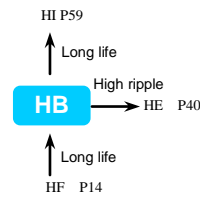


# HB SERIES



- Endurance with ripple current: 3000 hours at 105°C
- Rated voltage range: 16V-550V
- Ideal for switching power and inverter smoothing capacitors.



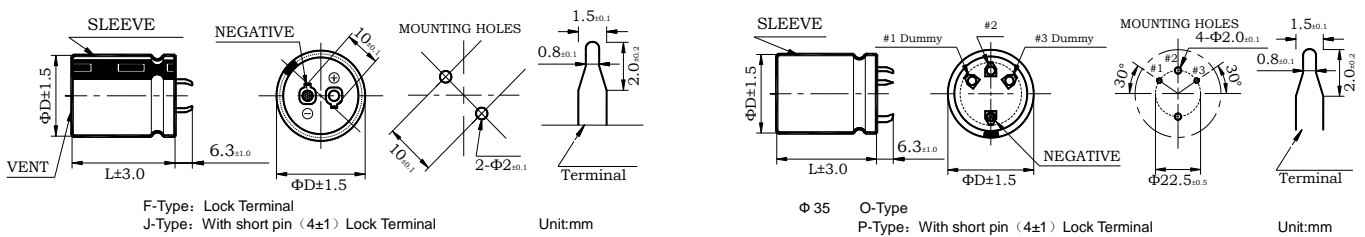
### SPECIFICATIONS

Items	Characteristics	
Operating Temperature Range	-40~+105°C	-25~+105°C
Rated Working Voltage Range	16~100V	160~550V
Capacitance Tolerance	±20% (20°C, 120Hz)	
Dissipation Factor (MAX) 20°C, 120Hz	U <sub>R</sub> (V)	16 25 35 50 63 80 100 160~315 350~400 450~550
	tanδ	0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.18 0.20
Impedance Ratio (MAX) 120Hz	U <sub>R</sub> (V)	16~100 160~200 250 315 350~400 450~550
	Z <sub>-25°C</sub> /Z <sub>+20°C</sub>	4 3 4 7 7 8
	Z <sub>-40°C</sub> /Z <sub>+20°C</sub>	18 15 15
Leakage Current (MAX)	I=0.01C <sub>R</sub> U <sub>R</sub> or 1.5mA whichever is minimum. (at 20°C, After 5 minutes application of rated voltage) I=Leakage Current(μA)      U <sub>R</sub> =Rated Voltage(V)      C <sub>R</sub> =Rated Capacitance(μF)	

	Useful Life		Load Life	Endurance Test	Shelf Life
Life Time	5000h	>180000h	3000h	3000h	1000h
Leakage Current	≤ Specified value		≤ Specified value	≤ Specified value	≤ Specified value
tanδ change	≤ 300% of specified value		≤ 200% of specified value	≤ 200% of specified value	≤ 200% of specified value
Capacitance Change	Within ± 30% of initial value		Within ± 20% of initial value	Within ± 20% of initial value	Within ± 20% of initial value
Condition	U <sub>R</sub> I <sub>R</sub> 105°C ≤ 1% Failure rate	U <sub>R</sub> 1.4 × I <sub>R</sub> 40°C ≤ 1% Failure rate	U <sub>R</sub> I <sub>R</sub> 105°C 0%	U <sub>R</sub> I <sub>R</sub> =0 105°C 0%	U <sub>R</sub> =0 I <sub>R</sub> =0 105°C 0% Back up to 20 °C and placed more than 24 hours. U <sub>R</sub> to be applied for 60 min before measurement.

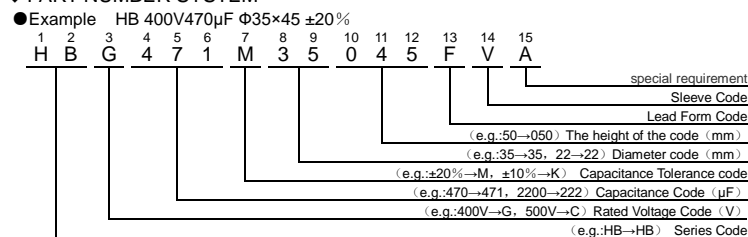
### Dimensions

#### Terminal Code



- Please consult to us for the terminal type not displayed in content.

