

## Time resolution of 4H-SiC PIN and simulation of 4H-SiC LGAD

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To explore the timing performance of the wide bandgap semiconductor devices, we measured the time resolution of 100 um 4H-SiC PIN device manufactured in China using the beta source and LGAD as reference. A simulation has been carried out to investigate the timing performance. We also reported the prospects of 4H-SiC with gain layer structure (LGAD) using the TCAD simulation.

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