

## Stacked Metallized Plastic Film Capacitor

Type: **ECQV(L)/(M)**

Designed for high density insertion applications.

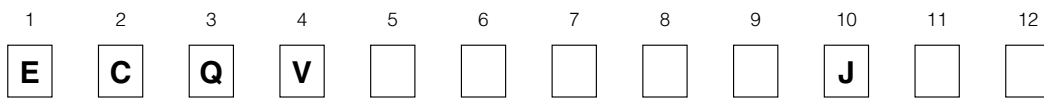
### ■ Features

- Small size and large capacitance
- Excellent electric characteristics in non-inductive construction
- Wide range for automatic insertion
- RoHS directive compliant

### ■ Recommended Applications

- General purpose
- Noise suppression for logic circuit

### ■ Explanation of Part Numbers



Product code

Dielectric & construction

Rated voltage

Capacitance

Cap. Tol.

Suffix

Suffix

1H	50 VDC
1J	63 VDC
1	100 VDC

L	50 VDC
M	63 VDC
	100 VDC

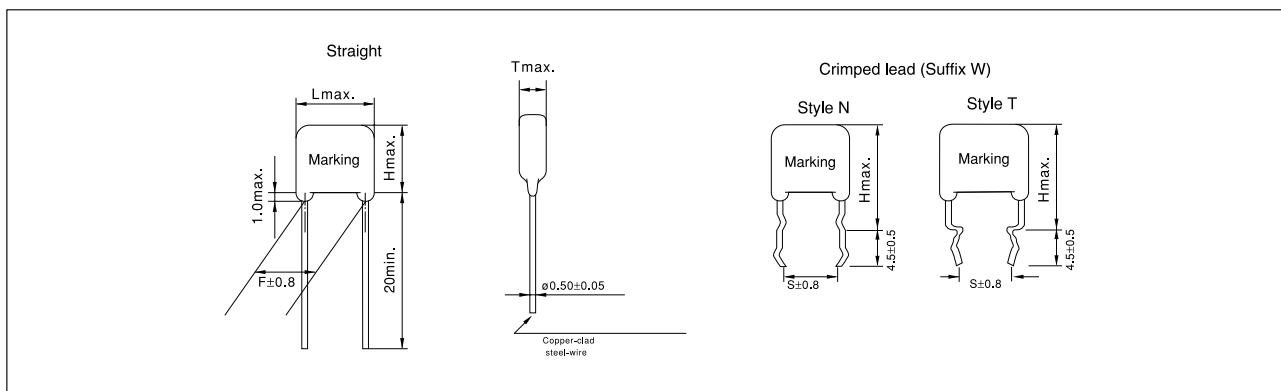
Suffix	Lead Form
Blank	Straight
W	Crimped lead
2	Straight taping (Ammo)
3	Crimped taping (Ammo)
5	Straight taping (Reel)
9	Crimped taping (Reel)

### ■ Specifications

Category temp. range (Including temperature-rise on unit surface)	-40 °C to +105 °C
Rated voltage	50 VDC, 63 VDC, 100 VDC (Derating of rated voltage by 2.5 %/°C at more than 85 °C)
Capacitance range	0.010 μF to 2.2 μF
Capacitance tolerance	± 5 % (J)
Dissipation factor (tan δ)	tan δ ≤ 1.0 % (20 °C, 1 kHz)
Withstand voltage	Between terminals : Rated volt. (VDC) × 150 % 60 s
Insulation resistance (IR)	C ≤ 0.33 μF : IR ≥ 3000 MΩ (20 °C, 50 VDC, 60 s ECQV1H, ECQV1J) C > 0.33 μF : IR ≥ 1000 MΩ · μF (20 °C, 100 VDC, 60 s ECQV1)

\* 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)