### PART NUMBER SYSTEM



### Rated Ripple Current Multiplies

● Frequency coefficient

Rated voltage (v)	Frequency (Hz)	50 (60)	100 (120)	300	1k	≥10k
16~50WV		0.90	1.00	1.10	1.15	1.15
63~100WV		0.85	1.00	1.17	1.32	1.45
160~550WV		0.80	1.00	1.16	1.30	1.41

● Temperature coefficient

Rated voltage (v)	Temperature (°C)	+40	+55	+70	+85	+105
16~550WV		2.7	2.5	2.1	1.7	1.0

# HB SERIES

## ◆ Standard Ratings

WV <sub>DC</sub> (Surge Voltage) (V)	Cap (μF)	Size D×L (mm)	tanδ 20°C/120Hz	Ripple Current 105°C/120Hz (Arms)	Catalog Part Number
16 (20)	6800	22×25	0.50	2.25	HBV682M22025□VA
	8200	25×25	0.50	2.43	HBV822M25025□VA
	10000	22×30	0.50	2.79	HBV103M22030□VA
	10000	25×25	0.50	2.79	HBV103M25025□VA
	12000	22×35	0.50	2.90	HBV123M22035□VA
	12000	25×30	0.50	2.90	HBV123M25030□VA
	12000	30×25	0.50	2.90	HBV123M30025□VA
	15000	22×40	0.50	3.20	HBV153M22040□VA
	15000	25×35	0.50	3.20	HBV153M25035□VA
	18000	22×45	0.50	3.50	HBV183M22045□VA
	18000	25×40	0.50	3.50	HBV183M25040□VA
	18000	30×30	0.50	3.50	HBV183M30030□VA
	18000	35×25	0.50	3.50	HBV183M35025□VA
	22000	25×45	0.50	3.80	HBV223M25045□VA
	22000	30×35	0.50	3.80	HBV223M30035□VA
	27000	25×50	0.50	4.20	HBV273M25050□VA
	27000	30×40	0.50	4.20	HBV273M30040□VA
	27000	35×30	0.50	4.20	HBV273M35030□VA
	33000	30×45	0.50	4.70	HBV333M30045□VA
	33000	35×35	0.50	4.70	HBV333M35035□VA
39000	30×50	0.50	5.10	HBV393M30050□VA	
39000	35×35	0.50	5.10	HBV393M35035□VA	
47000	35×40	0.50	5.55	HBV473M35040□VA	
56000	30×60	0.50	5.90	HBV563M30060□VA	
56000	35×45	0.50	5.90	HBV563M35045□VA	
68000	35×55	0.50	6.30	HBV683M35055□VA	
82000	35×60	0.50	6.40	HBV823M35060□VA	
25 (32)	4700	22×25	0.45	2.04	HBU472M22025□VA
	5600	25×25	0.45	2.23	HBU562M25025□VA
	6800	22×30	0.45	2.40	HBU682M22030□VA
	6800	25×25	0.45	2.40	HBU682M25025□VA
	8200	22×35	0.45	2.70	HBU822M22035□VA
	8200	25×30	0.45	2.70	HBU822M25030□VA
	8200	30×25	0.45	2.70	HBU822M30025□VA
	10000	22×40	0.45	3.00	HBU103M22040□VA
	10000	25×35	0.45	3.00	HBU103M25035□VA
	12000	22×45	0.45	3.20	HBU123M22045□VA
	12000	25×40	0.45	3.20	HBU123M25040□VA
	12000	30×30	0.45	3.20	HBU123M30030□VA
	12000	35×25	0.45	3.20	HBU123M35025□VA
	15000	25×45	0.45	3.60	HBU153M25045□VA
	15000	30×35	0.45	3.60	HBU153M30035□VA
	15000	35×30	0.45	3.60	HBU153M35030□VA
	18000	25×50	0.45	3.90	HBU183M25050□VA
	18000	30×40	0.45	3.90	HBU183M30040□VA
	18000	35×30	0.45	3.90	HBU183M35030□VA
	22000	30×45	0.45	4.30	HBU223M30045□VA
22000	35×35	0.45	4.30	HBU223M35035□VA	
27000	30×50	0.45	4.80	HBU273M30050□VA	
27000	35×45	0.45	4.80	HBU273M35045□VA	
33000	35×50	0.45	5.55	HBU333M35050□VA	
35 (44)	3300	22×25	0.40	1.94	HBT332M22025□VA
	3900	22×30	0.40	2.02	HBT392M22030□VA
	4700	25×25	0.40	2.20	HBT472M25025□VA
	5600	22×35	0.40	2.40	HBT562M22035□VA
	5600	25×30	0.40	2.40	HBT562M25030□VA
	5600	30×25	0.40	2.40	HBT562M30025□VA
	6800	22×40	0.40	2.78	HBT682M22040□VA

