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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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PPS Film Capacitor

Type: **ECHS(Z)**

Non-inductive construction with PPS film designed for high heat resistance and high frequency applications



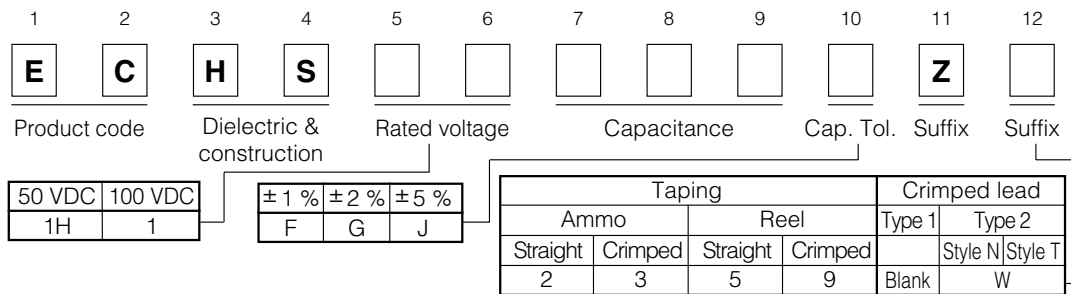
■ Features

- Wide operating temperature range $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$
- Excellent temperature coefficient $-100\text{ ppm}/^{\circ}\text{C}$
- Excellent frequency characteristics
- RoHS directive compliant

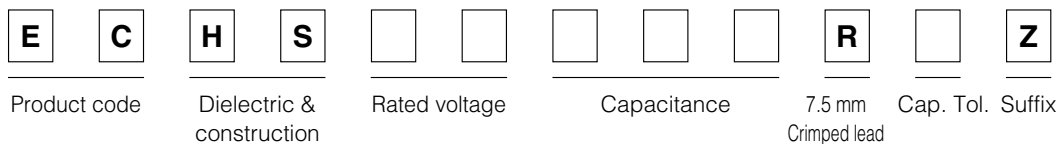
■ Recommended Applications

- Automotive components
- Oscillation circuits

■ Explanation of Part Numbers



● Explanation of Part Number for Odd Size Taping

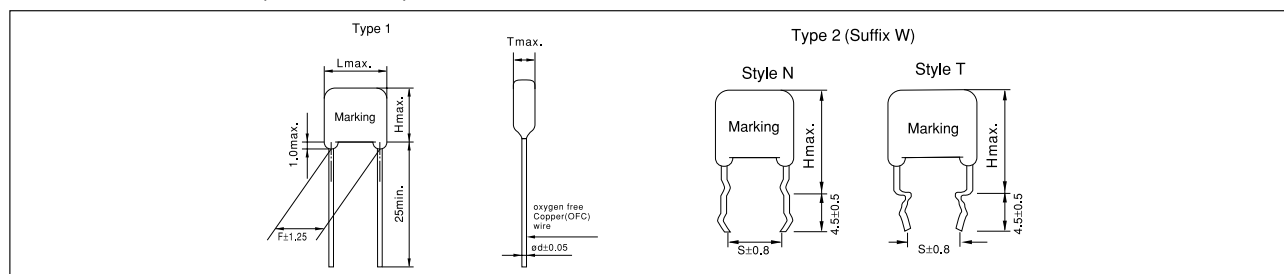


■ Specifications

Category temp. range (Including temperature-rise on unit surface)	$-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$
Rated voltage	50 VDC, 100 VDC
Capacitance range	50 V : $0.0010\text{ }\mu\text{F}$ to $0.47\text{ }\mu\text{F}$ 100 V : $0.00010\text{ }\mu\text{F}$ to $0.47\text{ }\mu\text{F}$
Capacitance tolerance	$\pm 1\%$ (F), $\pm 2\%$ (G), $\pm 5\%$ (J)
Dissipation factor ($\tan\delta$)	$\tan\delta \leq 0.3\%$ ($20\text{ }^{\circ}\text{C}$, 1 kHz)
Withstand voltage	Between terminals : Rated volt.(VDC) $\times 250\%$ 1 s to 5 s
Insulation resistance (IR)	$C \leq 0.33\text{ }\mu\text{F}$: $IR \geq 45000\text{ M}\Omega$ $C > 0.33\text{ }\mu\text{F}$: $IR \geq 15000\text{ M}\Omega \cdot \mu\text{F}$ ($20\text{ }^{\circ}\text{C}$, 100 VDC, 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 in mm (not to scale)

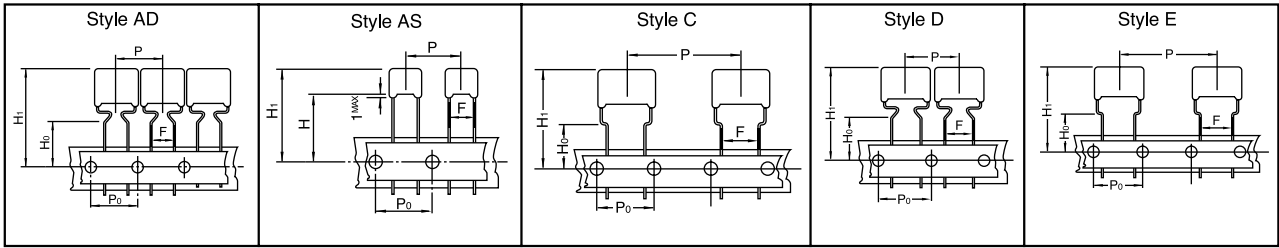


■ Packaging Specifications for Bulk Package

Packing quantity: 100 pcs./bag

■ Taping Specifications for Automatic Insertion

● Taping style



※Refer to the page of taping specifications.

