

Abstracts

Discontinuities Appear in the Repeller Current of a Reflex Klystron Detector (Correspondence)

K. Ishii. "Discontinuities Appear in the Repeller Current of a Reflex Klystron Detector (Correspondence)." 1963 Transactions on Microwave Theory and Techniques 11.2 (Mar. 1963 [T-MTT]): 154-155.

It is known that reflex klystrons are usable as microwave detectors. When the repeller current was plotted against acceleration grid (which is anode) voltage, Kocvienko, Deviatkov, and Lebed found discontinuities. Whitford did not find these discontinuities for the 726A reflex klystron. Kocvienko, et al., explained that the discontinuities were attributed to the appearance and disappearance of the virtual cathode when the klystron began or stopped oscillation. Whitford explained that the beam current density of the 726A reflex klystron was sufficiently high to maintain the virtual cathode at all times.

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