HBX SERIES

UPGRADE

Load Life: 125℃ 3000 hours

- High Ripple Current, Low ESR, High Reliability.
- Suitable for DC Link of high voltage inverter.
- AEC-Q200.

RoHS compliance

Automotive only

◆SPECIFICATIONS

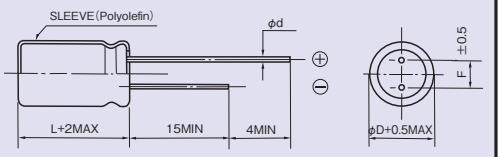
Items	Characteristics
Category Temperature Range	−40～+125℃
Rated Voltage Range	250, 275Vdc
Capacitance Tolerance	±20%(20℃,120Hz)
Leakage Current(MAX)	I=0.04CV+100μA(After 1 minute) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)
Dissipation Factor(MAX) (tanδ)	0.15 (20℃, 120Hz)
Endurance	After applying rated voltage with rated ripple current for 3000 hours at 125℃, the capacitors shall meet the following requirements.
Low Temperature Stability Impedance Ratio(MAX)	

Endurance	
Capacitance Change	Within ±20% of the initial value.
Dissipation Factor	Not more than 200% of the specified value.
Leakage Current	Not more than the specified value.

Rated Voltage (Vdc)	250	275
Z(−25℃)/Z(20℃)	3	3
Z(−40℃)/Z(20℃)	6	6

(120Hz)

◆DIMENSIONS (mm)



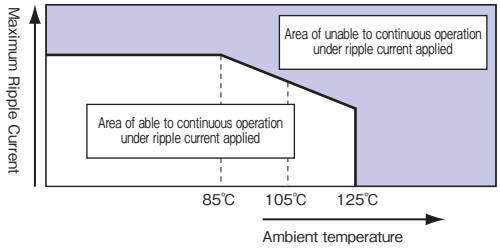
φD	10	12.5	16
φd	0.8		
F	5	7.5	

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency(Hz)	120	1k	10k	100k≦
Coefficient	0.45	0.80	1.00	1.00

◆OPTION

Standard item is blank.



◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current Io(mA r.m.s./ 125℃,100kHz)	MAX ripple current IMAX(mA r.m.s./ 125℃,100kHz)	MAX ripple current IMAX(mA r.m.s./ 105℃,100kHz)
250	30	12.5×20	1100	1100	1870
	36	10×30	1330	1330	2260
	43	10×35	1550	1550	2630
	43	12.5×25	1410	1410	2390
	51	10×40	1760	1760	2990
	51	16×20	1440	1440	2440
	56	12.5×30	1710	1710	2900

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current Io(mA r.m.s./ 125℃,100kHz)	MAX ripple current IMAX(mA r.m.s./ 125℃,100kHz)	MAX ripple current IMAX(mA r.m.s./ 105℃,100kHz)
275	30	12.5×20	1020	1020	1730
	36	10×30	1240	1240	2100
	43	10×35	1440	1440	2440
	43	12.5×25	1310	1310	2220
	51	10×40	1640	1640	2780
	51	16×20	1350	1350	2290
	56	12.5×30	1590	1590	2700

Rated ripple current Io : Ripple current continuous operation within endurance lifetime.

Maximum ripple current IMAX : Maximum ripple current continuous operation.Estimated lifetime complies with our lifetime calculation fomula.

◆PART NUMBER

□□□	HBX	□□□□□	M	□□□	□□	D×L
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size