

*Справочный материал по теме
«Воздействие сигнала и шума на АД»*

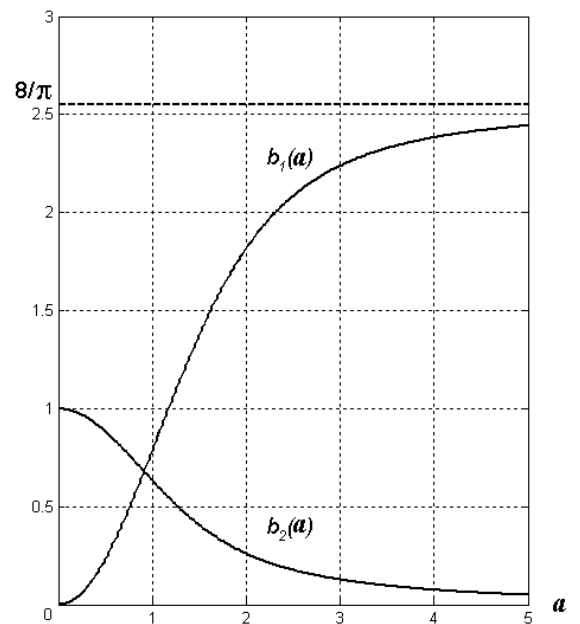
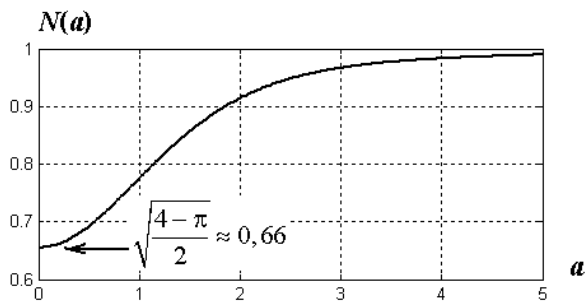
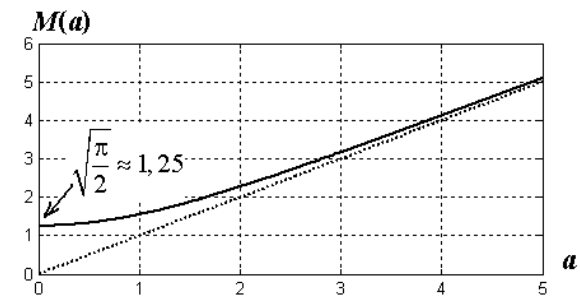
$$M(a) = \sqrt{\frac{\pi}{2}} e^{-\frac{a^2}{4}} \left[\left(1 + \frac{a^2}{2} \right) I_0\left(\frac{a^2}{4}\right) + \frac{a^2}{2} I_1\left(\frac{a^2}{4}\right) \right], \quad M(a) \approx \sqrt{\frac{\pi}{2}} \left(1 + \frac{a^2}{4} \right) \quad \text{при } a \ll 1$$

$$N(a) = \sqrt{2 + a^2 - M^2(a)}$$

$$M(a) \approx \sqrt{a^2 + 1} \quad \text{при } a > 1$$

$$b_1(a) = \left\{ a e^{-\frac{a^2}{4}} \left[I_0\left(\frac{a^2}{4}\right) + I_1\left(\frac{a^2}{4}\right) \right] \right\}^2,$$

$$b_2(a) = \left[e^{-\frac{a^2}{4}} I_0\left(\frac{a^2}{4}\right) \right]^2 + \left[e^{-\frac{a^2}{4}} I_1\left(\frac{a^2}{4}\right) \right]^2$$



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