WV <sub>DC</sub> (Surge Voltage) (V)	Cap (μF)	Size D×L (mm)	tanδ 20°C/120Hz	Ripple Current 105°C/120Hz (Arms)	Catalog Part Number	
35 (44)	6800	25×35	0.40	2.78	HBT682M25035□VA	
	8200	22×50	0.40	2.90	HBT822M22050□VA	
	8200	25×40	0.40	2.90	HBT822M25040□VA	
	8200	30×30	0.40	2.90	HBT822M30030□VA	
	8200	35×25	0.40	2.90	HBT822M35025□VA	
	10000	25×45	0.40	3.20	HBT103M25045□VA	
	10000	30×35	0.40	3.20	HBT103M30035□VA	
	12000	25×50	0.40	3.50	HBT123M25050□VA	
	12000	30×40	0.40	3.50	HBT123M30040□VA	
	12000	35×30	0.40	3.50	HBT123M35030□VA	
	15000	30×45	0.40	3.90	HBT153M30045□VA	
	15000	35×35	0.40	3.90	HBT153M35035□VA	
	18000	35×40	0.40	4.51	HBT183M35040□VA	
	22000	35×50	0.40	5.24	HBT223M35050□VA	
	27000	35×55	0.40	5.60	HBT273M35055□VA	
	50 (63)	1800	22×25	0.35	1.53	HBR182M22025□VA
		2200	22×30	0.35	1.72	HBR222M22030□VA
		2700	22×30	0.35	1.82	HBR272M22030□VA
		2700	25×25	0.35	1.80	HBR272M25025□VA
		3300	22×35	0.35	2.01	HBR332M22035□VA
3300		25×30	0.35	2.01	HBR332M25030□VA	
3900		22×40	0.35	2.23	HBR392M22040□VA	
3900		25×35	0.35	2.23	HBR392M25035□VA	
3900		30×25	0.35	2.23	HBR392M30025□VA	
4700		22×45	0.35	2.50	HBR472M22045□VA	
4700		30×30	0.35	2.50	HBR472M30030□VA	
4700		35×25	0.35	2.50	HBR472M35025□VA	
5600		22×50	0.35	2.80	HBR562M22050□VA	
5600		25×40	0.35	2.80	HBR562M25040□VA	
5600		30×35	0.35	2.80	HBR562M30035□VA	
6800		25×50	0.35	3.30	HBR682M25050□VA	
6800		30×40	0.35	3.30	HBR682M30040□VA	
6800		35×30	0.35	3.30	HBR682M35030□VA	
8200		30×45	0.35	3.85	HBR822M30045□VA	
8200		35×35	0.35	3.85	HBR822M35035□VA	
10000	30×50	0.35	4.49	HBR103M30050□VA		
10000	35×40	0.35	4.49	HBR103M35040□VA		
12000	35×45	0.35	4.56	HBR123M35045□VA		
15000	35×50	0.35	4.80	HBR153M35050□VA		
18000	35×60	0.35	5.10	HBR183M35060□VA		
63 (79)	1200	22×25	0.30	1.40	HBQ122M22025□VA	
	1500	22×25	0.30	1.52	HBQ152M22025□VA	
	1800	22×30	0.30	1.72	HBQ182M22030□VA	
	1800	25×25	0.30	1.72	HBQ182M25025□VA	
	2200	22×35	0.30	2.01	HBQ222M22035□VA	
	2200	25×30	0.30	2.01	HBQ222M25030□VA	
	2700	22×40	0.30	2.20	HBQ272M22040□VA	
	2700	25×35	0.30	2.20	HBQ272M25035□VA	
	2700	30×25	0.30	2.20	HBQ272M30025□VA	
	3300	22×50	0.30	2.60	HBQ332M22050□VA	
	3300	25×40	0.30	2.60	HBQ332M25040□VA	
	3300	30×30	0.30	2.60	HBQ332M30030□VA	
	3300	35×25	0.30	2.60	HBQ332M35025□VA	
	3900	25×45	0.30	2.57	HBQ392M25045□VA	
	3900	30×35	0.30	2.70	HBQ392M30035□VA	
	4700	25×50	0.30	3.00	HBQ472M25050□VA	
	4700	30×40	0.30	3.00	HBQ472M30040□VA	
4700	35×30	0.30	3.00	HBQ472M35030□VA		

