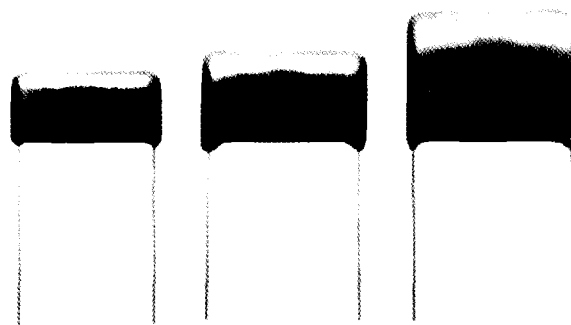


This series is designed for applications where high frequency, high pulse voltage and high current are required.

**Features**

- Very low loss at high frequency
- Very small inherent temperature rise
- Flame retardant epoxy resin coating
- Taped product available (see p. 140)



**Specifications**

Operating Temperature Range	-25~ +85 °C
Rated Voltage	1000V <sub>p-p</sub> at 15.75kHz (1250VDC), 1200V <sub>p-p</sub> at 15.75kHz (1600VDC) 1500V <sub>p-p</sub> at 15.75kHz (2500VDC), 800VDC, 1000VDC
Capacitance Range	0.001μF~0.068μF
Capacitance Tolerance	±3%(H), ±5%(J), ±10%(K)
Dissipation Factor	0.1% max. (20 °C, 1kHz) 0.2% max. (20 °C, 10kHz)
Withstanding Voltage	Between terminals: Rated voltage (VDC) x 175% 1 ~ 5s Between terminals and enclosure: 1500VAC 60s
Insulation Resistance	30,000MΩmin. (20°C, 500VDC, 60s)
Construction	Metallized polypropylene film, flame retardant epoxy resin coating

**Dimensions**

**Marking example**

ECWH8, ECWH10	
W-H822J	
M 800VDC	← Date code.
ECWH10H, 12H, 15H	
W-H102J	
M 1.0kVH	
1.25kVDC	← Date code

**Explanation of Part Numbers**

<div style="border: 1px solid black; padding: 2px; display: inline-block;">E</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">C</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">W</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">H</div>																					
Common Code	Type	Dielectric & construction	Rated Voltage	Rated Capacitance	Capacitance Tolerance (%)																
W	Plastic film capacitor		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>8</td><td>800(DC)</td></tr> <tr><td>10</td><td>1000(DC)</td></tr> <tr><td>10H</td><td>1250(DC)</td></tr> <tr><td>12H</td><td>1600(DC)</td></tr> <tr><td>15H</td><td>2500(DC)</td></tr> </table>	8	800(DC)	10	1000(DC)	10H	1250(DC)	12H	1600(DC)	15H	2500(DC)	<p>The two first digits indicate the two most significant digits of the capacitance value, and the third indicates the 10-power of the capacitance value expressed in picofarads.</p> <p>Examples: 104=100000pF=100nF=0.1μF</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>H</td><td>±3</td></tr> <tr><td>J</td><td>±5</td></tr> <tr><td>K</td><td>±10</td></tr> </table>	H	±3	J	±5	K	±10
8	800(DC)																				
10	1000(DC)																				
10H	1250(DC)																				
12H	1600(DC)																				
15H	2500(DC)																				
H	±3																				
J	±5																				
K	±10																				
					Suffix Suffix Lead Style																

