

FIGURE 5.6

The four possible P - SV reflection/conversion coefficients (displacement amplitude ratios) for a free surface are shown against horizontal slowness p . See Figure 5.5. In this case, $\alpha = 5$ km/s and $\beta = 3$ km/s, and we restrict p to lie in the range $0 \leq p \leq 1/\alpha$ so that incidence angle i is always real. For $i = 90^\circ$, $\hat{S}\hat{P}$ is quite large (~ 4.1). The left panel shows the whole range of p . The right panel shows an expanded view of the range just less than $p = 1/\alpha$.

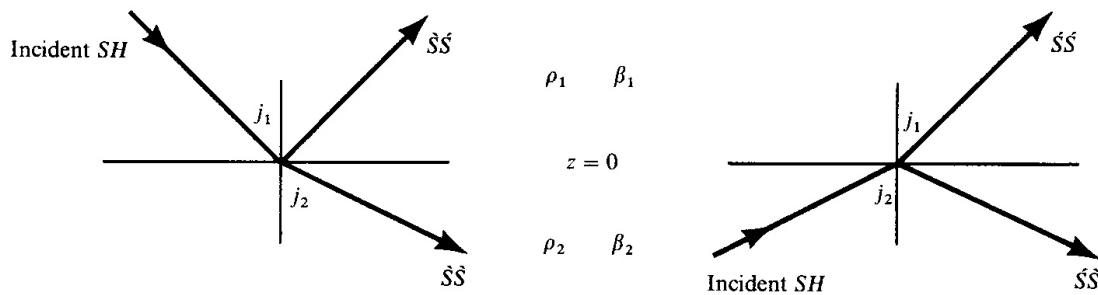


FIGURE 5.7

Notation for the four possible reflection/transmission coefficients arising for problems of incident SH -waves.