\*□Enter the appropriate terminal code

# HB SERIES

## ◆ Standard Ratings

WV <sub>DC</sub> (Surge Voltage) (V)	Cap ( $\mu$ F)	Size D×L (mm)	tan $\delta$ 20°C/120Hz	Ripple Current 105°C/120Hz Z (Arms)	Catalog Part Number
63 (79)	5600	30×45	0.30	3.22	HBQ562M30045□VA
	5600	35×35	0.30	3.30	HBQ562M35035□VA
	6800	30×50	0.30	3.68	HBQ682M30050□VA
	6800	35×40	0.30	3.84	HBQ682M35040□VA
	8200	35×45	0.30	4.43	HBQ822M35045□VA
	10000	35×50	0.30	5.11	HBQ103M35050□VA
80 (100)	820	22×25	0.25	1.04	HBP821M22025□VA
	1000	22×25	0.25	1.19	HBP102M22025□VA
	1200	22×30	0.25	1.50	HBP122M22030□VA
	1200	25×25	0.25	1.50	HBP122M25025□VA
	1500	22×35	0.25	1.59	HBP152M22035□VA
	1500	25×30	0.25	1.59	HBP152M25030□VA
	1800	22×40	0.25	1.79	HBP182M22040□VA
	1800	30×25	0.25	1.79	HBP182M30025□VA
	2200	22×45	0.25	2.03	HBP222M22045□VA
	2200	25×35	0.25	2.10	HBP222M25035□VA
	2200	30×30	0.25	2.10	HBP222M30030□VA
	2200	35×25	0.25	2.10	HBP222M35025□VA
	2700	25×45	0.25	2.35	HBP272M25045□VA
	2700	30×35	0.25	2.35	HBP272M30035□VA
	3300	25×50	0.25	2.60	HBP332M25050□VA
	3300	30×40	0.25	2.61	HBP332M30040□VA
	3300	35×30	0.25	2.64	HBP332M35030□VA
	3900	30×45	0.25	2.97	HBP392M30045□VA
	3900	35×35	0.25	2.97	HBP392M35035□VA
	4700	30×50	0.25	3.34	HBP472M30050□VA
	4700	35×40	0.25	3.38	HBP472M35040□VA
	5600	35×45	0.25	3.80	HBP562M35045□VA
	6800	35×50	0.25	3.90	HBP682M35050□VA
	8200	35×55	0.25	4.20	HBP822M35055□VA
10000	35×60	0.25	4.48	HBP103M35060□VA	
100 (125)	560	22×25	0.20	0.95	HBO561M22025□VA
	680	22×30	0.20	1.15	HBO681M22030□VA
	820	22×30	0.20	1.40	HBO821M22030□VA
	820	25×25	0.20	1.40	HBO821M25025□VA
	1000	22×35	0.20	1.47	HBO102M22035□VA
	1000	25×30	0.20	1.47	HBO102M25030□VA
	1200	22×40	0.20	1.69	HBO122M22040□VA
	1200	25×35	0.20	1.68	HBO122M25035□VA
	1200	30×25	0.20	1.68	HBO122M30025□VA
	1500	22×45	0.20	1.97	HBO152M22045□VA
	1500	25×40	0.20	1.98	HBO152M25040□VA
	1500	30×30	0.20	1.95	HBO152M30030□VA
	1500	35×25	0.20	1.95	HBO152M35025□VA
	1800	25×45	0.20	2.20	HBO182M25045□VA
	1800	30×35	0.20	2.20	HBO182M30035□VA
	1800	35×30	0.20	2.20	HBO182M35030□VA
	2200	25×50	0.20	2.53	HBO222M25050□VA
	2200	30×40	0.20	2.55	HBO222M30040□VA
	2200	35×30	0.20	2.60	HBO222M35030□VA
	2700	30×45	0.20	2.86	HBO272M30045□VA
	2700	35×35	0.20	2.90	HBO272M35035□VA
	3300	30×50	0.20	3.30	HBO332M30050□VA
	3300	35×40	0.20	3.30	HBO332M35040□VA
	3900	35×45	0.20	3.67	HBO392M35045□VA
4700	35×50	0.20	3.80	HBO472M35050□VA	
5600	35×60	0.20	4.05	HBO562M35060□VA	

