

Abstract Submitted  
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**On Chip Josephson Junction Microwave Switch** OFER NAAMAN, MOHAMED ABUTALEB, CHRIS KIRBY, MICHAEL RENNIE, Northrop Grumman Systems Corp. — We report on the design and measurement of a reflective single-pole single-throw microwave switch based on a superconducting circuit containing a single Josephson junction. The device has no internal power dissipation, minimal insertion loss, and is controlled by  $\Phi_0$ -level base-band signals. The data demonstrates the device operation with 2 GHz instantaneous bandwidth centered at 10 GHz and better than 20 dB on/off ratio for input powers up to -100 dBm.

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