

FORMULA 3.524.1

$$\int_0^{\infty} x^{s-1} \frac{\sinh bx}{\sinh cx} dx = \frac{\Gamma(s)}{(2c)^s} [\zeta(s, \frac{1}{2}(1 - \frac{b}{c})) - \zeta(s, \frac{1}{2}(1 + \frac{b}{c}))]$$