

Influence of oxygen precipitates on photodiodes dark current

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Strong correlation was observed between ring-like patterns in distributions silicon photodiodes dark current, carrier lifetime and microdefect etching pits. From our results It can be reasonably deduced that ring-like patterns in distribution silicon photodiodes dark current and carrier lifetime are related to oxide precipitates.

Keywords: dark current, lifetime of charge carriers, etching patterns, oxide precipitates, packaging defects.

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