WV <sub>DC</sub> (Surge Voltage) (V)	Cap ( $\mu$ F)	Size D×L (mm)	tan $\delta$ 20°C/120Hz	Ripple Current 105°C/120Hz (Arms)	Catalog Part Number
160 (200)	330	22×25	0.15	1.20	HBN331M22025□VA
	390	22×30	0.15	1.30	HBN391M22030□VA
	470	22×35	0.15	1.55	HBN471M22035□VA
	470	25×25	0.15	1.55	HBN471M25025□VA
	560	22×40	0.15	1.67	HBN561M22040□VA
	560	25×30	0.15	1.67	HBN561M25030□VA
	680	22×45	0.15	1.82	HBN681M22045□VA
	680	25×35	0.15	1.82	HBN681M25035□VA
	680	30×25	0.15	1.82	HBN681M30025□VA
	820	22×50	0.15	2.04	HBN821M22050□VA
	820	25×40	0.15	2.04	HBN821M25040□VA
	820	30×30	0.15	2.04	HBN821M30030□VA
	820	35×25	0.15	2.04	HBN821M35025□VA
	1000	25×45	0.15	2.40	HBN102M25045□VA
	1000	30×35	0.15	2.25	HBN102M30035□VA
	1200	25×50	0.15	2.49	HBN122M25050□VA
	1200	30×40	0.15	2.49	HBN122M30040□VA
	1200	35×30	0.15	2.49	HBN122M35030□VA
	1500	30×45	0.15	2.84	HBN152M30045□VA
	1500	35×35	0.15	2.84	HBN152M35035□VA
	1800	35×45	0.15	3.32	HBN182M35045□VA
	2200	35×50	0.15	3.60	HBN222M35050□VA
	2700	35×60	0.15	4.16	HBN272M35060□VA
	200 (250)	220	22×25	0.15	1.00
330		22×30	0.15	1.25	HBL331M22030□VA
330		25×25	0.15	1.25	HBL331M25025□VA
390		22×35	0.15	1.35	HBL391M22035□VA
470		22×40	0.15	1.50	HBL471M22040□VA
470		25×30	0.15	1.50	HBL471M25030□VA
470		30×25	0.15	1.50	HBL471M30025□VA
560		22×45	0.15	1.67	HBL561M22045□VA
560		25×35	0.15	1.60	HBL561M25035□VA
680		22×50	0.15	1.78	HBL681M22050□VA
680		25×40	0.15	1.78	HBL681M25040□VA
680		30×30	0.15	1.78	HBL681M30030□VA
680		35×25	0.15	1.78	HBL681M35025□VA
820		25×50	0.15	2.00	HBL821M25050□VA
820		30×35	0.15	2.04	HBL821M30035□VA
820		35×30	0.15	2.00	HBL821M35030□VA
1000		30×45	0.15	2.30	HBL102M30045□VA
1000		35×35	0.15	2.30	HBL102M35035□VA
1200		30×50	0.15	2.65	HBL122M30050□VA
1200		35×40	0.15	2.65	HBL122M35040□VA
1500		35×45	0.15	3.12	HBL152M35045□VA
1800		35×50	0.15	3.50	HBL182M35050□VA
2200		35×60	0.15	4.32	HBL222M35060□VA
250 (300)		180	22×25	0.15	0.90
	220	22×30	0.15	1.00	HBJ221M22030□VA
	220	25×25	0.15	1.00	HBJ221M25025□VA
	270	22×35	0.15	1.18	HBJ271M22035□VA
	330	22×40	0.15	1.30	HBJ331M22040□VA
	330	25×30	0.15	1.30	HBJ331M25030□VA
	330	30×25	0.15	1.30	HBJ331M30025□VA
	390	22×45	0.15	1.49	HBJ391M22045□VA
	390	25×35	0.15	1.49	HBJ391M25035□VA
	470	22×50	0.15	1.65	HBJ471M22050□VA
	470	25×40	0.15	1.65	HBJ471M25040□VA
	470	30×30	0.15	1.65	HBJ471M30030□VA

