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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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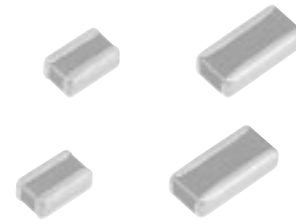
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Multilayer Ceramic Capacitors (Wide-width Type)

Series: **ECY**



■ Features

- Low ESL
- Ideal for High-speed MPU power supply stability and noise filtering
- RoHS compliant

■ Recommended Applications

- Stabilizes power supply voltage for High-speed MPU and noise filtering circuitry.

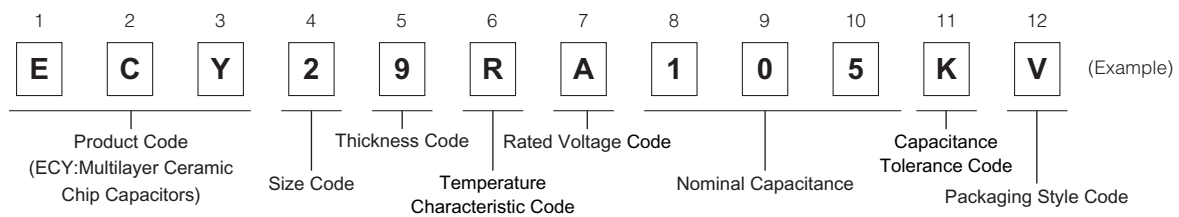
■ Handling Precautions

See Page 48 to 53

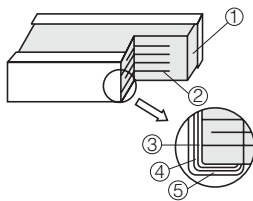
■ Packaging Specifications

See Page 45, 46, 56

■ Explanation of Part Numbers

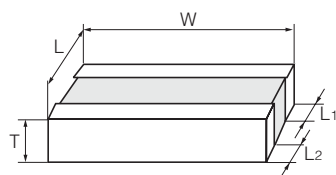


■ Construction



No	Name	
①	Ceramic dielectric	
②	Internal electrode	
③	Terminal electrode	Substrate electrode
④		Intermediate electrode
⑤		External electrode

■ Dimensions in mm (not to scale)



Size Code	Size (EIA)	L	W	T	L ₁ , L ₂
2	0508	1.25±0.10	2.0±0.1	0.85±0.10	0.3±0.2
3	0612	1.60±0.15	3.20±0.15	0.85±0.10	0.3±0.2
		1.6±0.2	3.2±0.2		

■ Packaging Styles and standard Packaging Quantity

Quantity : pcs. / reel

Packaging Style Code	Packaging Styles	Size	Quantity
V	180 reel Paper taping (Pitch : 4 mm)	0508	4,000
			0612

■ Temperature Characteristics

- Class 2

Temperature Characteristic Code	Temperature Characteristics	Capacitance Change	Measurement Temperature Range	Reference Temperature
R	X5R	±15 %	-55 to 85 °C	25 °C

■ Rated Voltage

Rated Voltage Code	H	E	C	A	J
Rated Voltage	DC 50 V	DC 25 V	DC 16 V	DC 10 V	DC 6.3 V

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

01 Dec. 2008

■ Nominal Capacitance

Ex.	103	104	105	106
Nominal capacitance	10,000 pF (0.01 μF)	100,000 pF (0.1 μF)	1,000,000 pF (1 μF)	10,000,000 pF (10 μF)

■ Capacitance Tolerance

Class	Temperature Characteristics	Capacitance Tolerance Code	Capacitance Tolerance
2	X5R	K	±10 %
		M	±20 %