**Rating & Dimensions**

**800VDC** Cap. tol.  $\pm 3\%$ (H),  $\pm 5\%$ (J)

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)							
		L max.	T max.	H max.		F $\pm 1.25$		S $\pm 0.8$	
				Type-1	Type-2	Type-1	Type-2	$\phi$ $\pm 0.05$	
ECW H 8822 Z( ZR)	.0082	21.0	7.5	12.0	17.0	16.5	7.5	0.8	
" 8912 Z( ZR)	.0091	"	8.0	"	"	"	"	"	
" 8103 Z( ZR)	.01	"	"	12.5	17.5	"	"	"	
" 8113 Z( ZR)	.011	"	8.5	"	"	"	"	"	
" 8123 Z( ZR)	.012	"	"	13.0	18.0	"	"	"	
" 8133 Z( ZR)	.013	"	9.0	"	"	"	"	"	
" 8153 Z( ZR)	.015	"	"	14.5	19.5	"	"	"	
" 8163 Z( ZR)	.016	"	"	15.0	20.0	"	"	"	
" 8183 Z( ZR)	.018	"	9.5	"	"	"	"	"	
" 8203 Z( ZR)	.02	"	10.0	15.5	20.5	"	"	"	
" 8223 Z( ZR)	.022	"	"	16.0	21.0	"	"	"	
" 8243 Z( ZR)	.024	"	10.5	16.5	21.5	"	"	"	
" 8273 Z( ZR)	.027	"	11.0	17.0	22.0	"	"	"	
" 8303 Z( ZR)	.03	27.0	8.5	14.0	19.0	22.5	"	"	
" 8333 Z( ZR)	.033	"	"	14.5	19.5	"	"	"	
" 8363 Z( ZR)	.036	"	9.0	"	"	"	"	"	
" 8393 Z( ZR)	.039	"	"	15.0	20.0	"	"	"	
" 8433 Z( ZR)	.043	"	"	16.5	21.5	"	"	"	
" 8473 Z( ZR)	.047	"	9.5	17.0	22.0	"	"	"	
" 8513 Z( ZR)	.051	"	"	17.5	22.5	"	"	"	
" 8563 Z( ZR)	.056	"	10.0	18.0	23.0	"	"	"	
" 8623 Z( ZR)	.062	"	10.5	"	"	"	"	"	
" 8683 Z( ZR)	.068	"	10.0	19.5	24.5	"	"	"	

**1000VDC** Cap. tol.  $\pm 3\%$ (H),  $\pm 5\%$ (J)

" 10562 Z( ZR)	.0056	21.0	8.0	12.0	17.0	16.5	7.5	0.8
" 10622 Z( ZR)	.0062	"	"	12.5	17.5	"	"	"
" 10682 Z( ZR)	.0068	"	8.5	"	"	"	"	"
" 10752 Z( ZR)	.0075	"	"	"	"	"	"	"
" 10822 Z( ZR)	.0082	"	"	13.0	18.0	"	"	"
" 10912 Z( ZR)	.0091	"	"	14.5	19.5	"	"	"
" 10103 Z( ZR)	.01	"	9.0	"	"	"	"	"
" 10113 Z( ZR)	.011	"	"	15.0	20.0	"	"	"
" 10123 Z( ZR)	.012	"	9.5	"	"	"	"	"
" 10133 Z( ZR)	.013	"	"	15.5	20.5	"	"	"
" 10153 Z( ZR)	.015	"	10.0	16.0	21.0	"	"	"
" 10163 Z( ZR)	.016	"	10.5	"	"	"	"	"
" 10183 Z( ZR)	.018	"	11.0	17.0	22.0	"	"	"
" 10203 Z( ZR)	.02	27.0	8.5	14.0	19.0	22.5	"	"
" 10223 Z( ZR)	.022	"	"	14.5	19.5	"	"	"
" 10243 Z( ZR)	.024	"	9.0	"	"	"	"	"
" 10273 Z( ZR)	.027	"	9.5	15.0	20.0	"	"	"
" 10303 Z( ZR)	.03	"	9.0	16.5	21.5	"	"	"
" 10333 Z( ZR)	.033	"	9.5	17.5	22.5	"	"	"
" 10363 Z( ZR)	.036	"	10.0	"	"	"	"	"
" 10393 Z( ZR)	.039	"	"	18.0	23.0	"	"	"
" 10433 Z( ZR)	.043	"	"	19.5	24.5	"	"	"
" 10473 Z( ZR)	.047	29.5	"	18.0	23.0	25.0	17.5	"
" 10513 Z( ZR)	.051	"	10.5	18.5	23.5	"	"	"
" 10563 Z( ZR)	.056	"	11.0	"	"	"	"	"
" 10623 Z( ZR)	.062	"	11.5	19.0	24.0	"	"	"
" 10683 Z( ZR)	.068	"	"	19.5	24.5	"	"	"

