

## **Comb Generators**

Series 95
Combline Spacing 1 to 1000 MHz
Commercial -- Military



- Built-in-Test (BIT)
- Jammers
- Phase Locked Loops
- Lower Cost
- Modulation Option

API Technologies' Series 95 Comb Generators use a Step Recovery Diode (SRD) to generate very narrow voltage spikes; these in turn produce an output frequency spectrum rich in harmonics. The spacing between the signals is equal to the source that drives the SRD, which in most cases is a stable crystal oscillator. Examples of the spectrum for a number of comb generators are included on the reverse side of this fact sheet. The crystal oscillator is normally internal; however, an external signal can be used to drive the SRD.

If only certain combline signals are required for a particular application, a filter tuned to the desired combline must be used.

Comb Generators have several applications. They are commonly used as Built-in-Test (BIT) oscillators to calibrate receivers; other uses are in Phase Locked Loops (PLL), Jammers, Antenna Testing, Linearizing Voltage Controlled Oscillators, etc.



## **Comb Generators**

## **SERIES 95** SPECIFICATIONS

Comb Spacing	1 to 1000 MHz
Output Spectrum	See plots (Typical)
Frequency Stability	+1 to +30 ppm
Temperature	(0 to +50 °C) to (-55 to +85 °C)
Input Voltage	+15 VDC
Connectors	RF-SMA Jack
DC Input	Solder Type Filter Capacitors

## **SERIES 95** SPECTRUM ENVELOPES







