Simplify.

$$\frac{b * a^6 * a^0 * b^4}{2a^4b^7}$$

Solution:

$$\frac{b * a^6 * a^0 * b^4}{2a^4b^7} = \frac{b^{1+4} * a^{6+0}}{2a^4b^7} = \frac{b^5a^6}{2a^4b^7} = \frac{1}{2}a^{6-4}b^{5-7} = \frac{1}{2}a^2b^{-2} = \frac{1}{2}\frac{a^2}{b^2} = \frac{1}{2}\left(\frac{a}{b}\right)^2$$

Answer: $\frac{1}{2}\left(\frac{a}{b}\right)^2$