

where I_0 = total signal current, A

H = height of trace above circuit board, in.

D = perpendicular distance from signal trace, in.

$i(D)$ = signal current density, A/in.

Current density
at point D is
proportional to

$$\frac{1}{1 + \left(\frac{D}{H}\right)^2}$$

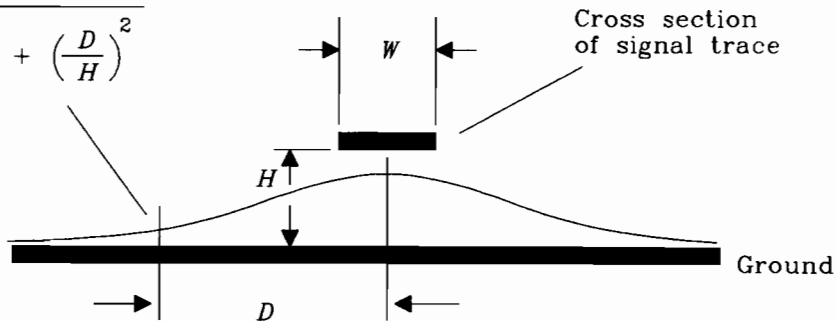


Figure 5.3 Distribution of high-frequency current density underneath a signal trace.