

Metallized Polypropylene Film Capacitor

Type : **ECWH(V)**

Non-inductive construction using metallized polypropylene film with flame retardant epoxy resin coating.



Features

- Low-loss
- Excellent electrical characteristics
- Flame retardant epoxy resin coating
- RoHS directive compliant

Recommended applications

- High frequency high voltage circuit
(General resonance, inverter circuit)

Explanation of part number

1	2	3	4	5	6	7	8	9	10	11	12																		
E	C	W	H							V																			
Product code		Dielectric & construction		Rated voltage		Capacitance		Cap. Tol.		Suffix	Suffix																		
				<table><tr><td>10</td><td>1000 V.DC</td></tr><tr><td>12</td><td>1250 V.DC</td></tr><tr><td>16</td><td>1600 V.DC</td></tr><tr><td>20</td><td>2000 V.DC</td></tr></table>		10	1000 V.DC	12	1250 V.DC	16	1600 V.DC	20	2000 V.DC	<table><tr><td>H</td><td>±3 %</td></tr><tr><td>J</td><td>±5 %</td></tr></table>		H	±3 %	J	±5 %	<table><tr><th>Code</th><th>Lead Form</th></tr><tr><td>Blank</td><td>Straight</td></tr><tr><td>B</td><td>Crimped lead</td></tr><tr><td>C</td><td>Cut lead</td></tr></table>		Code	Lead Form	Blank	Straight	B	Crimped lead	C	Cut lead
10	1000 V.DC																												
12	1250 V.DC																												
16	1600 V.DC																												
20	2000 V.DC																												
H	±3 %																												
J	±5 %																												
Code	Lead Form																												
Blank	Straight																												
B	Crimped lead																												
C	Cut lead																												

- Odd size taping

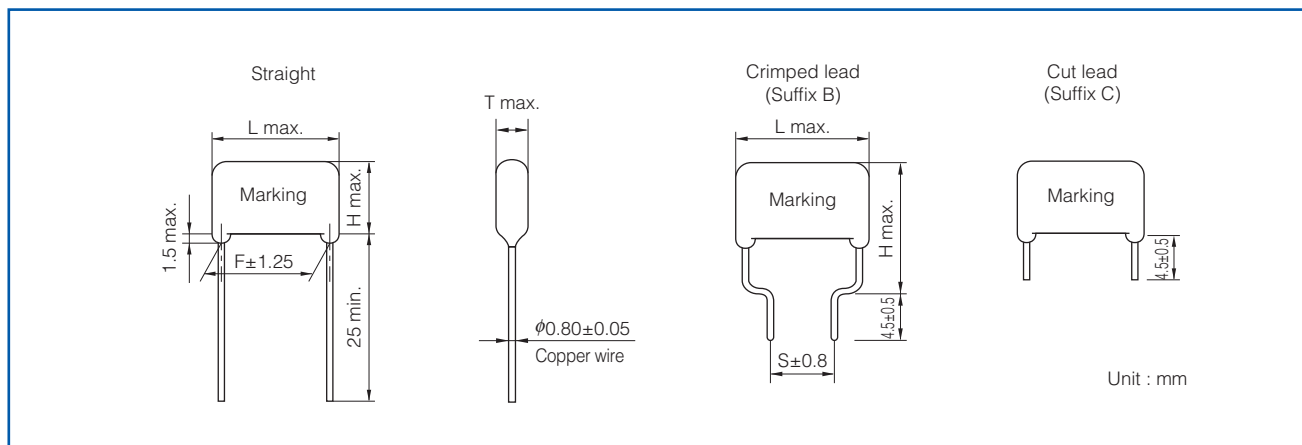
1	2	3	4	5	6	7	8	9	10	11	12
E	C	W	H						R		V
Product code		Dielectric & construction		Rated voltage		Capacitance		Cap. Tol.		Suffix	Suffix

