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## Contact behavior of RF MEMS devices

Muhammad Mateen Hassan<sup>1</sup> and Farooq Ahmed Bhatti<sup>2</sup>

<sup>1</sup>Department of Electrical Engineering, Capital University of Science and Technology, Pakistan

<sup>2</sup>Department of Electrical Engineering, Military College of Signals, NUST, Pakistan

This paper demonstrates the contact noise found in RF MEMS switches which reduces the lifetime of RF MEMS devices. Contact resistance and its influence were investigated with respect to load current, actuation voltage, contact history and time. New experimental technique is reported to find the number of asperities responsible for reliable contact. Contamination film relation with contact noise is also reported.

**Keywords:** radio frequency micro-electro-mechanical systems switch, gold, single pole single throw