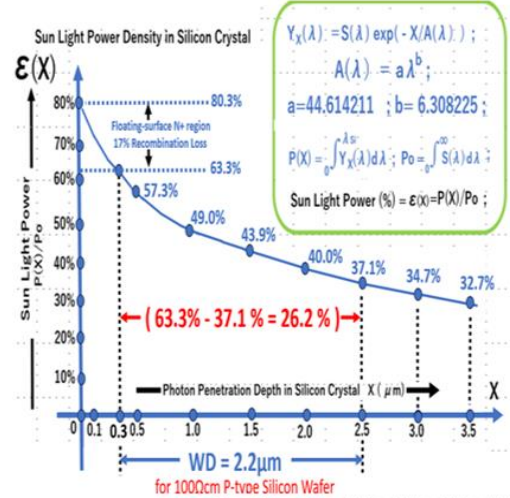
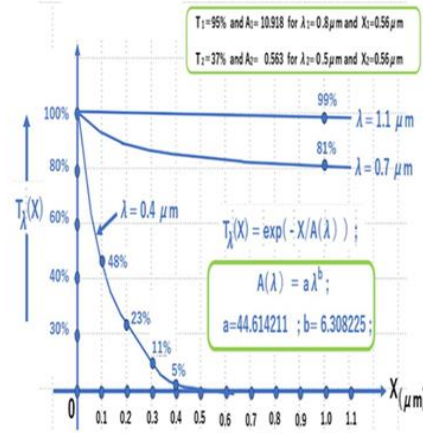
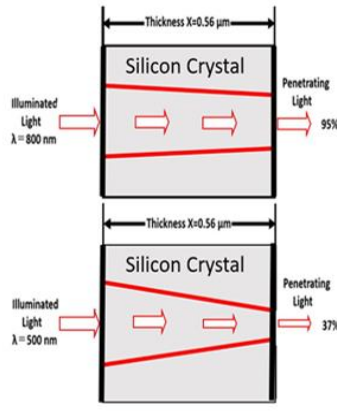


**EG = Vout + VB + VBN + VBP**

$$DP = N_v \exp\left(-\frac{VBP}{kT}\right) - N_c \exp\left(\frac{VBP - EG}{kT}\right)$$

$$DN = N_c \exp\left(-\frac{VBN}{kT}\right) - N_v \exp\left(\frac{VBN - EG}{kT}\right)$$

Percentage (%) of photons penetrating in the depth X(μm) in silicon crystal.



Vout = 0	DP = 100	DP = 200	DP = 300	DP = 400	DP = 500					
DN/DP=1	WD=3.549050	WDN=1.774525	WD=2.600617	WDN=1.300308	WD=2.165704	WDN=1.082852	WD=1.901123	WDN=0.950562	WD=1.717945	WDN=0.858973
DN/DP=10	WD=2.788880	WDN=0.253535	WD=2.035892	WDN=0.185081	WD=1.692053	WDN=0.153823	WD=1.483373	WDN=0.134852	WD=1.339131	WDN=0.121739
DN/DP=100	WD=2.814624	WDN=0.027868	WD=2.048425	WDN=0.020281	WD=1.699707	WDN=0.016829	WD=1.488462	WDN=0.014737	WD=1.342637	WDN=0.013293
DN/DP=1000	WD=2.936866	WDN=0.002934	WD=2.132015	WDN=0.002130	WD=1.766677	WDN=0.001765	WD=1.545701	WDN=0.001544	WD=1.393321	WDN=0.001392
DN/DP=10000	WD=3.064376	WDN=0.000306	WD=2.219884	WDN=0.000222	WD=1.837390	WDN=0.000184	WD=1.606327	WDN=0.000161	WD=1.447133	WDN=0.000145
Vout = 0	DP = 600	DP = 700	DP = 800	DP = 900	DP = 1000					
DN/DP=1	WD=1.581217	WDN=0.790608	WD=1.473986	WDN=0.736993	WD=1.386891	WDN=0.693446	WD=1.314275	WDN=0.657138	WD=1.252491	WDN=0.626246
DN/DP=10	WD=1.231598	WDN=0.111963	WD=1.147347	WDN=0.104304	WD=1.078972	WDN=0.098088	WD=1.022003	WDN=0.092909	WD=0.973562	WDN=0.088506
DN/DP=100	WD=1.234031	WDN=0.012218	WD=1.149007	WDN=0.011376	WD=1.080049	WDN=0.010694	WD=1.022628	WDN=0.010125	WD=0.973825	WDN=0.009642
DN/DP=1000	WD=1.279925	WDN=0.001279	WD=1.191208	WDN=0.001190	WD=1.119295	WDN=0.001118	WD=1.059440	WDN=0.001058	WD=1.008589	WDN=0.001008
DN/DP=10000	WD=1.328745	WDN=0.000133	WD=1.236173	WDN=0.000124	WD=1.161170	WDN=0.000116	WD=1.098767	WDN=0.000110	WD=1.045770	WDN=0.000105