

4.3. Heat Current

We have seen that the current and the heat current can be written in terms of voltage and temperature differences in the form

$$I = G_D V + G_S D T$$
$$I_Q = G_P D V + G_Q D T$$

4.3a A device is left open-circuited so that current is **zero**. The ratio of the heat current to the temperature difference is given by

- (a) G_Q
- (b) $G_Q - \left(\frac{G_P G_S}{G} \right)$
- (c) $G_Q + \left(\frac{G_P G_S}{G} \right)$
- (d) $G_Q + G_P$
- (e) None of the above

4.3b The coefficients G_P and G_S are related by

- (a) $G_P = T G_S$
- (b) $G_S = T G_P$
- (c) $G_P + G_S = T$
- (d) $G_P - G_S = T$
- (e) None of the above, they are not related