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标题: Influence of laser wavelength on insertion loss of silicon-based optically controlled microwave switch
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摘要: The influence of laser wavelength on the insertion loss of the silicon-based optically controlled microwave switch (OCMS) operating at L-band is investigated.The OCMS is made of a section of microstrip transmission line by placing a silicon dice on a microstrip gap. Both numerical simulations and experiments are conducted in the range of the wavelength from 600 nm to 980 nm for this study. The results show that the 980 nm laser achieves the lowest insertion loss in this wavelength range if the OCMS is excited with the same optical power density. (C) 2012 Wiley Periodicals, Inc. Microwave Opt Technol Lett 55:187190, 2013; View this article online at wileyonlinelibrary.com. DOI 10.1002/mop.27244
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