

# Abstracts

## Capacitance Definitions for Parametric Operation (Correspondence)

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*H. Heffner. "Capacitance Definitions for Parametric Operation (Correspondence)." 1961  
Transactions on Microwave Theory and Techniques 9.1 (Jan. 1961 [T-MTT]): 98-99.*

The purpose of this note is to reconcile the various definitions of nonlinear or equivalent time-varying capacitance which appear in the literature concerned with parametric devices. The problem considered is one of a nonlinear reactive element, let us say a capacitance, which is pumped by strong pump source at frequency  $f_{\text{sub } p}$  and which couples two circuit modes at frequencies  $f_{\text{sub } s}$  and  $f_{\text{sub } i}$ , usually called the signal and idling frequencies. For parametric operation we demand either  $f_{\text{sub } p} = f_{\text{sub } i} + f_{\text{sub } s}$  or  $f_{\text{sub } p} = f_{\text{sub } i} - f_{\text{sub } s}$ .

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