Specifications

Category temp. range (Including temperature-rise on unit surface)	- 40 °C to +105 °C	
Rated voltage	1000 V.DC, 1250 V.DC (1000 Vp-p) 1600 V.DC (1200 Vp-p), 2000 V.DC (1500 Vp-p) (Derating of rated voltage by 1.25 %/°C at more than 85 °C)	
Capacitance range	1000 V.DC	0.0075 μF to 0.10 μF
	1250 V.DC	0.0036 μF to 0.10 μF
	1600 V.DC	0.0013 μF to 0.056 μF
	2000 V.DC	0.001 μF to 0.015 μF
Capacitance tolerance	±3 % (H), ±5 % (J)	
Dissipation factor (tan δ)	tan δ ≤ 0.1 % (20 °C, 1 kHz) tan δ ≤ 0.2 % (20 °C, 10 kHz)	
Withstand voltage	Between terminals : Rated volt. (V.DC) × 150 %, 60 s Between terminals to enclosure : 1500 V.AC 60 s	
Insulation resistance (IR)	IR ≥ 30000 MΩ (20 °C, 500 V.DC, 60 s)	

* In case of applying voltage in alternating current (50 Hz or 60 Hz sine wave) to a capacitor with DC rated voltage, please refer to the page of "Permissible voltage (R.M.S) in alternating current corresponding to DC rated voltage".

Dimensions

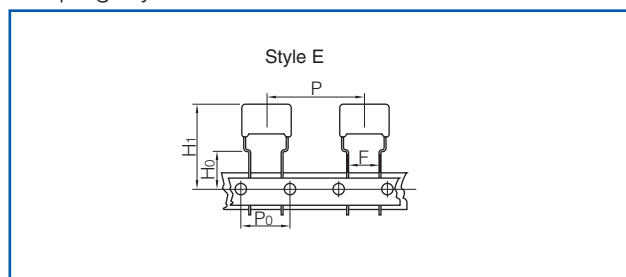


Packaging specifications for bulk package

- Packing quantity : 100 pcs./bag

Taping specifications for automatic insertion

- Taping style



* Refer to the page of taping specifications.

- Taping style

Type	Rated voltage (V.DC)	Capacitance range (μF)	Taping style						Packing	suffix
			AD	AS	B	C	D	E		
ECWH(V)	1000	0.0075 to 0.10						○	Ammo	R() V
	1250	0.0036 to 0.051						○		R() V
	1600	0.0013 to 0.020						○		R() V
	2000	0.0010 to 0.015						○		R() V

* See the column "Rating · Dimensions · Quantity" for packing quantity

- Lead spacing

Style	Lead spacing
E	7.5 mm

Rating · Dimensions · Quantity

● Rated voltage : 1000 V.DC, Capacitance tolerance : $\pm 3\%$ (H), $\pm 5\%$ (J)

