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Title:	Construction of Thin Film Attenuators for Microwave Frequency Signals for Usage at Cryogenic Temperatures
Authors:	<a href="#">Sharma, Mohak.</a>
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Abstract:	We review the general concepts pertaining to microwave frequency transmission lines and apply them to construct thin film attenuators for the usage at cryogenic temperatures. We go through a brief discussion on attenuators including their usage and characteristics. This is followed up by simulations of the well established transmission lines: microstrip and GCPW. Taking an extensive literature review as the basis, we modify these structures to integrate lossy elements in order to construct our desired device. This is accompanied by the necessary theoretical analysis and simulations. We finally follow this up with the fabrication process of our device and its measurement results.
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