[nex69] Relaxation function with uniform continued-fraction coefficients.

Find closed-form expressions for the relaxation function $c_0(z)$, the spectral density $\Phi_0(\omega)$, and the fluctuation function $C_0(t)$, of some physical system if we know that the (infinite) sequence of continued-fraction coefficients is
(a) uniform: $\Delta_1 = \Delta_2 = \ldots = \frac{1}{4}\omega_0^2$,
(b) almost uniform: $\Delta_1 = \frac{1}{2}\omega_0^2$, $\Delta_2 = \Delta_3 \ldots = \frac{1}{4}\omega_0^2$.

Solution: