

HCBB62X2R

Metallized Polypropylene Film Capacitor for Capacitive Divider
(Class X2, 310Va.c./275Va.c.)






Features

- Metallized polypropylene film
- Capable of withstanding over-voltage stress
- Excellent self-healing performance
- UL 94 V-0 compliant
- Excellent capacitance stability under load

Typical Applications

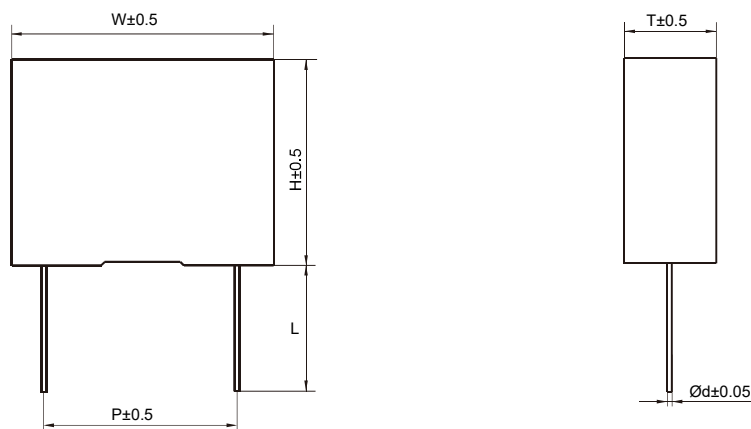
- Specifically designed for applications in serial with the 100Va.c.~240Va.c. mains, for example, energy meter, LED driver etc.

Safety Approvals

	CQC	GB/T 6346.14	0.01μF-2.2μF; 310Va.c./275Va.c.; 40/110/56B File No.: CQC21001289371
	ENEC-VDE	EN 60384-14 IEC 60384- 14	0.01μF-2.2μF; 310Va.c./275Va.c.; 40/110/56B File No.: 125834
	UL/cUL	UL 60384-14 CSA E60384 - 1:14 CSA E60384 - 14:14	0.01μF-2.2μF; 310Va.c./275Va.c.; 40/110/56B File No.: E311928

Notes: The above certificate No.is just a license No. Please refer to the certificates we supplied for detail information.

Outline Drawing



Notes: All product dimensions are in mm.
See the Outline Dimensions table for details.

Specifications

Reference standards		IEC 60384-14, GB/T 6346.14	
Rated voltage	U_R	310Va.c./275Va.c.(50Hz/60Hz)	
Capacitance range	C_N	0.01 μ F~2.2 μ F	
Capacitance tolerance		$\pm 10\%$ (K), $\pm 20\%$ (M)	
Dissipation factor	$\tan\delta$	$0.01\mu\text{F} \leq C_N \leq 1.0\mu\text{F}$	$\leq 10 \times 10^{-4}$ (1kHz)
		$1.0\mu\text{F} < C_N \leq 2.2\mu\text{F}$	$\leq 20 \times 10^{-4}$ (1kHz)
Insulation resistance (20°C,100V,1min)	IR	$C_N \leq 0.33\mu\text{F}$	$IR \geq 15000M\Omega$
		$C_N > 0.33\mu\text{F}$	$IR \cdot C_N \geq 5000s$
Climatic category/ Passive flammability category		40/110/56/B	
Operating temperature range	T_{OP}	-40°C~+110°C	
Voltage proof	U_{t-t}	Between terminals	$4.3U_R(Vd.c.)$,2s
	U_{t-c}	Between terminals and case	2120Va.c.,1min

Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
H	C	B	B	6	2	X	2	R	/	Q	3	1	0	4	K	6	0	0	0	C	0	0	0
Series code									Rated voltage		Rated capacitance			Capacitance tolerance		Pitch		Internal code			Lead form and packaging code		
									Q3=310Va.c. P3=275Va.c.		For example: 104=10×10 ⁴ pF =0.01 μ F			K=±10% M=±20%		4=10mm 6=15mm 9=22.5mm B=22.5mm		See table 1					

Table 1: Lead Form and Packaging Code

Digit 21		Digit 22		Digit 23		Digit 24	
Code	Explanation	Code	Explanation	Code	Explanation	Code	Explanation
A	Ammo-pack ¹⁾	3	F=7.5mm	0	Straight	1	Taping lead space: P ₃ =12.7mm,H=18.0mm(Pitch=7.5mm)
		4	F=10mm				
		6	F=15mm			1	Crimped
		7	F=22.5mm				
		8	F=27.5mm	7	P ₃ =38mm,H=18.0mm (Pitch=22.5mm or 27.5mm)		
C	Straight Lead (bulk) ²⁾	00	Standard lead length(18mm ~ 28mm)	0		0	Standard lead length
		35	Lead length3.5mm ³⁾				Lead length tolerance±0.5mm

Notes: 1) For more details on Ammo-pack, please refer to the Overview of the Universal Capacitors.