■ Specifications and Testing Methods

Item	Specification	Test Method
Operating Temperature Range	-55 to 85 °C	—
Dielectric Withstanding Voltage	No dielectric breakdown and/or damage	Test voltage: Rated voltage × 250 % Duration: 1 to 5 s. Charge/discharge current: 50 mA max.
Insulation Resistance (IR)	10000 MΩ or 500/C(MΩ) whichever is less. Note:100/C (MΩ) min. for DC 10 V max. C:Nominal Cap. in μF	Measuring voltage: Rated voltage Duration: 60 ± 5 s Charge/discharge current: 50 mA max.
Capacitance	Within the specified tolerance	Measuring temperature: 20±2 °C
Dissipation Factor (tan δ)	DC 50 V, DC 25 V, and DC 16 V: 0.025 max. DC 10 V: 0.05 max. DC 6.3 V: 0.15 max.	Preconditioning: The capacitors shall be kept in temperature of 150 +0/-10 °C for 1 hour and subjected to standard condition* 48±4 hours before initial measurement.
		Measuring frequency: 1 KHz ± 10%
		Measuring voltage: 1.0 ± 0.2 Vrms

*Standard condition : Temperature 15 to 35 °C, Relative humidity 45 to 75 %
For further information, see the technical specifications.

■ Standard Products for EIA Size "0508", Taped Version

- Class 2
- ◆ Temperature Characteristic Code : R (Temperature Characteristics : X5R)

Rated Voltage		DC 50 V			DC 25 V			DC 10 V		
Capacitance (μF)	Capacitance Tolerance	Part No.	Dim. T (mm)	Temp. Char. X5R	Part No.	Dim. T (mm)	Temp. Char. X5R	Part No.	Dim. T (mm)	Temp. Char. X5R
0.01	±10 % (K)	ECY29RH103□V	0.85	○						
0.1	or				ECY29RE104□V	0.85	○			
1	±20 % (M)							ECY29RA105□V	0.85	○

□: Capacitance tolerance code : "□" for "K" or "M"
Standard packaging quantity of Packaging Style Code "V" (T = 0.85 mm): 4,000 pcs./reel
Avoid flow soldering.

■ Standard Products for EIA Size "0612", Taped Version

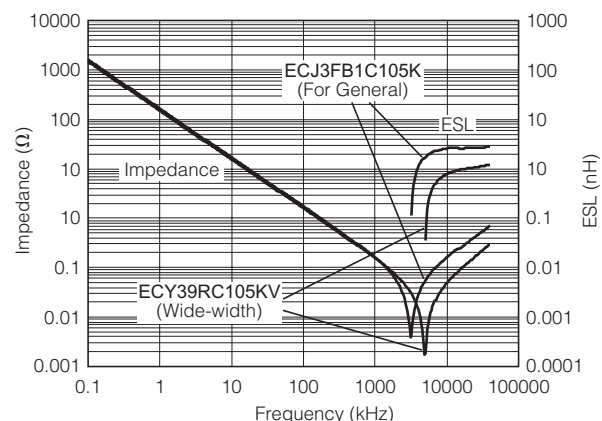
- Class 2
- ◆ Temperature Characteristic Code : R (Temperature Characteristics : X5R)

Rated Voltage		DC 50 V			DC 16 V			DC 6.3 V		
Capacitance (μF)	Capacitance Tolerance	Part No.	Dim. T (mm)	Temp. Char. X5R	Part No.	Dim. T (mm)	Temp. Char. X5R	Part No.	Dim. T (mm)	Temp. Char. X5R
0.1	±10 % (K)	ECY39RH104□V	0.85	○						
1	or				ECY39RC105□V	0.85	○			
10	±20 % (M)							ECY39RJ106MV	0.85*	○

□: Capacitance tolerance code : "□" for "K" or "M"
Dimensional tolerance of L, W, T: L, W: ± 0.15 mm / T: ± 0.1 mm for no mark, L, W: ± 0.2 mm / T: ± 0.1 mm for "*" mark
Standard packaging quantity of Packaging Style Code "V" (T = 0.85 mm): 4,000 pcs./reel
Avoid flow soldering.

■ Impedance/ESL-Frequency [Ex.]

Size 0612, Temperature Characteristics X5R, 1 μF



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