

**FORMULA 3.562.4**

$$\int_0^{\infty} x e^{-\beta x^2} \cosh \gamma x \, dx = \frac{\gamma}{4\beta} \sqrt{\frac{\pi}{\beta}} e^{\gamma^2/4\beta} \operatorname{erf} \left( \frac{\gamma}{2\sqrt{\beta}} \right) + \frac{1}{2\beta}$$