\*□Enter the appropriate terminal code

# HB SERIES

## ◆ Standard Ratings

WV <sub>DC</sub> (Surge Voltage) (V)	Cap (μF)	Size D×L (mm)	tanδ 20°C 120Hz	Ripple Current 105°C 120Hz (Arms)	Catalog Part Number
250 (300)	470	35×25	0.15	1.65	HBJ471M35025□VA
	560	25×45	0.15	1.80	HBJ561M25045□VA
	560	30×35	0.15	1.80	HBJ561M30035□VA
	560	35×30	0.15	1.80	HBJ561M35030□VA
	680	25×50	0.15	2.00	HBJ681M25050□VA
	680	30×40	0.15	2.00	HBJ681M30040□VA
	820	30×45	0.15	2.30	HBJ821M30045□VA
	820	35×35	0.15	2.30	HBJ821M35035□VA
	1000	30×50	0.15	2.70	HBJ102M30050□VA
	1000	35×40	0.15	2.70	HBJ102M35040□VA
	1200	35×45	0.15	3.09	HBJ122M35045□VA
	350 (400)	68	22×25	0.18	0.47
100		22×30	0.18	0.60	HBH101M22030□VA
100		25×25	0.18	0.60	HBH101M25025□VA
120		22×35	0.18	0.70	HBH121M22035□VA
150		22×40	0.18	0.77	HBH151M22040□VA
150		25×30	0.18	0.78	HBH151M25030□VA
150		30×25	0.18	0.78	HBH151M30025□VA
180		22×45	0.18	0.87	HBH181M22045□VA
180		25×35	0.18	0.92	HBH181M25035□VA
180		30×30	0.18	0.90	HBH181M30030□VA
220		22×50	0.18	1.04	HBH221M22050□VA
220		25×40	0.18	1.04	HBH221M25040□VA
220		35×25	0.18	1.04	HBH221M35025□VA
270		25×50	0.18	1.28	HBH271M25050□VA
270		30×35	0.18	1.26	HBH271M30035□VA
270		35×30	0.18	1.24	HBH271M35030□VA
330		30×45	0.18	1.32	HBH331M30045□VA
330		35×35	0.18	1.32	HBH331M35035□VA
390		30×50	0.18	1.64	HBH391M30050□VA
390		35×40	0.18	1.64	HBH391M35040□VA
470		30×50	0.18	1.78	HBH471M30050□VA
470		35×45	0.18	1.86	HBH471M35045□VA
560		30×60	0.18	2.10	HBH561M30060□VA
560		35×50	0.18	2.10	HBH561M35050□VA
680		35×55	0.18	2.36	HBH681M35055□VA
820		35×60	0.18	2.70	HBH821M35060□VA
1000		35×60	0.18	3.06	HBH102M35060□VA
1000		35×65	0.18	3.10	HBH102M35065□VA
1000		40×55	0.18	3.10	HBH102M40055□VA
1200		35×75	0.18	3.80	HBH122M35075□VA
1200		40×65	0.18	3.86	HBH122M40065□VA
1500		40×80	0.18	4.56	HBH152M40080□VA
1500		45×65	0.18	4.36	HBH152M45065□VA
1800		40×95	0.18	5.32	HBH182M40095□VA
1800		45×75	0.18	5.14	HBH182M45075□VA
2200		45×90	0.18	5.90	HBH222M45090□VA
2200	50×75	0.18	5.70	HBH222M50075□VA	
2700	45×100	0.18	6.80	HBH272M45100□VA	
2700	50×90	0.18	6.90	HBH272M50090□VA	
3300	50×105	0.18	8.00	HBH332M50105□VA	
400 (450)	68	22×25	0.18	0.58	HBG680M22025□VA
	82	22×30	0.18	0.68	HBG820M22030□VA
	82	25×25	0.18	0.68	HBG820M25025□VA
	100	22×30	0.18	0.74	HBG101M22030□VA
	100	25×25	0.18	0.74	HBG101M25025□VA
	120	22×35	0.18	0.80	HBG121M22035□VA
	120	25×30	0.18	0.80	HBG121M25030□VA