Cap. tol. code (H, J) Last suffix R/B: Crimped leads(Type-2)

**Rating & Dimensions**

**1250VDC** (1000V<sub>pp</sub> at 15.75kHz) Cap. tol. ±3%(H), ±5%(J), ±10%(K)

Part No.	Cap. (μF)	Dimensions (mm)						
		L max.	T max.	H max.		F±1.25	S±0.8	ød ±0.05
				Type-1	Type-2	Type-1	Type-2	
ECWH10H102R	.001	22.0	8.0	13.0	18.0	16.5	10.0	0.8
" 10H112R	.0011	"	"	13.5	18.5	"	"	"
" 10H122R	.0012	"	8.5	"	"	"	"	"
" 10H132R	.0013	"	"	14.0	19.0	"	"	"
" 10H152R	.0015	"	8.0	13.5	18.5	"	"	"
" 10H162R	.0016	"	"	"	"	"	"	"
" 10H182R	.0018	"	8.5	"	"	"	"	"
" 10H202R	.002	"	9.0	14.0	19.0	"	"	"
" 10H222R	.0022	"	8.0	13.0	18.0	"	"	"
" 10H242R	.0024	"	"	13.5	18.5	"	"	"
" 10H272R	.0027	"	8.5	"	"	"	"	"
" 10H302R	.003	"	"	14.0	19.0	"	"	"
" 10H332R	.0033	"	9.0	"	"	"	"	"
" 10H362R	.0036	"	9.5	14.5	19.5	"	"	"
" 10H392R	.0039	"	9.0	15.5	20.5	"	"	"
" 10H432R	.0043	"	9.5	16.0	21.0	"	"	"
" 10H472R	.0047	"	10.0	16.5	21.5	"	"	"
" 10H512R	.0051	"	"	"	"	"	"	"
" 10H562R	.0056	"	10.5	17.0	22.0	"	"	"
" 10H622R	.0062	"	11.0	17.5	22.5	"	"	"
" 10H682R	.0068	"	11.5	"	"	"	"	"
" 10H752R	.0075	"	"	18.5	23.5	"	"	"
" 10H822R	.0082	28.0	8.5	15.5	20.5	22.5	15.0	"
" 10H912R	.0091	"	9.0	"	"	"	"	"
" 10H103R	.01	"	9.5	16.0	21.0	"	"	"
" 10H113R	.011	"	10.0	16.5	21.5	"	"	"
" 10H123R	.012	"	"	18.0	23.0	"	"	"
" 10H133R	.013	"	"	18.5	23.5	"	"	"
" 10H153R	.015	"	10.5	19.0	24.0	"	"	"
" 10H163R	.016	"	11.0	"	"	"	"	"
" 10H183R	.018	"	"	20.5	25.5	"	"	"
" 10H203R	.02	30.5	"	19.5	24.5	25.0	17.5	"
" 10H223R	.022	"	11.5	20.0	25.0	"	"	"
" 10H243R	.024	"	12.0	"	"	"	"	"
" 10H273R	.027	"	12.5	20.5	25.5	"	"	"
" 10H303R	.03	"	13.5	22.0	27.0	"	"	"
" 10H333R	.033	"	13.0	23.0	28.0	"	"	"
" 10H363R	.036	32.5	12.5	22.5	27.5	"	"	"
" 10H393R	.039	"	13.0	23.0	28.0	"	"	"
" 10H433R	.043	"	14.0	23.5	28.5	"	"	"
" 10H473R	.047	"	14.5	24.0	29.0	"	"	"
" 10H513R	.051	"	"	24.5	29.5	"	"	"
" 10H563R	.056	"	15.5	25.0	30.0	"	"	"
" 10H623R	.062	"	16.0	26.5	31.5	"	"	"
" 10H683R	.068	"	"	28.0	33.0	"	"	"

