

**FORMULA 3.547.1**

$$\int_0^{\infty} e^{-b \sinh x} \sinh ax \, dx = \frac{\pi}{2} \cot \frac{\pi a}{2} [J_a(b) - \mathbf{J}_a(b)] - \frac{\pi}{2} [\mathbf{E}_a(b) + Y_a(b)]$$