WV <sub>DC</sub> (Surge Voltage) (V)	Cap (μF)	Size D×L (mm)	tanδ 20°C 120Hz	Ripple Current 105°C 120Hz (Arms)	Catalog Part Number
400 (450)	120	30×25	0.18	0.80	HBG121M30025□VA
	150	22×40	0.18	0.84	HBG151M22040□VA
	150	25×35	0.18	0.86	HBG151M25035□VA
	150	30×25	0.18	0.86	HBG151M30025□VA
	180	22×50	0.18	1.00	HBG181M22050□VA
	180	25×40	0.18	1.02	HBG181M25040□VA
	180	30×30	0.18	1.02	HBG181M30030□VA
	180	35×25	0.18	1.02	HBG181M35025□VA
	220	25×45	0.18	1.10	HBG221M25045□VA
	220	30×35	0.18	1.08	HBG221M30035□VA
	220	35×25	0.18	1.14	HBG221M35025□VA
	270	25×50	0.18	1.34	HBG271M25050□VA
	270	30×40	0.18	1.26	HBG271M30040□VA
	270	35×30	0.18	1.26	HBG271M35030□VA
	330	30×45	0.18	1.60	HBG331M30045□VA
	330	35×35	0.18	1.54	HBG331M35035□VA
	390	30×50	0.18	1.66	HBG391M30050□VA
	390	35×40	0.18	1.66	HBG391M35040□VA
	470	30×50	0.18	1.96	HBG471M30050□VA
	470	35×45	0.18	1.96	HBG471M35045□VA
	560	35×50	0.18	2.16	HBG561M35050□VA
	680	35×60	0.18	2.36	HBG681M35060□VA
	820	35×65	0.18	2.90	HBG821M35065□VA
	820	40×55	0.18	3.10	HBG821M40055□VA
	1000	35×80	0.18	3.50	HBG102M35080□VA
	1000	40×65	0.18	3.40	HBG102M40065□VA
	1200	35×90	0.18	4.00	HBG122M35090□VA
	1200	40×80	0.18	4.10	HBG122M40080□VA
	1200	45×60	0.18	3.90	HBG122M45060□VA
	1500	40×90	0.18	4.40	HBG152M40090□VA
	1500	45×75	0.18	4.60	HBG152M45075□VA
	1500	50×70	0.18	4.90	HBG152M50070□VA
	1800	45×90	0.18	5.60	HBG182M45090□VA
	1800	50×80	0.18	5.60	HBG182M50080□VA
	2200	50×90	0.18	6.40	HBG222M50090□VA
	2700	50×105	0.18	7.20	HBG272M50105□VA
450 (500)	56	22×25	0.20	0.50	HBE560M22025□VA
	68	22×30	0.20	0.60	HBE680M22030□VA
	68	25×25	0.20	0.60	HBE680M25025□VA
	82	22×35	0.20	0.70	HBE820M22035□VA
	82	25×30	0.20	0.70	HBE820M25030□VA
	100	22×40	0.20	0.74	HBE101M22040□VA
	100	25×30	0.20	0.74	HBE101M25030□VA
	100	30×25	0.20	0.82	HBE101M30025□VA
	120	22×45	0.20	0.80	HBE121M22045□VA
	120	25×35	0.20	0.80	HBE121M25035□VA
	120	30×30	0.20	0.80	HBE121M30030□VA
	150	22×50	0.20	0.84	HBE151M22050□VA
	150	25×40	0.20	0.88	HBE151M25040□VA
	150	30×30	0.20	0.88	HBE151M30030□VA
	150	35×25	0.20	0.88	HBE151M35025□VA
450 (500)	180	25×45	0.20	1.00	HBE181M25045□VA
	180	30×35	0.20	1.00	HBE181M30035□VA
	180	35×30	0.20	1.04	HBE181M35030□VA
	220	25×50	0.20	1.12	HBE221M25050□VA
	220	30×40	0.20	1.12	HBE221M30040□VA
	220	35×30	0.20	1.12	HBE221M35030□VA
	270	30×45	0.20	1.28	HBE271M30045□VA

