

21

Views

0

CrossRef citations
to date

0

Altmetric

Circuit techniques and analysis

A novel circuit for investigating BJT current source dynamic resistance and capacitance at low DC bias currents

M. E. BRINSON & D. J. FAULKNER

Pages 595-606 | Received 23 Mar 1995, Accepted 16 May 1995, Published online: 19 Apr 2007

[Download citation](#) <https://doi.org/10.1080/00207219508926296>[References](#)[Citations](#)[Metrics](#)[Reprints & Permissions](#)[Get access](#)

Abstract

A novel circuit for investigating BJT current source dynamic resistance and capacitance is described and analysed. This circuit is a single-stage differential amplifier driving series-connected diodes, and has the unusual property that its differential gain is equal to the number of load diodes. The circuit is suitable for determining current source dynamic resistance and capacitance at low bias currents, and allows their values to be extracted from common-mode data by curve fitting. Sample dynamic resistance and capacitance results are reported and compared with values obtained from SPICE simulation.

[Select Language](#) ▼

Translator disclaimer

Sign in to start your session

SD

Requ
tri