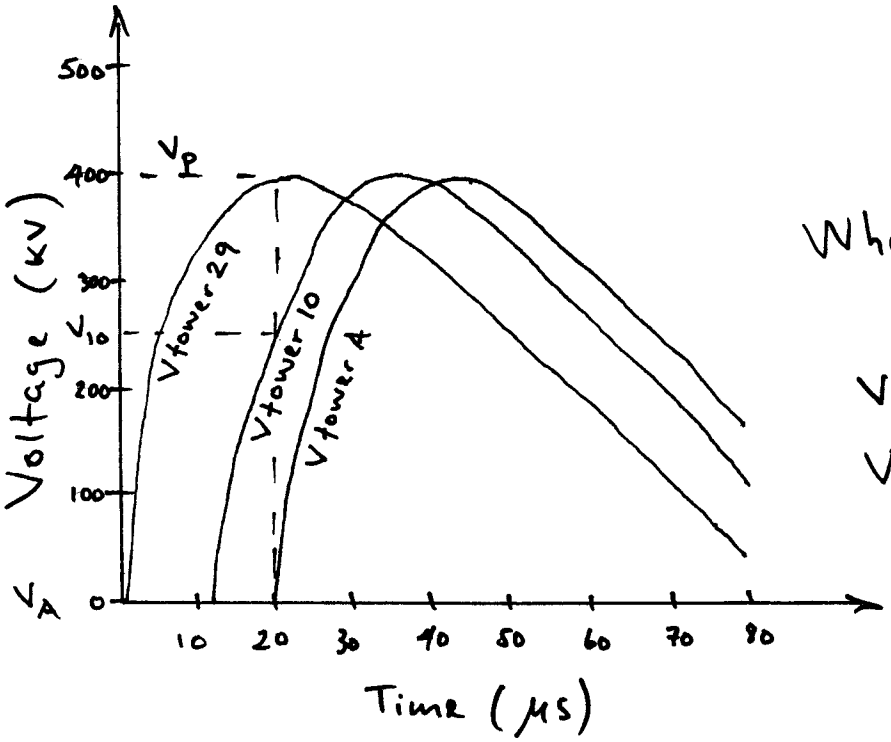
Homework 9

9.2)



When surge reaches tower A:

