

55. Since it has two protons, its kinetic energy is 600 MeV. With the given value $mc^2 = 3727$ MeV, we use Eq. 38-37:

$$pc = \sqrt{K^2 + 2Kmc^2} = \sqrt{600^2 + 2(600)(3727)}$$

which yields $p = 2198$ MeV/ c .