

# HXB Series

- High reliability and high voltage are realized by hybrid electrolyte
- Endurance with ripple current : 5,000 hours at 105°C
- For 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.

HXA

Higher temperature

HXB

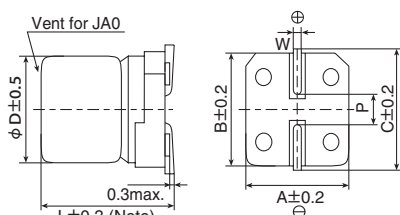


## SPECIFICATIONS

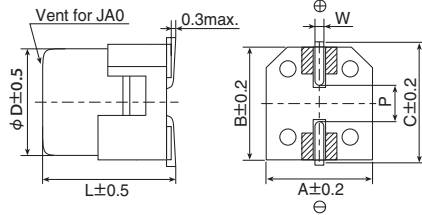
Items	Characteristics							
Category								
Temperature Range	-55 to +105℃							
Rated Voltage Range	16 to 80V <sub>dc</sub>							
Capacitance Tolerance	± 20% (M) (at 20℃, 120Hz)							
Leakage Current	I=0.01CV Where, I : Max. leakage current ( $\mu$ A ), C: Nominal capacitance( $\mu$ F ), V : Rated voltage(V) (at 20℃ after 2 minutes)							
Dissipation Factor (tan $\delta$ )	Rated voltage(V <sub>dc</sub> )	16V	25V	35V	50V	63V	80V	(at 20℃, 120Hz)
	tan $\delta$ (Max.)	0.16	0.14	0.12	0.10	0.08	0.08	
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25℃)/Z(+20℃)≤1.5 Z(-55℃)/Z(+20℃)≤2.0 (at 100kHz)							
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 105 ℃.							
	Capacitance change	≤ ±30% of the initial value						
	D.F. (tan $\delta$ )	≤ 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℃ after exposing them for 1,000 hours at 105 ℃ 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 $\delta$ )	≤ 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 : F61 to JA0
- Terminal Code : G(Vibration resistant structure)
- Size code : HA0 and JA0



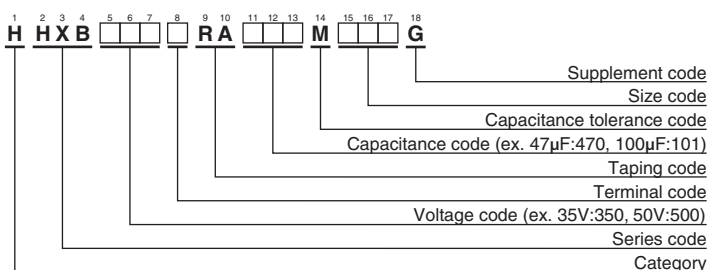
Note : L±0.5 for HA0 and JA0



⊠ : Dummy terminals

Size Code	φD	L	A	B	C	W	P
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

## PART NUMBERING SYSTEM



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

## MARKING

EX) 35V47μF



## Rated voltage symbol

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

### HXB Series

#### ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Size code	ESR (mΩ max./20°C, 100kHz)	Rated ripple current (mA rms/105°C, 100kHz)	Part No.
16	82	F61	45	1,600	HHXB160ARA820MF61G
	150	F80	27	2,200	HHXB160ARA151MF80G
	270	HA0	22	2,500	HHXB160□RA271MHA0G
	470	JA0	18	2,600	HHXB160□RA471MJA0G
25	47	F61	50	1,300	HHXB250ARA470MF61G
	56	F61	50	1,300	HHXB250ARA560MF61G
	68	F80	30	2,000	HHXB250ARA680MF80G
	100	F80	30	2,000	HHXB250ARA101MF80G
	150	HA0	27	2,300	HHXB250□RA151MHA0G
	220	HA0	27	2,300	HHXB250□RA221MHA0G
	270	JA0	20	2,500	HHXB250□RA271MJA0G
	330	JA0	20	2,500	HHXB250□RA331MJA0G
35	27	F61	60	1,300	HHXB350ARA270MF61G
	47	F61	60	1,300	HHXB350ARA470MF61G
	47	F80	35	2,000	HHXB350ARA470MF80G
	68	F80	35	2,000	HHXB350ARA680MF80G
	100	HA0	27	2,300	HHXB350□RA101MHA0G
	150	HA0	27	2,300	HHXB350□RA151MHA0G
	150	JA0	20	2,500	HHXB350□RA151MJA0G
	270	JA0	20	2,500	HHXB350□RA271MJA0G
50	10	F61	80	1,100	HHXB500ARA100MF61G
	15	F80	40	1,600	HHXB500ARA150MF80G
	22	F61	80	1,100	HHXB500ARA220MF61G
	33	F80	40	1,600	HHXB500ARA330MF80G
	33	HA0	30	1,800	HHXB500□RA330MHA0G
	47	HA0	30	1,800	HHXB500□RA470MHA0G
	56	JA0	25	2,000	HHXB500□RA560MJA0G
	68	HA0	30	1,800	HHXB500□RA680MHA0G
	100	JA0	25	2,000	HHXB500□RA101MJA0G
63	6.8	F61	120	1,000	HHXB630ARA6R8MF61G
	10	F61	120	1,000	HHXB630ARA100MF61G
	10	F80	80	1,500	HHXB630ARA100MF80G
	22	F80	80	1,500	HHXB630ARA220MF80G
	22	HA0	40	1,600	HHXB630□RA220MHA0G
	33	HA0	40	1,600	HHXB630□RA330MHA0G
	33	JA0	30	1,800	HHXB630□RA330MJA0G
	56	JA0	30	1,800	HHXB630□RA560MJA0G
80	22	HA0	45	1,600	HHXB800□RA220MHA0G
	39	JA0	35	1,700	HHXB800□RA390MJA0G

□ : Enter the appropriate terminal code.

#### ◆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 470	0.13	0.45	0.65	0.75	0.85	0.85	1.00