



**Fig. 1.** Device schematics and I-V curves of GaAsP/Ga<sub>2</sub>O<sub>3</sub> and Si/Ga<sub>2</sub>O<sub>3</sub> PN diodes.

**Table 1.** Summary of the diode characteristics of GaAsP/Ga<sub>2</sub>O<sub>3</sub> and Si/Ga<sub>2</sub>O<sub>3</sub> PN diodes.

	GaAsP/Ga <sub>2</sub> O <sub>3</sub> PN Diode	Si/Ga <sub>2</sub> O <sub>3</sub> PN Diode
On/off Ratio	10 <sup>3</sup>	10 <sup>7</sup>
Ideality Factor	1.35	1.13