Cap. tol. code (H, J, K)  
 \*Last suffix "R"=straight leads (Type-1)  
 Last suffix "S"=crimped leads (Type-2)

**Rating & Dimensions**

**1600VDC** (1200V<sub>p-p</sub> at 15.75kHz) Cap. tol. ±3%(H), ±5%(J), ±10%(K)

Part No.	Cap. (μF)	Dimensions (mm)						
		L max.	T max.	H max.		F±1.25	S±0.8	ød ±0.05
				Type-1	Type-2	Type-1	Type-2	
ECWH12H102 R S	.001	22.0	8.0	13.0	18.0	16.5	10.0	0.8
" 12H112 R S	.0011	"	"	13.5	18.5	"	"	"
" 12H122 R S	.0012	"	8.5	"	"	"	"	"
" 12H132 R S	.0013	"	"	14.0	19.0	"	"	"
" 12H152 R S	.0015	"	9.0	"	"	"	"	"
" 12H162 R S	.0016	"	9.5	14.5	19.5	"	"	"
" 12H182 R S	.0018	"	9.0	16.0	21.0	"	"	"
" 12H202 R S	.002	"	10.0	"	"	"	"	"
" 12H222 R S	.0022	"	"	16.5	21.5	"	"	"
" 12H242 R S	.0024	"	10.5	"	"	"	"	"
" 12H272 R S	.0027	"	11.0	17.0	22.0	"	"	"
" 12H302 R S	.003	"	"	17.5	22.5	"	"	"
" 12H332 R S	.0033	"	11.5	18.5	23.5	"	"	"
" 12H362 R S	.0036	28.0	8.5	15.5	20.5	22.5	15.0	"
" 12H392 R S	.0039	"	9.0	"	"	"	"	"
" 12H432 R S	.0043	"	9.5	16.0	21.0	"	"	"
" 12H472 R S	.0047	"	10.0	"	"	"	"	"
" 12H512 R S	.0051	"	"	16.5	21.5	"	"	"
" 12H562 R S	.0056	"	"	18.5	23.5	"	"	"
" 12H622 R S	.0062	"	"	"	"	"	"	"
" 12H682 R S	.0068	"	10.5	19.0	24.0	"	"	"
" 12H752 R S	.0075	"	11.0	19.5	24.5	"	"	"
" 12H822 R S	.0082	"	11.5	"	"	"	"	"
" 12H912 R S	.0091	"	"	20.0	25.0	"	"	"
" 12H103 R S	.01	30.5	"	"	"	25.0	17.5	"
" 12H113 R S	.011	"	12.0	"	"	"	"	"
" 12H123 R S	.012	"	"	20.5	25.5	"	"	"
" 12H133 R S	.013	"	13.0	21.0	26.0	"	"	"
" 12H153 R S	.015	"	"	23.0	28.0	"	"	"
" 12H163 R S	.016	"	13.5	23.5	28.5	"	"	"
" 12H183 R S	.018	"	14.0	24.0	29.0	"	"	"
" 12H203 R S	.02	"	15.0	25.0	30.0	"	"	"
" 12H223 R S	.022	"	"	25.5	30.5	"	"	"
" 12H243 R S	.024	"	16.0	26.5	31.5	"	"	"
" 12H273 R S	.027	32.5	15.5	25.5	30.5	27.0	20.0	"
" 12H303 R S	.03	"	16.5	26.5	31.5	"	"	"
" 12H333 R S	.033	"	"	28.5	33.5	"	"	"
" 12H363 R S	.036	"	17.5	28.0	33.0	"	"	"
" 12H393 R S	.039	37.5	16.5	27.0	32.0	31.0	25.0	1.0

— Cap. tol. code (H, J, K)

\*Last suffix "R"=straight leads (Type-1)

Last suffix "S"=crimped leads (Type-2)

