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In[11]:= Ls = Z0^2 * Cs;
Gs = Rs * Cs / Ls;
td = x * Sqrt[Ls * Cs];
      |Quadratwurzel
gam = Sqrt[(Rs + p * Ls) * (Gs + p * Cs)];
      |Quadratwurzel
Tp = (Z2 * Cosh[gam * (1 - x)] + Z0 * Sinh[gam * (1 - x)]) / ((Z1 +
      |Kosinus Hyperbolicus |Sinus Hyperbolicus
Z2) * Cosh[gam * 1] + (Z0 + Z1 * Z2 / Z0) * Sinh[gam * 1]) // TrigToExp // Simplify;
      |Kosinus Hyperbolicus |Sinus Hyperbolicus |konvertiere tri... |vereinfache
lap = FullSimplify[1 / p * Tp, Assumptions -> {Z0 > 0, tr > 0, (Rs + p * Cs * Z0^2) > 0}] /. {Z1 -> Z0};
      |vereinfache vollständig |Annahmen
InverseLaplaceTransform[lap, p, t]
      |inverse Laplace-Transformation
ua[t_] := InverseLaplaceTransform[lap, p, t]
      |inverse Laplace-Transformation

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Out[17]= 0.493481 HeavisideTheta[-5.05249 × 10-7 + t]

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In[19]:= Z0 = 50; Z2 = 50; Cs = 101.049872*^-12; Rs = 6.56167979*^-3; l = 100; x = 100; tr = 1*^-7;

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In[20]:= Plot[ua[t], {t, 0, 5 * td}, GridLines -> Automatic]
      |stelle Funktion graphisch dar |Gitternetzlinien |automatisch

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