

**System Performance Matrix:**

The MAX3509 with 7dB loss on output will meet Euro-DOCSIS with properly designed duplexer. The output of the MAX3509 uses a 1:2 output transformer with 35.5 $\Omega$  in series to maintain good return loss and match to any output filter.

Frequency	Output Transformer	Gain Code*	Pin (dBmV)	Pout (dBmV)	2 <sup>nd</sup> Harmonic	3 <sup>rd</sup> Harmonic	Pass
22MHz	1:2	61	34	61.2	64.78dBc	51.53dBc	Yes
65MHz	1:2	62	34	61.52	58.82dBc	41.2dBc	**

\* Gain code used may change part to part

\*\* Depends on duplexer attenuation out of band.