Shmoo Plot Shapes

A shmoo plot is a graph that represents how a particular test passes or fails when parameters like frequency, voltage, or temperature are varied and the test is executed repeatedly. The shape of the failing region is meaningful and helps in determining the cause of the failure. Shmoo plots typically fall into familiar categories with descriptive names. A shmoo plot of normal circuit operation shows better high-frequency performance as supply voltage increases, as shown in Fig. 1a. However, other shapes frequently seen include the curlback (Fig. 1b), ceiling (Fig. 1c), floor (Fig. 1d), wall (Fig. 1e), finger (Fig. 1f), and breaking wave (Fig. 1g).



Fig. 1. (a) Normal shmoo plot. (b) Curlback. (c) Ceiling. (d) Floor. (e) Wall. (f) Finger. (g) Breaking wave.