Alt argument pentru identitatea dimensionala masa-sarcina, pentru dimensiunea de lungime L a capacitatii electrice si pentru adimensionalitatea lui k si epsilon,zero.

Din identitatea dimensionala a formulelor rezulta identitatea dimensionala a constantelor fizice G si k si de asemenea odentitatea dimensionala masa-sarcina. Deci putem scrie ca doar dimensional avem identitatea: $[G] \equiv [k]$.

Si atunci putem sa scriem ca $[k] = \frac{N \cdot m^2}{Kg^2} = \frac{M \cdot a \cdot m^2}{Kg^2} = \frac{Kg \cdot m \cdot \cdot m^2}{Kg^2 \cdot s^2} = \frac{m^3}{Kg \cdot s^2} = \frac{L^3}{M \cdot T^2} = L^3 \cdot M^{-1} \cdot T^{-2}$

1) Dar pentru k avem relatia: $k = \frac{1}{4 \cdot \pi \cdot \varepsilon_0} = \frac{1}{ad \cdot \varepsilon_0} = \frac{1}{ad \cdot \frac{F_d}{m}} = ad \cdot \frac{m}{F_d};$

Dar $k = \frac{N \cdot m^2}{Kg^2} = \frac{Kg \cdot a \cdot m^2}{Kg^2} = \frac{a \cdot m^2}{Kg} = \frac{m}{\frac{Kg}{m \cdot a}} = \frac{m}{\frac{Kg}{v^2}}; \rightarrow k = \frac{m}{F_d} = \frac{m}{\frac{Kg}{v^2}}; \rightarrow F_d = \frac{Kg}{v^2} = \frac{M \cdot T^2}{L^2} = M \cdot T^2 \cdot L^{-2};$

$\rightarrow F_d = \frac{M}{v^2} = \frac{Kg}{v^2}$; Dar dimensiunea fizica a faradului este:

$F_d = L^{-2} \cdot M^{-1} \cdot T^4 \cdot I^2;\ I^2 = \frac{Q^2}{T^2};$

$\rightarrow F_d = L^{-2} \cdot M^{-1} \cdot T^4 \cdot \frac{Q^2}{T^2} = \frac{T^2 \cdot Q^2}{L^2 \cdot M} = \frac{T^2 \cdot Q^2}{L^2 \cdot Kg} = \frac{Q^2}{\frac{L^2}{T^2} \cdot Kg} = \frac{Q^2}{v^2 \cdot Kg} = \frac{Kg}{v^2} \rightarrow \frac{Q^2}{Kg} = Kg; \rightarrow Q^2 = Kg^2; \rightarrow [Q] \equiv [M]$

2) $C = \frac{Q}{U}; U = L^2 \cdot M \cdot T^{-3} \cdot I^{-1} = \frac{L^2 \cdot M}{T^3 \cdot I}; I = \frac{Q}{T};$

$\rightarrow U = \frac{L^2 \cdot M \cdot T}{T^3 \cdot Q} = \frac{L^2}{T^2} = v^2; U = R \cdot I; R = \frac{1}{v}; \rightarrow v^2 = \frac{1}{v} \cdot I; \rightarrow I = v^3; I = \frac{Q}{T} = v^3; \rightarrow Q = v^3 \cdot T; \rightarrow C = \frac{v^3 \cdot T}{v^2} = v \cdot T = L; \rightarrow F_d = L; \rightarrow \varepsilon_0 = \frac{F_d}{m} = \frac{L}{L} = ad; \rightarrow k = ad$

3) $R = \frac{U}{I} = \frac{v^2}{v^3} = \frac{1}{v} = L^2 \cdot M \cdot T^{-3} \cdot I^{-2} = \frac{L^2 \cdot M}{T^3 \cdot I^2} = \frac{L^2 \cdot M \cdot T^2}{T^3 \cdot Q^2} = \frac{L^2}{T \cdot Q} = \frac{1}{v} = \frac{T}{L};$

$\rightarrow L^3 = T^2 \cdot Q; \rightarrow Q = \frac{L^3}{T^2}; \rightarrow C = \frac{Q}{U} = \frac{L^3 \cdot T^2}{T^2 \cdot L^2} = L; \rightarrow F_d = L; \rightarrow \varepsilon_0 = \frac{F_d}{m} = \frac{L}{L} = ad; \rightarrow \frac{1}{\varepsilon_0} = ad; \rightarrow k = ad; k = \frac{N \cdot m^2}{Kg^2} = \frac{Kg \cdot a \cdot m^2}{Kg^2} = \frac{a \cdot m^2}{Kg} = ad; \rightarrow Kg = a \cdot m^2 = \frac{L}{T^2} \cdot L^2 = \frac{L^3}{T^2} = [Q]$