Spherical Pore

Thompson-Gray Measurement Model

(a) (b)

50.8 mm

19.63 mm

output (volts)

output, volts

time, μsec

frequency, MHz

s(\omega) volts/MHz

0 1 2 3 4 5 6 7 8 9 10

0 2 4 6 8 10 12 14 16 18 20

0 0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08

0 0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08

0 0.5 1 1.5 2

0 0.5 1 1.5 2

-2.5 -2 -1.5 -1 -0.5 0 0.5 1 1.5 2

-2.5 -2 -1.5 -1 -0.5 0 0.5 1 1.5 2

time, μsec

μsec
Flat-bottom hole or flat crack at normal incidence

“Large” flaw measurement model

(a) (b)

Output, volts

Time, μsec
Side-drilled Hole

2-D Measurement Model

(a) Side-drilled Hole

(outputs, volts)

time, μsec

(b) 2-D Measurement Model