Part No.	Cap. (μ F)	Dimensions (mm)							Min. order Q'ty	
		L max.	T max.	H max.		F	S	ϕ d	Taping	Bulk
				Straight	Crimped lead	Straight	Crimped lead		7.5 mm	Straight · Crimped lead
ECWH10752□V()	0.0075	18.0	6.0	12.5	17.5	15.0	10.0	0.8	500	500
ECWH10822□V()	0.0082	18.0	6.0	12.5	17.5	15.0	10.0	0.8		
ECWH10912□V()	0.0091	18.0	6.0	13.0	18.0	15.0	10.0	0.8		
ECWH10103□V()	0.010	18.0	6.5	13.0	18.0	15.0	10.0	0.8		
ECWH10113□V()	0.011	18.0	6.5	13.5	18.5	15.0	10.0	0.8		
ECWH10123□V()	0.012	18.0	6.5	13.5	18.5	15.0	10.0	0.8		
ECWH10133□V()	0.013	18.0	7.0	13.5	18.5	15.0	10.0	0.8		
ECWH10153□V()	0.015	18.0	7.0	14.0	19.0	15.0	10.0	0.8		
ECWH10163□V()	0.016	18.0	7.5	14.0	19.0	15.0	10.0	0.8		
ECWH10183□V()	0.018	18.0	7.5	14.5	19.5	15.0	10.0	0.8		
ECWH10203□V()	0.020	18.0	8.0	15.0	20.0	15.0	10.0	0.8	400	
ECWH10223□V()	0.022	18.0	8.5	15.0	20.0	15.0	10.0	0.8		
ECWH10243□V()	0.024	18.0	8.5	15.5	20.5	15.0	10.0	0.8		
ECWH10273□V()	0.027	18.0	9.0	16.0	21.0	15.0	10.0	0.8	300	
ECWH10303□V()	0.030	18.0	9.5	16.5	21.5	15.0	10.0	0.8		
ECWH10333□V()	0.033	23.0	7.5	16.0	21.0	20.0	15.0	0.8	400	
ECWH10363□V()	0.036	23.0	7.5	16.0	21.0	20.0	15.0	0.8		
ECWH10393□V()	0.039	23.0	8.0	16.5	21.5	20.0	15.0	0.8		
ECWH10433□V()	0.043	23.0	8.5	16.5	21.5	20.0	15.0	0.8		
ECWH10473□V()	0.047	23.0	8.5	17.0	22.0	20.0	15.0	0.8		
ECWH10513□V()	0.051	23.0	9.0	17.5	22.5	20.0	15.0	0.8	300	
ECWH10563□V()	0.056	23.0	9.5	17.5	22.5	20.0	15.0	0.8		
ECWH10623□V()	0.062	23.0	9.5	18.0	23.0	20.0	15.0	0.8		
ECWH10683□V()	0.068	23.0	10.0	19.0	24.0	20.0	15.0	0.8		
ECWH10753□V()	0.075	23.0	10.5	19.5	24.5	20.0	15.0	0.8		
ECWH10823□V()	0.082	23.0	11.0	20.0	25.0	20.0	15.0	0.8		
ECWH10913□V()	0.091	23.0	11.5	20.5	25.5	20.0	15.0	0.8		
ECWH10104□V()	0.10	23.0	12.0	21.0	26.0	20.0	15.0	0.8		

* □ : Capacitance tolerance code
() : Suffix for lead crimped

Rating · Dimensions · Quantity

● Rated voltage : 1250 V.DC, Capacitance tolerance : $\pm 3\%$ (H), $\pm 5\%$ (J)

