

For the Sheet:

1a use  $D = D_0 \exp(-E_a/kT)$ ,  $T = 273 + T_{degC}$ ,  $D_0$  is 0.037,  $E_a = 3.46\text{eV}$ ,  $k = 8.617\text{E-}5 \text{ eV/deg-K}$   
1b use diff Length =  $\sqrt{Dt}$ ,  $t$  is in seconds

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2- Use eqn 3.19 in text, or  
in lecture notes : Drive-in Diffusion-Finite supply, the  $x_j$  equation, where  $C_B$  is the substrate doping.  $Dt$  needs to be  
calculated as in problem 1a, 1b.  
use cm for all  $x_j$