

FORMULA 3.478.3

$$\int_0^u x^{\nu-1}(u-x)^{\mu-1}\exp(\beta x^n) dx = B(\mu, \nu)u^{\nu+\mu-1} \times$$
$${}_nF_n\left(\frac{\nu}{n}, \frac{\nu+1}{n}, \dots, \frac{\nu+n-1}{n}; \frac{\mu+\nu}{n}, \frac{\mu+\nu+1}{n}, \dots, \frac{\mu+\nu+n-1}{n}; \beta u^n\right)$$

$\operatorname{Re} \mu > 0, \operatorname{Re} \nu > 0, n = 2, 3, \dots$