Part No.	Cap. (μF)	Dimensions (mm)							Min. order Q'ty		
		L max.	T max.	H max.		F	S	ød	Taping	Bulk	
				Straight	Crimped lead	Straight	Crimped lead		7.5 mm	Straight	Crimped lead
ECWH12362□V()	0.0036	18.0	6.0	12.5	17.5	15.0	10.0	0.8	500	500	500
ECWH12392□V()	0.0039	18.0	6.0	12.5	17.5	15.0	10.0	0.8			
ECWH12432□V()	0.0043	18.0	6.0	13.0	18.0	15.0	10.0	0.8			
ECWH12472□V()	0.0047	18.0	6.0	13.0	18.0	15.0	10.0	0.8			
ECWH12512□V()	0.0051	18.0	6.5	13.0	18.0	15.0	10.0	0.8			
ECWH12562□V()	0.0056	18.0	6.5	13.5	18.5	15.0	10.0	0.8			
ECWH12622□V()	0.0062	18.0	6.5	13.5	18.5	15.0	10.0	0.8			
ECWH12682□V()	0.0068	18.0	7.0	13.5	18.5	15.0	10.0	0.8			
ECWH12752□V()	0.0075	18.0	7.0	14.0	19.0	15.0	10.0	0.8			
ECWH12822□V()	0.0082	18.0	7.5	14.0	19.0	15.0	10.0	0.8			
ECWH12912□V()	0.0091	18.0	7.5	14.5	19.5	15.0	10.0	0.8	400		
ECWH12103□V()	0.010	18.0	8.0	15.0	20.0	15.0	10.0	0.8			
ECWH12113□V()	0.011	18.0	8.5	15.0	20.0	15.0	10.0	0.8			
ECWH12123□V()	0.012	18.0	8.5	15.5	20.5	15.0	10.0	0.8			
ECWH12133□V()	0.013	18.0	9.0	15.5	20.5	15.0	10.0	0.8			
ECWH12153□V()	0.015	18.0	9.5	16.0	21.0	15.0	10.0	0.8	500		
ECWH12163□V()	0.016	23.0	7.5	16.0	21.0	20.0	15.0	0.8			
ECWH12183□V()	0.018	23.0	7.5	16.0	21.0	20.0	15.0	0.8			
ECWH12203□V()	0.020	23.0	8.0	16.5	21.5	20.0	15.0	0.8	400		
ECWH12223□V()	0.022	23.0	8.5	16.5	21.5	20.0	15.0	0.8			
ECWH12243□V()	0.024	23.0	8.5	17.0	22.0	20.0	15.0	0.8			
ECWH12273□V()	0.027	23.0	9.0	17.5	22.5	20.0	15.0	0.8			
ECWH12303□V()	0.030	23.0	9.5	18.0	23.0	20.0	15.0	0.8			
ECWH12333□V()	0.033	23.0	10.0	18.5	23.5	20.0	15.0	0.8	300		
ECWH12363□V()	0.036	23.0	10.0	19.0	24.0	20.0	15.0	0.8			
ECWH12393□V()	0.039	23.0	10.5	19.5	24.5	20.0	15.0	0.8			
ECWH12433□V()	0.043	23.0	11.0	20.0	25.0	20.0	15.0	0.8			
ECWH12473□V()	0.047	23.0	11.5	20.5	25.5	20.0	15.0	0.8			
ECWH12513□V()	0.051	23.0	12.0	21.0	26.0	20.0	15.0	0.8			
ECWH12563□V()	0.056	28.0	11.5	20.0	25.0	25.0	17.5	0.8	—		
ECWH12623□V()	0.062	28.0	12.0	21.0	26.0	25.0	17.5	0.8			
ECWH12683□V()	0.068	28.0	12.5	21.5	26.5	25.0	17.5	0.8			
ECWH12753□V()	0.075	28.0	13.5	22.0	27.0	25.0	17.5	0.8			
ECWH12823□V()	0.082	28.0	14.0	22.5	27.5	25.0	17.5	0.8			
ECWH12913□V()	0.091	28.0	14.5	23.0	28.0	25.0	17.5	0.8			
ECWH12104□V()	0.10	28.0	15.5	24.0	29.0	25.0	17.5	0.8			

* □ : Capacitance tolerance code
() : Suffix for lead crimped

Rating · Dimensions · Quantity

● Rated voltage : 1600 V.DC, Capacitance tolerance : $\pm 3\%$ (H), $\pm 5\%$ (J)

