doi:10.1351/goldbook.C00906

cathodic transfer coefficient, α_c

For a reaction with a single rate-determining step

$$\frac{\alpha_c}{\nu} = -\frac{R\,T}{n\,F}\left(\frac{\partial(\ln(\mid I_c \mid))}{\partial E}\right)_{T,p,c_i,\ldots}$$

where α_c is the cathodic transfer coefficient (number), R is the gas constant, T is the thermodynamic temperature, and ν the stoichiometric number giving the number of identical activated complexes formed and destroyed in the completion of the overall reaction as formulated with the transfer of n electrons.

Source:
PAC, 1974, *37*, 499 *(Electrochemical nomenclature)* on page 515

