In[11]:=
```
Ls = Z0^2 * Cs;
Gs = Rs * Cs / Ls;
td = x * Sqrt[Ls * Cs];
gam = Sqrt[(Rs + p * Ls) * (Gs + p * Cs)];
Tp = (Z2 * Cosh[gam * (l - x)] + Z0 * Sinh[gam * (l - x)]) / ((Z1 +
 Z2) * Cosh[gam * l] + (Z0 + Z1 * Z2 / Z0) * Sinh[gam * l]) // TrigToExp // Simplify;
lap = FullSimplify[1 / p * Tp, Assumptions → {Z0 > 0, tr > 0, (Rs + p * Cs * Z0^2) > 0}] /. {Z1 → Z0};
InverseLaplaceTransform[lap, p, t]
ua[t_] := InverseLaplaceTransform[lap, p, t]
```

Out[17]=
$$0.493481\ \text{HeavisideTheta}\left[-5.05249\times 10^{-7}+t\right]$$

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

In[20]:=
```
Plot[ua[t], {t, 0, 5 * td}, GridLines → Automatic]
```

Out[20]=