Take $\Delta = 1.76 \, k_B T_c$
and $D(E_F)V = 0.34$
Hence with $\Delta = 2\hbar \omega_c \, e^{-1/D(E_F)V}$
one finds $\hbar \omega_c = 9 \, k_B T_c$

Fermi function at $T_c$:

$$f(T_c) = \frac{1}{e^{\xi_k / k_B T_c} + 1}$$

$$f(T_c) - v_k^2(T=0)$$
\[ \Delta_k = -\sum_{\ell} V_{k\ell} u_{\ell} v_{\ell} \]

\[ V = \sum_{k, \ell} V_{k\ell} u_k v_k u_{\ell} v_{\ell} \]