2) Other lead form and packaging options are available upon customer request.

3) If the lead length is 4.5 mm, the code is C450, etc.

Outline Dimensions

Unit: mm

310Va.c./275Va.c.													
C _N (μF)	W	H	T	P	d	Ordering Information	C _N (μF)	W	H	T	P	d	Ordering Information
0.010	13.0	9.0	4.0	10.0	0.6	HCBB62X2R/Q3103+4000****	0.47	26.5	20.0	11.0	22.5	0.8	HCBB62X2R/Q3474+9000****
0.022	13.0	11.0	5.0	10.0	0.6	HCBB62X2R/Q3223+4000****	0.56	26.5	19.0	10.0	22.5	0.8	HCBB62X2R/Q3564+9000****
0.033	13.0	12.0	6.0	10.0	0.6	HCBB62X2R/Q3333+4000****	0.60	26.5	20.0	11.0	22.5	0.8	HCBB62X2R/Q3604+9000****
0.047	13.0	12.0	6.0	10.0	0.6	HCBB62X2R/Q3473+4000****	0.68	26.5	20.0	11.0	22.5	0.8	HCBB62X2R/Q3684+9000****
0.010	18.0	11.0	5.0	15.0	0.6	HCBB62X2R/Q3103+6000****	0.75	26.5	20.0	11.0	22.5	0.8	HCBB62X2R/Q3754+9000****
0.015	18.0	11.0	5.0	15.0	0.6	HCBB62X2R/Q3153+6000****	0.82	26.5	22.0	12.0	22.5	0.8	HCBB62X2R/Q3824+9000****
0.022	18.0	11.0	5.0	15.0	0.6	HCBB62X2R/Q3223+6000****	0.87	26.5	22.0	12.0	22.5	0.8	HCBB62X2R/Q3874+9000****
0.033	18.0	11.0	5.0	15.0	0.6	HCBB62X2R/Q3333+6000****	0.91	26.5	22.0	12.0	22.5	0.8	HCBB62X2R/Q3914+9000****
0.047	18.0	11.0	5.0	15.0	0.6	HCBB62X2R/Q3473+6000****	1.0	26.5	22.0	12.0	22.5	0.8	HCBB62X2R/Q3105+9000****
0.068	18.0	12.0	6.0	15.0	0.6	HCBB62X2R/Q3683+6000****	0.39	32.0	18.0	9.0	27.5	0.8	HCBB62X2R/Q3394+B000****
0.10	18.0	14.5	8.5	15.0	0.6	HCBB62X2R/Q3104+6000****	0.47	32.0	18.0	9.0	27.5	0.8	HCBB62X2R/Q3474+B000****
0.15	18.0	14.5	8.5	15.0	0.6	HCBB62X2R/Q3154+6000****	0.56	32.0	20.0	11.0	27.5	0.8	HCBB62X2R/Q3564+B000****
0.22	18.0	16.0	10.0	15.0	0.8	HCBB62X2R/Q3224+6000****	0.60	32.0	20.0	11.0	27.5	0.8	HCBB62X2R/Q3604+B000****
0.33	18.0	19.2	11.2	15.0	0.8	HCBB62X2R/Q3334+6000****	0.68	32.0	20.0	11.0	27.5	0.8	HCBB62X2R/Q3684+B000****
0.15	26.5	16.5	7.0	22.5	0.8	HCBB62X2R/Q3154+9000****	0.82	32.0	22.0	13.0	27.5	0.8	HCBB62X2R/Q3824+B000****
0.18	26.5	16.5	7.0	22.5	0.8	HCBB62X2R/Q3184+9000****	1.0	32.0	22.0	13.0	27.5	0.8	HCBB62X2R/Q3105+B000****
0.22	26.5	16.5	7.0	22.5	0.8	HCBB62X2R/Q3224+9000****	1.2	32.0	28.0	14.0	27.5	0.8	HCBB62X2R/Q3125+B000****
0.27	26.5	17.0	8.5	22.5	0.8	HCBB62X2R/Q3274+9000****	1.5	32.0	28.0	14.0	27.5	0.8	HCBB62X2R/Q3155+B000****
0.33	26.5	17.0	8.5	22.5	0.8	HCBB62X2R/Q3334+9000****	1.8	32.0	30.0	16.0	27.5	0.8	HCBB62X2R/Q3185+B000****
0.39	26.5	19.0	10.0	22.5	0.8	HCBB62X2R/Q3394+9000****	2.2	32.0	33.0	18.0	27.5	0.8	HCBB62X2R/Q3225+B000****

