

TABLE 1—ALLOWABLE ADJACENT-CHANNEL PHASE-NOISE REQUIREMENTS FOR GSM SYSTEMS

GSM per 05.05 in wideband application	Offset	Performance*
Adjacent 1: 9 dBc	100 kHz to 300 kHz	~ - 101 dBc/Hz
Adjacent 2: 41 dBc	300 kHz to 500 kHz	~ - 133 dBc/Hz
600-kHz blocker: - 26 dBm	500 kHz to 700 kHz	~ - 151 dBc/Hz
800-kHz blocker: - 16 dBm	700 kHz to 2.9 MHz	~ - 161 dBc/Hz
3-MHz blocker: - 13 dBm	2.9 MHz to band edge	~ - 164 dBc/Hz

* This number assumes that the noise due to phase noise is equal to 6 dB below the thermal noise of the overall receiver. The typical noise figure is 4 dB; therefore, the total thermal noise is - 170 dBm/Hz referenced to the antenna, and the equivalent phase noise would be 6 dB below this figure, or - 176 dB.