

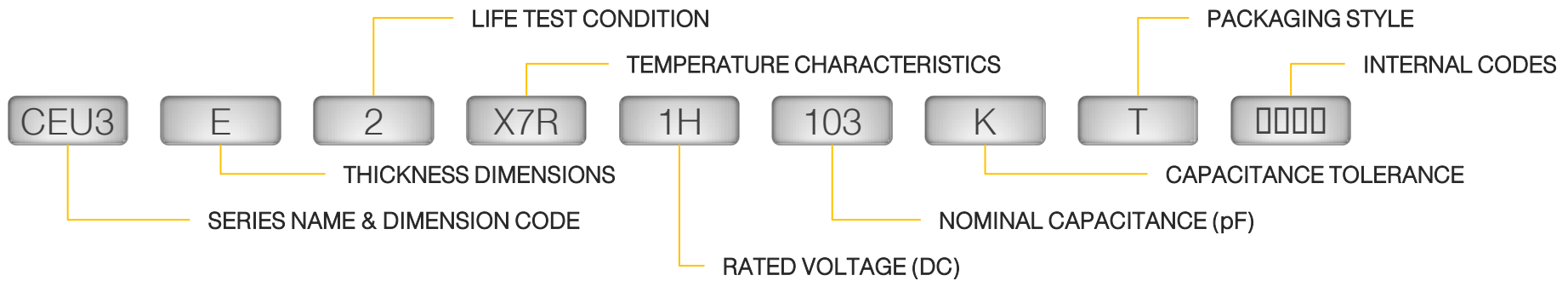
CEU SERIES | Serial Design



Automotive design often employs two distinct capacitors in a series on the PCB for power supply and battery line to protect the circuit from a short in case of cracking of the MLCC. In conjunction with our existing soft electrode technology, TDK offers 2 capacitors in single body construction in our CEU product line for ultra high reliability. Serial construction of inner electrode prevents sudden insulation breakdown after flex crack formation and soft termination technology allows for better absorption of external stress and protects the ceramic body. The combination of these technologies yield improved voltage and ESD performance over standard designs and decrease risk of short circuit failures and low IR due to mechanical flex cracks. Soft termination also allow for better performance with thermal expansion and contraction.

Case Code	L (mm)	W (mm)	T (mm)	Life Test Conditions
CEU3E2 (0603)	1.60	0.80	0.80	WV x 2
CEU4J2 (0805)	2.10	1.25	1.25	WV x 2

Part Number Description



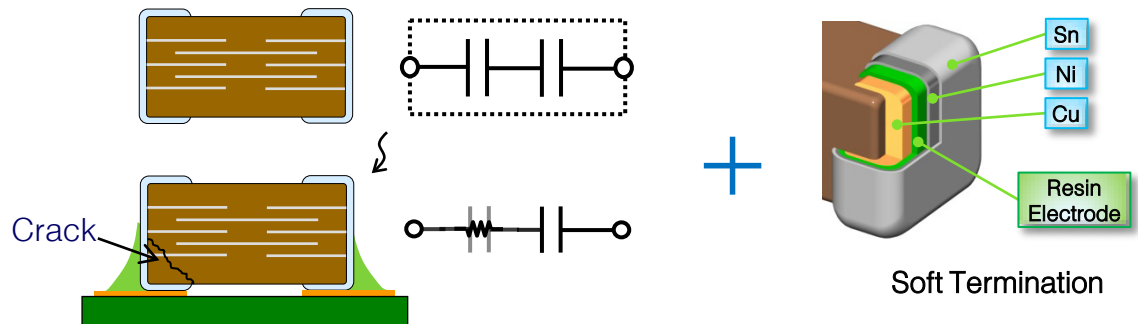
Features:

- ❖ Improved bending resistance (Board Flex Resistance)
- ❖ Improved temperature cycle performance
- ❖ Allow space reduction on PCB
- ❖ Ultra high reliability
- ❖ RoHS, WEE, and REACH compliant

Applications:

- ❖ Power supply without protective circuit
- ❖ Automotive battery line

Ultra High Reliability Features!



➤ Serial construction of inner electrode prevents sudden insulation breakdown after flex crack formation.

➤ Conductive resin electrode layer absorbs external stress and protects ceramic body.

CEU SERIES | Serial Design / X7R

Capacitance (pF)	Cap Code	CEU3 0603/C1608		CEU4 0805/C2012	
		2A (100V)	1H (50V)	2A (100V)	1H (50V)
1,000	102	■			
1,500	152				
2,200	222	■			
3,300	332	■			
4,700	472		■		
6,800	682		■	■	
10,000	103		■	■	
15,000	153		■		
22,000	223				■
33,000	333				■
47,000	473		■		■
68,000	683				■
100,000	104				■

■ X7R