

# Prototyping Dual-band Artificial Magnetic Conductors With Laser Micromachining

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In this paper we describe a laser micromachining process for prototyping dual-band artificial magnetic conductors (AMCs) with narrow slots in the order of ( $\sim 100$  nm) or even narrower. Because these narrow slots cannot be correctly fabricated using standard milling machine, we explore laser micromachining. Although these AMCs can be made inexpensively using mass production processes, prototyping them is difficult. Considering that the period of the dual-band AMC surface is much smaller than the wavelength, we explored the use of a waveguide to measure the reflection coefficient of fabricated prototypes.