
Flux of the electric field vector around a polarized body. Consider a polarized dielectric body with no free charge, in free space. The outward flux of the electric field intensity vector, \mathbf{E} , through a closed surface S that completely encloses the body is

- (A) positive.
- (B) zero.
- (C) negative.
- (D) Depends on whether the dielectric is homogeneous or not.
- (E) Depends on the distribution of the polarization vector in the body.

Solution: (B)

Answer: (B)