\*□Enter the appropriate terminal code

# HB SERIES

## ◆ Standard Ratings

WV <sub>DC</sub> (Surge Voltage) (V)	Cap ( $\mu$ F)	Size D×L (mm)	$\tan\delta$ 20°C/120Hz	Ripple Current 105°C/120Hz (Arms)	Catalog Part Number
450 (500)	270	35×35	0.20	1.28	HBE271M35035□VA
	330	30×50	0.20	1.38	HBE331M30050□VA
	330	35×40	0.20	1.46	HBE331M35040□VA
	390	30×60	0.20	1.66	HBE391M30060□VA
	390	35×45	0.20	1.66	HBE391M35045□VA
	470	35×50	0.20	1.88	HBE471M35050□VA
	560	35×60	0.20	2.16	HBE561M35060□VA
	680	35×65	0.20	2.60	HBE681M35065□VA
	680	40×60	0.20	2.80	HBE681M40060□VA
	820	35×75	0.20	3.10	HBE821M35075□VA
	820	40×65	0.20	3.20	HBE821M40065□VA
	1000	35×90	0.20	3.66	HBE102M35090□VA
	1000	40×80	0.20	3.76	HBE102M40080□VA
	1200	40×95	0.20	4.50	HBE122M40095□VA
	1200	45×75	0.20	4.30	HBE122M45075□VA
	1200	50×65	0.20	4.30	HBE122M50065□VA
	1500	40×100	0.20	4.80	HBE152M40100□VA
	1500	45×90	0.20	5.10	HBE152M45090□VA
1500	50×80	0.20	5.20	HBE152M50080□VA	
1800	50×95	0.20	5.80	HBE182M50095□VA	
2200	50×110	0.20	6.70	HBE222M50110□VA	
500 (550)	47	22×30	0.20	0.46	HBC470M22030□VA
	56	22×40	0.20	0.46	HBC560M22040□VA
	68	22×45	0.20	0.60	HBC680M22045□VA
	68	25×30	0.20	0.60	HBC680M25030□VA
	82	22×50	0.20	0.68	HBC820M22050□VA
	82	25×40	0.20	0.68	HBC820M25040□VA
	100	22×45	0.20	0.72	HBC101M22045□VA
	100	25×40	0.20	0.72	HBC101M25040□VA
	100	30×30	0.20	0.70	HBC101M30030□VA
	120	22×50	0.20	0.80	HBC121M22050□VA
	120	25×40	0.20	0.80	HBC121M25040□VA
	120	30×35	0.20	0.80	HBC121M30035□VA
	120	35×30	0.20	0.80	HBC121M35030□VA
	150	25×45	0.20	0.86	HBC151M25045□VA
	150	30×40	0.20	0.90	HBC151M30040□VA
	150	35×35	0.20	0.90	HBC151M35035□VA
	180	25×50	0.20	1.00	HBC181M25050□VA
	180	30×45	0.20	1.02	HBC181M30045□VA
	220	30×50	0.20	1.18	HBC221M30050□VA
	220	35×40	0.20	1.18	HBC221M35040□VA
	270	30×55	0.20	1.36	HBC271M30055□VA
	270	35×50	0.20	1.36	HBC271M35050□VA
	330	35×60	0.20	1.66	HBC331M35060□VA
	390	35×60	0.20	1.80	HBC391M35060□VA
	470	35×60	0.20	2.20	HBC471M35060□VA
	560	35×65	0.20	2.40	HBC561M35065□VA
	560	40×55	0.20	2.40	HBC561M40055□VA
	680	35×75	0.20	2.80	HBC681M35075□VA
	680	40×70	0.20	2.90	HBC681M40070□VA
	820	40×75	0.20	3.30	HBC821M40075□VA
820	45×60	0.20	3.20	HBC821M45060□VA	
1000	40×90	0.20	3.90	HBC102M40090□VA	
1000	45×75	0.20	3.80	HBC102M45075□VA	
1200	40×100	0.20	4.40	HBC122M40100□VA	
1200	45×85	0.20	4.30	HBC122M45085□VA	
1200	50×80	0.20	4.50	HBC122M50080□VA	
1500	45×100	0.20	5.00	HBC152M45100□VA	

WV <sub>DC</sub> (Surge Voltage) (V)	Cap ( $\mu$ F)	Size D×L (mm)	$\tan\delta$ 20°C/120Hz	Ripple Current 105°C/120Hz (Arms)	Catalog Part Number
500 (550)	1500	50×90	0.20	5.10	HBC152M50090□VA
	1800	50×105	0.20	5.90	HBC182M50105□VA
550 (600)	180	30×50	0.20	1.10	HBZ181M30050□VA
	220	30×60	0.20	1.30	HBZ221M30060□VA
	270	35×50	0.20	1.50	HBZ271M35050□VA
	330	35×60	0.20	1.70	HBZ331M35060□VA
	390	35×70	0.20	2.00	HBZ391M35070□VA
	390	40×60	0.20	2.00	HBZ391M40060□VA
	470	35×80	0.20	2.40	HBZ471M35080□VA
	470	40×70	0.20	2.40	HBZ471M40070□VA
	560	35×90	0.20	2.70	HBZ561M35090□VA
	560	40×80	0.20	2.70	HBZ561M40080□VA
	680	40×90	0.20	3.10	HBZ681M40090□VA
	680	45×70	0.20	3.00	HBZ681M45070□VA
	820	45×85	0.20	3.50	HBZ821M45085□VA
	820	50×70	0.20	3.40	HBZ821M50070□VA
	1000	45×100	0.20	4.10	HBZ102M45100□VA
	1000	50×80	0.20	3.90	HBZ102M50080□VA
	1200	50×90	0.20	4.60	HBZ122M50090□VA

\*□Enter the appropriate terminal code