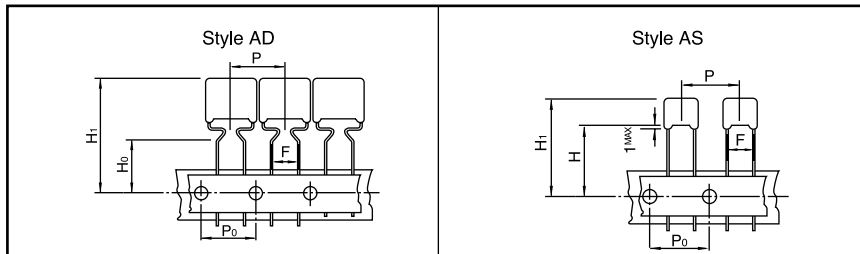


### ■ Packaging Specifications for Bulk Package

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	suffix
			AD	AS	B	C	D	E		
ECQV (L)	50 VDC	0.010 to 2.2	○						Ammo	JL3
		0.010 to 1.0		○					Ammo	JL2
		0.010 to 2.2	○						Reel	JL9
		0.010 to 1.0		○					Reel	JL5
ECQV (M)	63 VDC	0.010 to 1.0	○						Ammo	JM3
		0.010 to 0.15		○					Ammo	JM2
		0.010 to 1.0	○						Reel	JM9
		0.010 to 0.15		○					Reel	JM5
	100 VDC	0.010 to 0.47	○						Ammo	JM3
		0.010 to 0.10		○					Ammo	JM2
		0.010 to 0.47	○						Reel	JM9
		0.010 to 0.10		○					Reel	JM5

#### ● Lead Spacing

Style	Lead Spacing
AD	5.0 mm
AS	5.0 mm

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

### ■ Rating, Dimensions & Quantity/Ammo Box or Reel

#### ● Type ECQV(L) Rated voltage : 50 VDC

Part No.	Cap. (μF)	Dimensions (mm)								Quantity	
		L <sub>max.</sub>	T <sub>max.</sub>	H <sub>max.</sub>		F	S	ød	Ammo	Reel	
				Straight	Crimped lead						
ECQV1H103JL( )	0.010	7.3	3.2	5.0	9.0	5.0	5.0	0.50	2000	2000	
ECQV1H123JL( )	0.012	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H153JL( )	0.015	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H183JL( )	0.018	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H223JL( )	0.022	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H273JL( )	0.027	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H333JL( )	0.033	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H393JL( )	0.039	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H473JL( )	0.047	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H563JL( )	0.056	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H683JL( )	0.068	7.3	3.2	5.0	9.0	5.0	5.0	0.50			
ECQV1H823JL( )	0.082	7.3	3.6	5.0	9.0	5.0	5.0	0.50			
ECQV1H104JL( )	0.10	7.3	4.0	5.0	9.0	5.0	5.0	0.50			
ECQV1H124JL( )	0.12	7.3	4.0	5.0	9.0	5.0	5.0	0.50			
ECQV1H154JL( )	0.15	7.3	4.4	5.5	9.5	5.0	5.0	0.50			
ECQV1H184JL( )	0.18	7.3	4.5	5.5	9.5	5.0	5.0	0.50			
ECQV1H224JL( )	0.22	7.3	4.8	5.5	9.5	5.0	5.0	0.50			
ECQV1H274JL( )	0.27	7.3	4.6	7.0	11.0	5.0	5.0	0.50			
ECQV1H334JL( )	0.33	7.3	5.2	7.0	11.0	5.0	5.0	0.50			
ECQV1H394JL( )	0.39	7.3	5.7	7.3	11.3	5.0	5.0	0.50			
ECQV1H474JL( )	0.47	7.3	6.0	7.3	11.3	5.0	5.0	0.50			
ECQV1H564JL( )	0.56	7.3	5.8	10.0	14.0	5.0	5.0	0.50			
ECQV1H684JL( )	0.68	7.3	6.5	10.0	14.0	5.0	5.0	0.50			
ECQV1H824JL( )	0.82	7.3	6.8	10.0	14.0	5.0	5.0	0.50			
ECQV1H105JL( )	1.0	7.3	8.0	11.0	15.0	5.0	5.0	0.50			
ECQV1H125JL( )	1.2	10.2	6.5	10.0	14.0	7.5	5.0	0.50			
ECQV1H155JL( )	1.5	10.2	7.2	10.0	14.0	7.5	5.0	0.50			
ECQV1H185JL( )	1.8	10.2	7.2	12.0	16.5	7.5	5.0	0.50			
ECQV1H225JL( )	2.2	10.2	7.9	12.0	16.5	7.5	5.0	0.50			