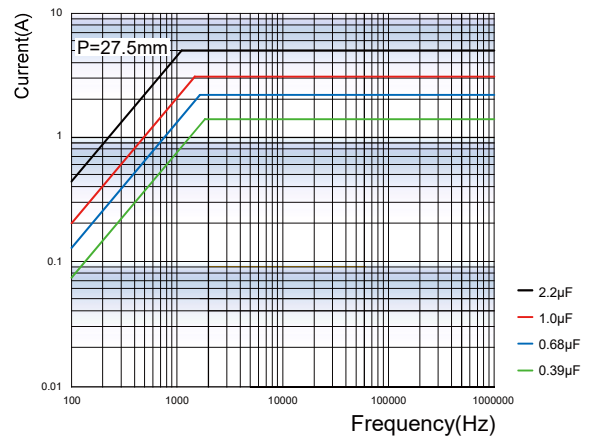
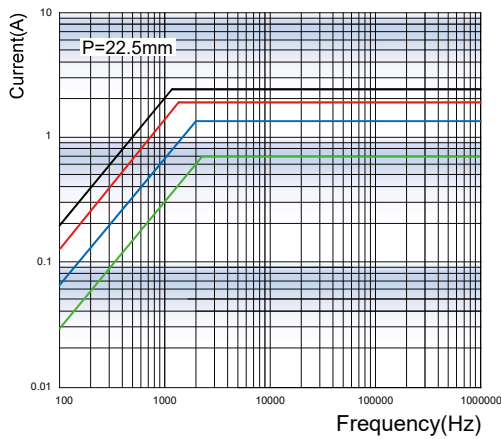
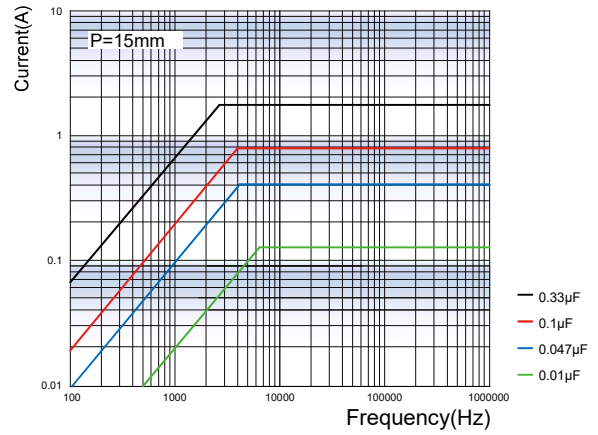
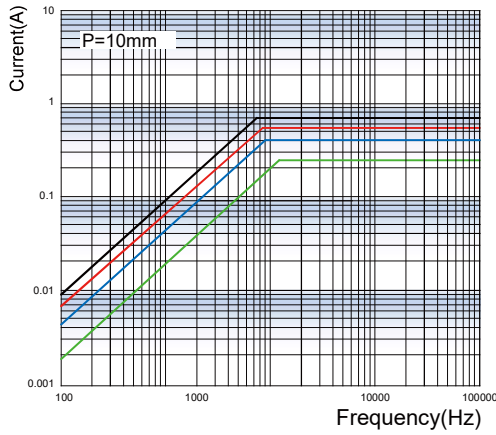
Notes: 1) "+" means capacitance tolerance, K=±10%, M=±20% ;

2) "****" means lead form and packaging code (See table 1) ;

3) When the rated AC voltage is 275Va.c., the 10th to 11th digits shall be P2.

Characteristic Curve (Typical)

Permissible AC current I_{RMS} versus frequency f (for sinusoidal waveforms $T_{op} \leq 85^{\circ}C$)



Impedance Z versus frequency f