**Rating & Dimensions**

**2500VDC** (1500V<sub>p-p</sub> at 15.75kHz) Cap. tol. ±3%(H), ±5%(J), ±10%(K)

Part No.	Cap. (μF)	Dimensions (mm)						
		L max.	T max.	H max.		F±1.25	S±0.8	ød ±0.05
				Type-1	Type-2	Type-1	Type-2	
ECW H15H102 <sup>D</sup> / <sub>N</sub>	.001	28.0	9.0	15.5	20.5	22.5	15.0	0.8
" 15H112 <sup>D</sup> / <sub>N</sub>	.0011	"	"	16.0	21.0	"	"	"
" 15H122 <sup>D</sup> / <sub>N</sub>	.0012	"	9.5	"	"	"	"	"
" 15H132 <sup>D</sup> / <sub>N</sub>	.0013	"	10.0	16.5	21.5	"	"	"
" 15H152 <sup>D</sup> / <sub>N</sub>	.0015	"	10.5	"	"	"	"	"
" 15H162 <sup>D</sup> / <sub>N</sub>	.0016	"	"	17.0	22.0	"	"	"
" 15H182 <sup>D</sup> / <sub>N</sub>	.0018	"	"	19.0	24.0	"	"	"
" 15H202 <sup>D</sup> / <sub>N</sub>	.002	"	11.0	"	"	"	"	"
" 15H222 <sup>D</sup> / <sub>N</sub>	.0022	"	"	19.5	24.5	"	"	"
" 15H242 <sup>D</sup> / <sub>N</sub>	.0024	30.5	10.5	19.0	24.0	25.0	17.5	"
" 15H272 <sup>D</sup> / <sub>N</sub>	.0027	"	11.0	19.5	24.5	"	"	"
" 15H302 <sup>D</sup> / <sub>N</sub>	.003	"	11.5	20.0	25.0	"	"	"
" 15H332 <sup>D</sup> / <sub>N</sub>	.0033	"	12.0	20.5	25.5	"	"	"
" 15H362 <sup>D</sup> / <sub>N</sub>	.0036	"	12.5	"	"	"	"	"
" 15H392 <sup>D</sup> / <sub>N</sub>	.0039	"	13.0	21.0	26.0	"	"	"
" 15H432 <sup>D</sup> / <sub>N</sub>	.0043	"	"	23.0	28.0	"	"	"
" 15H472 <sup>D</sup> / <sub>N</sub>	.0047	"	13.5	23.5	28.5	"	"	"
" 15H512 <sup>D</sup> / <sub>N</sub>	.0051	"	14.0	24.0	29.0	"	"	"
" 15H562 <sup>D</sup> / <sub>N</sub>	.0056	"	14.5	24.5	29.5	"	"	"
" 15H622 <sup>D</sup> / <sub>N</sub>	.0062	"	15.0	25.0	30.0	"	"	"
" 15H682 <sup>D</sup> / <sub>N</sub>	.0068	"	15.5	26.0	31.0	"	"	"
" 15H752 <sup>D</sup> / <sub>N</sub>	.0075	"	"	27.5	32.5	"	"	"
" 15H822 <sup>D</sup> / <sub>N</sub>	.0082	"	16.0	28.0	33.0	"	"	"
" 15H912 <sup>D</sup> / <sub>N</sub>	.0091	"	17.0	29.0	34.0	"	"	"
" 15H103 <sup>D</sup> / <sub>N</sub>	.01	32.5	16.0	28.0	33.0	27.0	20.0	"
" 15H113 <sup>D</sup> / <sub>N</sub>	.011	"	17.0	29.0	34.0	"	"	1.0
" 15H123 <sup>D</sup> / <sub>N</sub>	.012	"	17.5	29.5	34.5	"	"	"
" 15H133 <sup>D</sup> / <sub>N</sub>	.013	37.5	16.0	28.0	33.0	31.0	25.0	"
" 15H153 <sup>D</sup> / <sub>N</sub>	.015	"	17.0	29.0	34.0	"	"	"

— Cap. tol. code (H, J, K)

\*Last suffix "D"=straight Leads (Type-1)  
 Last suffix "N"=crimped Leads (Type-2)