Breakdown rates

![Graph showing breakdown rates vs. input power. The graph compares breakdown rates per hour for different input power levels, with data points for H90vg3N and H60vg3N-6C. The x-axis represents input power, and the y-axis represents breakdown rate per hour on a logarithmic scale.]
Breakdown rates

H60vg3N-6C

Breakdown rate per hour vs Average gradient

400 ns
240 ns
Breakdown rates

Breakdown rate per hour

Input power

H60vg3N-6C

- 400 ns
- 240 ns
Breakdown rates

H60vg3N-6C

- 400 ns
- 240 ns

Breakdown rate per hour vs. Average gradient
Breakdown rates

H90vg3N

Breakdown rate per hour

Average gradient

$400 \text{ ns}$
$240 \text{ ns}$

$10^{-1}$ $10^0$ $10^1$

$55$ $60$ $65$ $70$
Breakdown rates

Breakdown rate per hour

Input power

H90vg3N

400 ns
240 ns
Breakdown rates

Breakdown rate per hour

Average gradient

H90vg3N

400 ns

240 ns
H90 breakdown rates mapping

![Graph showing breakdown rate per hour versus average gradient with different symbols for 400 ns, 240 ns, and 100 ns.](image-url)
H90 breakdown rates mapping

![Graph showing H90vg3N breakdown rates mapping with data points for 400 ns, 240 ns, and 100 ns. The graph plots breakdown rate per hour against average gradient.]
Pulse length dependence of BD rates

Average accelerating gradient (MV/m) vs. pulse length (ns)

- 100 MW, \sqrt{400 \text{ ns}}
- 67 MW, \text{cubic-root}(400 \text{ ns})

Data @ 1 breakdown/hour
Data @ 0.2 breakdown/hour