Part No.	Cap. (μF)	Dimensions (mm)							Min. order Q'ty															
		L max.	T max.	H max.		F	S	ød	Taping	Bulk														
				Straight	Crimped lead	Straight	Crimped lead		7.5 mm	Straight	Crimped lead													
ECWH16132□V()	0.0013	18.0	6.5	13.0	18.0	15.0	10.0	0.8	500	500	500													
ECWH16152□V()	0.0015	18.0	6.5	13.5	18.5	15.0	10.0	0.8																
ECWH16162□V()	0.0016	18.0	7.0	13.5	18.5	15.0	10.0	0.8																
ECWH16182□V()	0.0018	18.0	7.0	14.0	19.0	15.0	10.0	0.8																
ECWH16202□V()	0.0020	18.0	7.0	14.0	19.0	15.0	10.0	0.8																
ECWH16222□V()	0.0022	18.0	6.5	13.5	18.5	15.0	10.0	0.8																
ECWH16242□V()	0.0024	18.0	7.0	13.5	18.5	15.0	10.0	0.8																
ECWH16272□V()	0.0027	18.0	7.0	14.0	19.0	15.0	10.0	0.8																
ECWH16302□V()	0.003	18.0	7.5	14.0	19.0	15.0	10.0	0.8	400			500	500											
ECWH16332□V()	0.0033	18.0	7.5	14.5	19.5	15.0	10.0	0.8																
ECWH16362□V()	0.0036	18.0	7.0	13.5	18.5	15.0	10.0	0.8	500					500	500									
ECWH16392□V()	0.0039	18.0	7.0	14.0	19.0	15.0	10.0	0.8																
ECWH16432□V()	0.0043	18.0	7.0	14.0	19.0	15.0	10.0	0.8																
ECWH16472□V()	0.0047	23.0	6.5	14.5	19.5	20.0	15.0	0.8																
ECWH16512□V()	0.0051	23.0	6.5	15.0	20.0	20.0	15.0	0.8																
ECWH16562□V()	0.0056	23.0	6.5	15.0	20.0	20.0	15.0	0.8																
ECWH16622□V()	0.0062	23.0	7.0	15.0	20.0	20.0	15.0	0.8																
ECWH16682□V()	0.0068	23.0	7.0	15.5	20.5	20.0	15.0	0.8																
ECWH16752□V()	0.0075	23.0	7.5	15.5	20.5	20.0	15.0	0.8	400							500	500							
ECWH16822□V()	0.0082	23.0	7.5	16.0	21.0	20.0	15.0	0.8																
ECWH16912□V()	0.0091	23.0	8.0	16.0	21.0	20.0	15.0	0.8																
ECWH16103□V()	0.010	23.0	8.0	16.5	21.5	20.0	15.0	0.8																
ECWH16113□V()	0.011	23.0	8.5	17.0	22.0	20.0	15.0	0.8	300									500	500					
ECWH16123□V()	0.012	23.0	9.0	17.0	22.0	20.0	15.0	0.8																
ECWH16133□V()	0.013	23.0	9.0	17.5	22.5	20.0	15.0	0.8																
ECWH16153□V()	0.015	23.0	9.5	18.0	23.0	20.0	15.0	0.8																
ECWH16163□V()	0.016	23.0	10.0	18.5	23.5	20.0	15.0	0.8																
ECWH16183□V()	0.018	23.0	10.5	19.5	24.5	20.0	15.0	0.8																
ECWH16203□V()	0.020	23.0	11.0	20.0	25.0	20.0	15.0	0.8																
ECWH16223□V()	0.022	28.0	9.5	18.0	23.0	25.0	17.5	0.8												—	500	500		
ECWH16243□V()	0.024	28.0	10.0	18.5	23.5	25.0	17.5	0.8																
ECWH16273□V()	0.027	28.0	10.5	19.5	24.5	25.0	17.5	0.8																
ECWH16303□V()	0.030	28.0	11.0	20.0	25.0	25.0	17.5	0.8																
ECWH16333□V()	0.033	28.0	11.5	20.5	25.5	25.0	17.5	0.8																
ECWH16363□V()	0.036	28.0	12.5	21.5	26.5	25.0	17.5	0.8																
ECWH16393□V()	0.039	28.0	13.5	22.0	27.0	25.0	17.5	0.8																
ECWH16433□V()	0.043	28.0	14.5	22.5	27.5	25.0	17.5	0.8																
ECWH16473□V()	0.047	28.0	15.0	23.5	28.5	25.0	17.5	0.8																
ECWH16513□V()	0.051	28.0	15.5	24.0	29.0	25.0	17.5	0.8	400														500	500
ECWH16563□V()	0.056	28.0	16.0	24.5	29.5	25.0	17.5	0.8																