● Packaging Specifications

Type	Rated volt.	Cap. range (μF)	Taping style					Packing	
			AD	AS	B	C	D		E
ECHS	50 VDC	0.0010 to 0.056	○						Ammo
		0.0010 to 0.056	○						Reel
		0.0010 to 0.012		○					Ammo
		0.0010 to 0.012		○					Reel
		0.068 to 0.47				○			Ammo
		0.15 to 0.47						○	Ammo
		0.068 to 0.12					○		Ammo
	100 VDC	0.00010 to 0.027	○						Ammo
		0.00010 to 0.027	○						Reel
		0.00010 to 0.0047		○					Ammo
		0.00010 to 0.0047		○					Reel
		0.033 to 0.12				○			Ammo
		0.033 to 0.056					○		Ammo
		0.068 to 0.47						○	Ammo

● Lead Spacing

Style	Lead Spacing
AD	5.0 mm
AS	5.0 mm
C	5.0 mm
D	7.5 mm
E	7.5 mm

※ See the column "Rating, Dimensions & Quantity Box" for packing quantity.

■ Rating, Dimensions & Quantity/Ammo Box or Reel

● Rated voltage : 50 VDC, Capacitance tolerance : ±1 % (F), ±2 % (G), ±5 % (J)

Part No.	Cap. (μF)	Dimensions (mm)							Quantity	
		L _{max.}	T _{max.}	H _{max.}		F	S	ød	Ammo	Reel
				Type 1	Type 2					
ECHS1H102 □Z ()	0.0010	8.5	4.0	7.6	12.6	5.00	5.0	0.60	1000	
ECHS1H122 □Z ()	0.0012	8.5	4.0	7.8	12.8	5.00	5.0	0.60		
ECHS1H152 □Z ()	0.0015	8.5	4.0	7.6	12.6	5.00	5.0	0.60		
ECHS1H182 □Z ()	0.0018	8.5	4.0	7.6	12.6	5.00	5.0	0.60		
ECHS1H222 □Z ()	0.0022	8.5	4.0	7.8	12.8	5.00	5.0	0.60		
ECHS1H272 □Z ()	0.0027	8.5	4.0	7.8	12.8	5.00	5.0	0.60		
ECHS1H332 □Z ()	0.0033	8.5	4.0	8.0	13.0	5.00	5.0	0.60		
ECHS1H392 □Z ()	0.0039	8.5	4.0	7.8	12.8	5.00	5.0	0.60		
ECHS1H472 □Z ()	0.0047	8.5	4.0	8.0	13.0	5.00	5.0	0.60		
ECHS1H562 □Z ()	0.0056	8.5	4.0	8.2	13.2	5.00	5.0	0.60		
ECHS1H682 □Z ()	0.0068	8.5	4.0	7.6	12.6	5.00	5.0	0.60		
ECHS1H822 □Z ()	0.0082	8.5	4.0	7.6	12.6	5.00	5.0	0.60		
ECHS1H103 □Z ()	0.010	8.5	4.0	7.8	12.8	5.00	5.0	0.60		
ECHS1H123 □Z ()	0.012	8.5	4.0	8.0	13.0	5.00	5.0	0.60		
ECHS1H153 □Z ()	0.015	12.0	4.5	7.8	12.8	7.50	5.0	0.60		
ECHS1H183 □Z ()	0.018	12.0	4.5	8.0	13.0	7.50	5.0	0.60		
ECHS1H223 □Z ()	0.022	12.0	4.5	8.2	13.2	7.50	5.0	0.60		
ECHS1H273 □Z ()	0.027	12.0	4.5	10.4	15.4	7.50	5.0	0.60		
ECHS1H333 □Z ()	0.033	12.0	4.5	10.6	15.6	7.50	5.0	0.60		
ECHS1H393 □Z ()	0.039	12.0	5.0	10.4	15.4	7.50	5.0	0.60		
ECHS1H473 □Z ()	0.047	12.0	5.0	10.8	15.8	7.50	5.0	0.60		
ECHS1H563 □Z ()	0.056	12.0	5.5	11.0	16.0	7.50	5.0	0.60		
ECHS1H683 □Z ()	0.068	14.5	5.0	11.2	16.2	10.00	5.0	0.60		
ECHS1H823 □Z ()	0.082	14.5	5.5	11.6	16.6	10.00	5.0	0.60		
ECHS1H104 □Z ()	0.10	14.5	6.0	12.0	17.0	10.00	5.0	0.60		
ECHS1H124 □Z ()	0.12	14.5	6.5	12.4	18.4	10.00	5.0	0.60		
ECHS1H154 □Z ()	0.15	17.0	6.5	12.4	18.4	12.50	5.0	0.60		
ECHS1H184 □Z ()	0.18	17.0	6.5	14.0	19.0	12.50	5.0	0.60		
ECHS1H224 □Z ()	0.22	17.0	7.0	14.4	19.4	12.50	5.0	0.60		
ECHS1H274 □Z ()	0.27	17.0	7.5	15.2	20.2	12.50	5.0	0.80		
ECHS1H334 □Z ()	0.33	17.0	8.5	15.8	20.8	12.50	5.0	0.80		
ECHS1H394 □Z ()	0.39	17.0	9.0	16.4	21.4	12.50	5.0	0.80		
ECHS1H474 □Z ()	0.47	17.0	10.0	17.2	22.2	12.50	5.0	0.80		

Suffix for lead crimped or taped type
 Cap. tol. code

Style N: 0.0010 μF to 0.012 μF
 Style T: 0.015 μF to 0.47 μF