↑ Suffix for lead crimped or taped type

Style N: 0.010 μF to 1.0 μF  
Style T: 1.2 μF to 2.2 μF

■ Rating, Dimensions & Quantity/Ammo Box or Reel

● Type ECQV(M) Rated voltage : 63 VDC

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)							Quantity	
		L <sup>max.</sup>	T <sup>max.</sup>	H <sup>max.</sup>		F	S	$\phi$ d	Ammo	Reel
				Straight	Crimped lead	Straight	Crimped lead			
ECQV1J103JM( )	0.010	7.5	3.2	6.8	10.8	5.0	5.0	0.50	2000	2000
ECQV1J123JM( )	0.012	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J153JM( )	0.015	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J183JM( )	0.018	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J223JM( )	0.022	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J273JM( )	0.027	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J333JM( )	0.033	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J393JM( )	0.039	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J473JM( )	0.047	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J563JM( )	0.056	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J683JM( )	0.068	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J823JM( )	0.082	7.5	3.2	6.8	10.8	5.0	5.0	0.50		
ECQV1J104JM( )	0.10	7.5	3.2	7.0	11.0	5.0	5.0	0.50		
ECQV1J124JM( )	0.12	7.5	3.8	7.0	11.0	5.0	5.0	0.50		
ECQV1J154JM( )	0.15	7.5	4.1	7.0	11.0	5.0	5.0	0.50		
ECQV1J184JM( )	0.18	10.2	3.5	9.0	14.0	7.5	5.0	0.50		
ECQV1J224JM( )	0.22	10.2	3.5	9.0	14.0	7.5	5.0	0.50		
ECQV1J274JM( )	0.27	10.2	3.5	9.0	14.0	7.5	5.0	0.50		
ECQV1J334JM( )	0.33	10.2	3.8	9.0	14.0	7.5	5.0	0.50		
ECQV1J394JM( )	0.39	10.2	4.0	9.0	14.0	7.5	5.0	0.50		
ECQV1J474JM( )	0.47	10.2	4.5	9.0	14.0	7.5	5.0	0.50		
ECQV1J564JM( )	0.56	10.2	4.9	9.0	14.0	7.5	5.0	0.50		
ECQV1J684JM( )	0.68	10.2	5.5	10.0	15.0	7.5	5.0	0.50		
ECQV1J824JM( )	0.82	10.2	6.1	10.0	15.0	7.5	5.0	0.50		
ECQV1J105JM( )	1.0	10.2	6.9	10.0	15.0	7.5	5.0	0.50		

Style N: 0.010  $\mu$ F to 0.15  $\mu$ F

Style T: 0.18  $\mu$ F to 1.0  $\mu$ F

● Type ECQV(M) Rated voltage : 100 VDC

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)							Quantity	
		L <sup>max.</sup>	T <sup>max.</sup>	H <sup>max.</sup>		F	S	$\phi$ d	Ammo	Reel
				Straight	Crimped lead	Straight	Crimped lead			
ECQV1103JM( )	0.010	7.5	3.2	7.0	12.0	5.0	5.0	0.50	2000	2000
ECQV1123JM( )	0.012	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1153JM( )	0.015	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1183JM( )	0.018	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1223JM( )	0.022	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1273JM( )	0.027	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1333JM( )	0.033	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1393JM( )	0.039	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1473JM( )	0.047	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1563JM( )	0.056	7.5	3.2	7.0	12.0	5.0	5.0	0.50		
ECQV1683JM( )	0.068	7.5	4.0	7.0	12.0	5.0	5.0	0.50		
ECQV1823JM( )	0.082	7.5	4.1	7.0	12.0	5.0	5.0	0.50		
ECQV1104JM( )	0.10	7.5	4.5	7.0	12.0	5.0	5.0	0.50	1000	1000
ECQV1124JM( )	0.12	10.2	3.3	9.0	14.0	7.5	5.0	0.50	2000	2000
ECQV1154JM( )	0.15	10.2	3.3	9.0	14.0	7.5	5.0	0.50		
ECQV1184JM( )	0.18	10.2	3.6	9.0	14.0	7.5	5.0	0.50		
ECQV1224JM( )	0.22	10.2	4.0	9.0	14.0	7.5	5.0	0.50		
ECQV1274JM( )	0.27	10.2	4.2	9.0	14.0	7.5	5.0	0.50	1000	1000
ECQV1334JM( )	0.33	10.2	4.8	10.0	15.0	7.5	5.0	0.50		
ECQV1394JM( )	0.39	10.2	5.5	10.0	15.0	7.5	5.0	0.50		
ECQV1474JM( )	0.47	10.2	6.8	10.5	15.5	7.5	5.0	0.50		

↑ Suffix for lead crimped or taped type

Style N: 0.010  $\mu$ F to 0.10  $\mu$ F

Style T: 0.12  $\mu$ F to 0.47  $\mu$ F