

FORMULA 3.751.1

$$\int_0^{\infty} \frac{\sin(ax) dx}{\sqrt{x+b}} = \sqrt{\frac{\pi}{2a}} \left[\cos(ab) - \sin(ab) + 2C(\sqrt{ab}) \sin(ab) - 2S(\sqrt{ab}) \cos(ab) \right] \quad a > 0, |\arg b| < \pi$$