	JA0	33	1,700	HHXC800□RA470MJA0G	
	330	JC5	17	2,400	HHXC350□RA331MJC5G		47	JC5	28	2,100	HHXC800□RA470MJC5G	
					68		JC5	28	2,100	HHXC800□RA680MJC5G		
					82		JC5	28	2,100	HHXC800□RA820MJC5G		

□ : Enter the appropriate terminal code.
 New products are indicated in red text.

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF)	Frequency(Hz)							
	120	1k	5k	10k	20k	30k	100k to 500k	
to 10	0.03	0.30	0.50	0.60	0.70	0.75	1.00	
15 to 33	0.07	0.30	0.50	0.60	0.70	0.75	1.00	
39 to 150	0.10	0.40	0.60	0.70	0.80	0.80	1.00	
220 to 560	0.13	0.45	0.65	0.75	0.85	0.85	1.00	



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.
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- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

[Available Items by Manufacturing Locations](#)

[Environmental Measures](#)

[Technical Note](#)

[Precautions and Guidelines](#)

[Recommended Soldering Conditions](#)

[Taping, Lead-preforming, Terminal and Packaging Options](#)