* □ : Capacitance tolerance code
() : Suffix for lead crimped

Rating · Dimensions · Quantity

● Rated voltage : 2000 V.DC, Capacitance tolerance : $\pm 3\%$ (H), $\pm 5\%$ (J)

Part No.	Cap. (μF)	Dimensions (mm)							Min. order Q'ty	
		L max.	T max.	H max.		F	S	ød	Taping	Bulk
				Straight	Crimped lead	Straight	Crimped lead		7.5 mm	Straight · Crimped lead
ECWH20102□V()	0.0010	18.0	6.5	13.5	18.5	15.0	10.0	0.8	500	500
ECWH20112□V()	0.0011	18.0	6.5	13.5	18.5	15.0	10.0	0.8		
ECWH20122□V()	0.0012	18.0	7.0	13.5	18.5	15.0	10.0	0.8		
ECWH20132□V()	0.0013	18.0	7.0	14.0	19.0	15.0	10.0	0.8		
ECWH20152□V()	0.0015	18.0	7.5	14.0	19.0	15.0	10.0	0.8	400	
ECWH20162□V()	0.0016	18.0	7.5	14.5	19.5	15.0	10.0	0.8		
ECWH20182□V()	0.0018	18.0	8.0	14.5	19.5	15.0	10.0	0.8		
ECWH20202□V()	0.0020	18.0	8.0	15.0	20.0	15.0	10.0	0.8		
ECWH20222□V()	0.0022	18.0	8.5	15.0	20.0	15.0	10.0	0.8	300	
ECWH20242□V()	0.0024	18.0	8.5	15.5	20.5	15.0	10.0	0.8		
ECWH20272□V()	0.0027	18.0	9.0	16.0	21.0	15.0	10.0	0.8		
ECWH20302□V()	0.0030	18.0	9.5	16.0	21.0	15.0	10.0	0.8		
ECWH20332□V()	0.0033	18.0	8.5	15.5	20.5	15.0	10.0	0.8	400	
ECWH20362□V()	0.0036	18.0	9.0	15.5	20.5	15.0	10.0	0.8	300	
ECWH20392□V()	0.0039	18.0	9.0	16.0	21.0	15.0	10.0	0.8		
ECWH20432□V()	0.0043	18.0	9.5	16.0	21.0	15.0	10.0	0.8		
ECWH20472□V()	0.0047	23.0	7.0	15.5	20.5	20.0	15.0	0.8	500	
ECWH20512□V()	0.0051	23.0	7.5	16.0	21.0	20.0	15.0	0.8	400	
ECWH20562□V()	0.0056	23.0	7.5	16.0	21.0	20.0	15.0	0.8		
ECWH20622□V()	0.0062	23.0	8.0	16.5	21.5	20.0	15.0	0.8		
ECWH20682□V()	0.0068	23.0	8.5	16.5	21.5	20.0	15.0	0.8		
ECWH20752□V()	0.0075	23.0	9.5	18.0	23.0	20.0	15.0	0.8	300	
ECWH20822□V()	0.0082	23.0	10.0	18.0	23.0	20.0	15.0	0.8		
ECWH20912□V()	0.0091	23.0	10.0	19.0	24.0	20.0	15.0	0.8		
ECWH20103□V()	0.010	23.0	10.5	19.5	24.5	20.0	15.0	0.8		
ECWH20113□V()	0.011	23.0	11.0	20.0	25.0	20.0	15.0	0.8		
ECWH20123□V()	0.012	23.0	11.5	20.5	25.5	20.0	15.0	0.8		
ECWH20133□V()	0.013	23.0	12.0	21.0	26.0	20.0	15.0	0.8		
ECWH20153□V()	0.015	23.0	12.0	21.5	26.5	20.0	15.0	0.8		

* □ : Capacitance tolerance code
() : Suffix for lead crimped