Signal Generator Family with Best-in-Class Phase Noise and Broad Frequency Generation

Anritsu Company introduces the MG3690C series of RF/Microwave signal generators that combines best-in-class phase noise and broad frequency generation to allow engineers to conduct highly accurate tests on subsystems, especially those in local oscillator substitution and clock generation applications. The overall performance of the MG3690C signal generators makes them well suited to test microwave components, subsystems, and systems during design and manufacturing, as well as for signal simulation to test and verify radar and communications systems. The MG3690C is the latest member of the only synthesizer family that generates signals from 0.1 Hz to 70 GHz. Baseband, IF, RF, and microwave signals can be produced from a single instrument to maximize equipment use and reduce cost of test. Options set a new level for low phase noise of -115 dB/Hz at 20 GHz and 10 kHz offset. This means that devices under test (DUTs) are stimulated with known good signals, thus enhancing the integrity of the measurement and reducing time tracking down test-equipment induced measurement problems. The series is also excellent for digital datacom applications, as the extremely low phase noise of the MG3690C minimizes instrument-induced clock jitter. The MG3690C can generate narrow pulses down to 10 ns to emulate a wide variety of signals. Amplitude leveled pulses down to 100 ns can be generated to minimize amplitude drift over time and temperature for tight test margins. Amplitude-leveled pulses also eliminate the need for a CW mode during frequency change and minimize the chances of the DUT becoming damaged. The MG3690C series can generate doublet, triplet, and quadruplet pulses with independently set spacing and pulse width, making the signal generators well suited to emulate a wide range of radar returns. The signal generators also deliver best-in-class measurement speed, as their fast switching speed of 5 ms reduces test time.

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