

Abstract Submitted  
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**Electrical properties of Mo/SiC Schottky barrier diodes**<sup>1</sup> SAI BHARGAV NAREDLA, TOM ODER, Youngstown State University — Molybdenum has been recognized as a refractory metal suitable for high temperature applications. It has been used as a barrier material in processing silicon carbide devices. In this investigation, molybdenum Schottky contacts were deposited on SiC at different temperatures ranging from 26 °C to 900 °C using dc magnetron sputtering. The electrical properties of the Schottky barrier diodes were characterized using current-voltage, capacitance-voltage and current-voltage-temperature measurements. The as-deposited diodes exhibited ideality factor varying from 1.03 to 1.71 and barrier height ranging from 1.04 to 1.58 eV. Additional results from the characterization will be provided in this presentation.

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