

# HXF New! Series

- Guaranteed short time operating temperature at 150°C
- High reliability is realized by hybrid electrolyte
- Endurance with ripple current : 4,000 hours at 135°C
- Rated voltage range : 25 to 63V<sub>dc</sub>, Capacitance range : 33 to 330μF
- 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

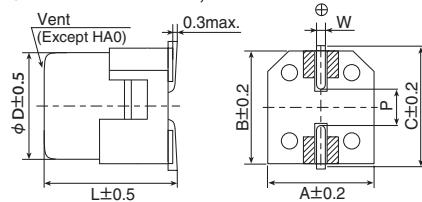
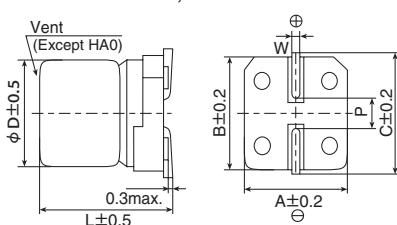
Items	Characteristics				
<b>Category</b>					
<b>Temperature Range</b>	-55 to +135°C				
<b>Rated Voltage Range</b>	25 to 63V <sub>dc</sub>				
<b>Capacitance Tolerance</b>	±20% (M)				
<b>Leakage Current</b>	I=0.01CV or 3 μA, whichever is greater Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage(V)				
<b>Dissipation Factor (tan δ)</b>	Rated voltage(V <sub>dc</sub> )	25V	35V	50V	63V
	tan δ (Max.)	0.14	0.12	0.10	0.08
<b>Low Temperature Characteristics (Max. Impedance Ratio)</b>	Z(-25°C)/Z(+20°C)≤1.5 Z(-55°C)/Z(+20°C)≤2.0				
<b>Endurance 1</b>	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 or 135°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			
<b>Endurance 2</b>	The following specifications shall be satisfied when the temperatures of capacitors are restored to 20°C after the rated voltage is applied for 300 hours at 150°C and subjected to DC voltage while the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 3,000 hours at 125°C or 135°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			
<b>Shelf Life</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 135°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			
<b>Bias Humidity Test</b>	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.				
	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 : HA0, JA0

- Terminal Code : G(Vibration resistant structure)

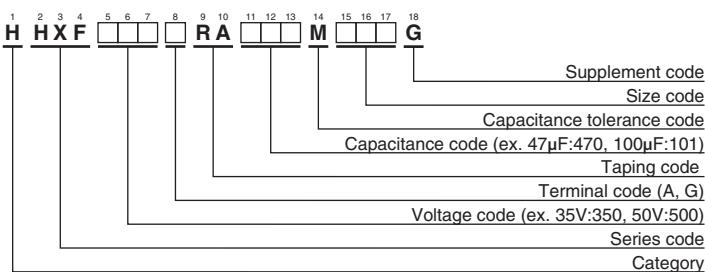
- Size code : HA0, JA0



Size Code	φD	L	A	B	C	W	P
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

■ : Dummy terminals

## ◆PART NUMBERING SYSTEM



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

## ◆MARKING

EX) 35V270μF



- Rated voltage symbol

Rated voltage (V <sub>dc</sub> )	Symbol
25	E
35	V
50	H
63	J

HXF New!  
Series

## ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap ( $\mu$ F)	Size code	ESR (m $\Omega$ max./20°C, 100kHz)	Rated ripple current (mA rms/100kHz)		Part No.
				125°C	135°C	
25	150	HA0	18	3,900	2,800	HHXF250□RA151MHA0G
	220	HA0	18	3,900	2,800	HHXF250□RA221MHA0G
	270	JA0	16	4,500	3,300	HHXF250□RA271MJA0G
	330	JA0	16	4,500	3,300	HHXF250□RA331MJA0G
35	100	HA0	18	3,900	2,800	HHXF350□RA101MHA0G
	150	HA0	18	3,900	2,800	HHXF350□RA151MHA0G
	150	JA0	16	4,500	3,300	HHXF350□RA151MJA0G
	270	JA0	16	4,500	3,300	HHXF350□RA271MJA0G
50	47	HA0	24	3,600	2,500	HHXF500□RA470MHA0G
	68	HA0	24	3,600	2,500	HHXF500□RA680MHA0G
	100	JA0	20	4,300	3,000	HHXF500□RA101MJA0G
	120	JA0	20	4,300	3,000	HHXF500□RA121MJA0G
63	33	HA0	27	3,300	2,300	HHXF630□RA330MHA0G
	47	HA0	27	3,300	2,300	HHXF630□RA470MHA0G
	56	JA0	22	4,000	2,800	HHXF630□RA560MJA0G
	82	JA0	22	4,000	2,800	HHXF630□RA820MJA0G

□ : Enter the appropriate terminal code.

## ◆RATED RIPPLE CURRENT MULTIPLIERS

## ◎Frequency Multipliers

Capacitance( $\mu$ F)	Frequency(Hz)	120	1k	5k	10k	20k	30k	100k to 500k
33 to 150	0.10	0.30	0.50	0.60	0.75	0.75	1.00	
220 to 330	0.10	0.40	0.60	0.70	0.80	0.85	1.00	