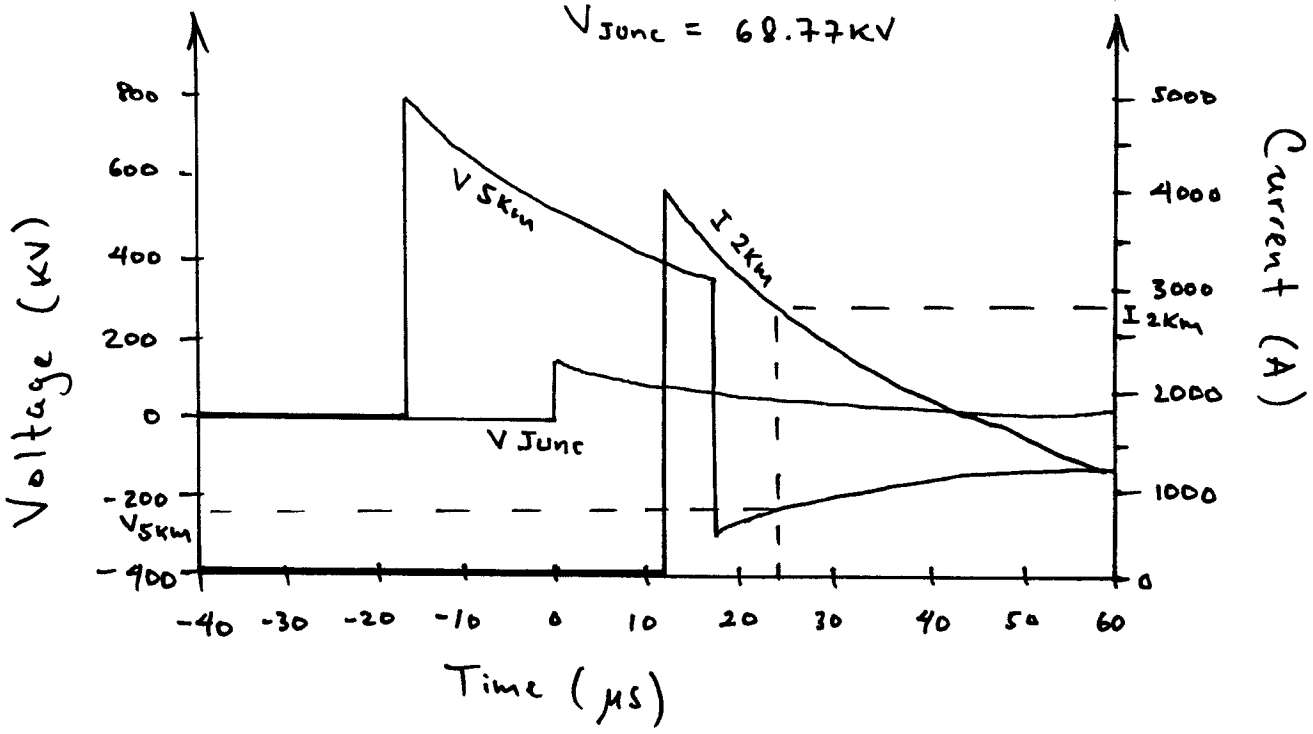
V on tower 10 = 276.7kV

V peak occurrs 29 towers back or 5.83km from A

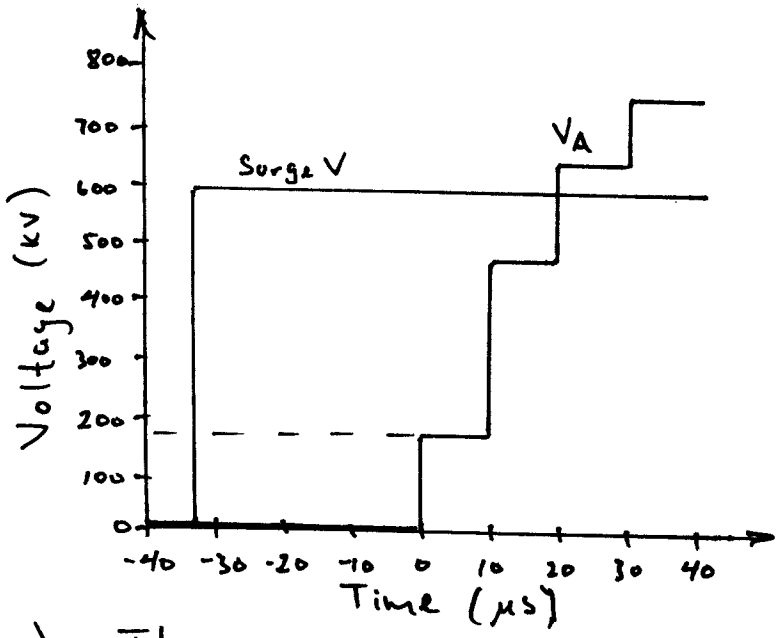
9.3) At $t = 25\mu s$, $V_{5km} = -263.74kV$

$I_{2km} = 2.98\,kA$

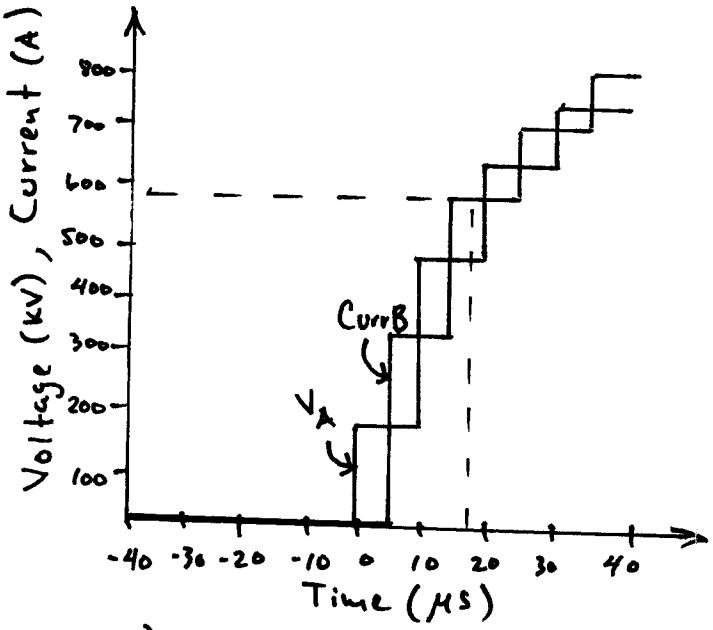
$V_{Junc} = 68.77kV$



9.4)



a) The surge that enters the cable: $V_A = 181.8\,kV$



b) At $t = 18\mu s$, CurrB = 564.71A

c.)

V_A after the first reflected wave = 460.97kV