

FORMULA 3.247.2

$$\int_0^\infty \frac{(1-x^p)x^{\nu-1}}{1-x^{np}} dx = \frac{\pi}{np} \sin\left(\frac{\pi}{n}\right) \operatorname{cosec}\left(\frac{(p+\nu)\pi}{np}\right) \operatorname{cosec}\left(\frac{\nu\pi}{np}\right)$$