$$A \left(\frac{1 - \eta}{\sqrt{2\pi}\sigma} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2} + \frac{\eta}{\pi} \frac{w}{(x-\mu)^2 + w^2} \right); \sigma = \frac{w}{\sqrt{2\ln 2}}$$