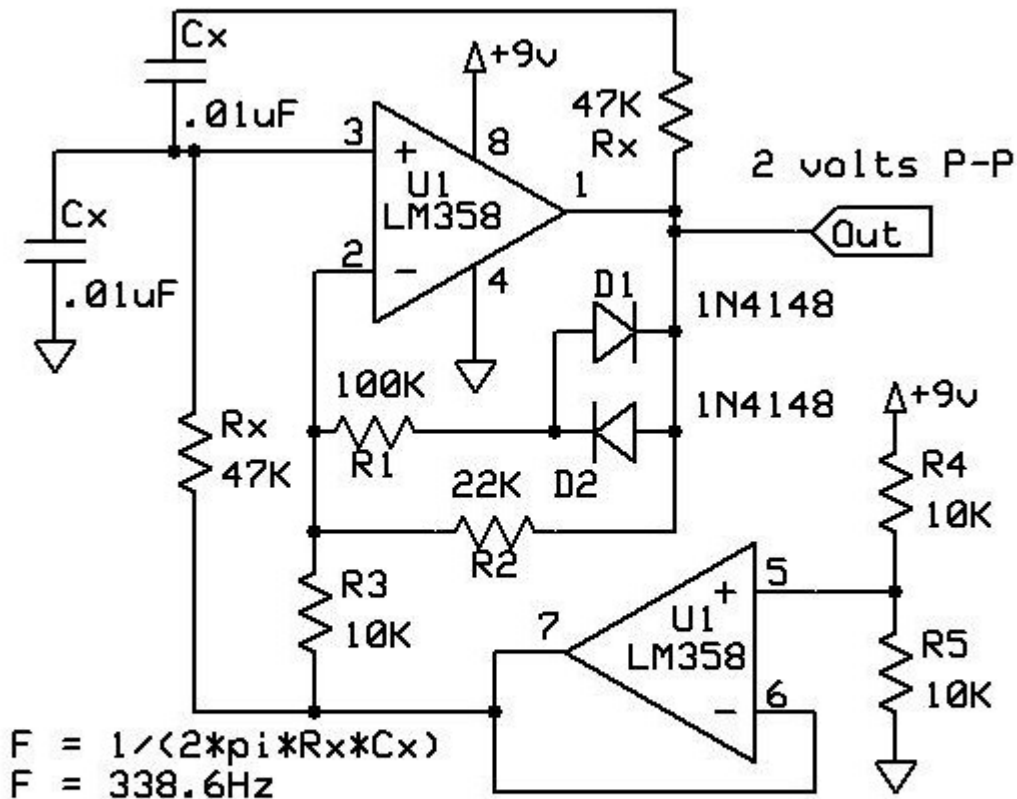# Wien Bridge Oscillator

This circuit produces an extremely low distortion sine-wave, in spite of the non-linear devices used for amplitude limiting (D1 and D2). The reason is first that distortion (harmonics) are fed to the minus input of the opamp with far less loss than to the plus input, severely attenuating them. Second, a Wien bridge oscillator requires a gain of exactly 3.00. No more and no less. For lowest distortion, calculate the minimum and maximum available gain to just above and just below 3.00. In other words, use as little amplitude control as possible.

$F = 1/(2*pi*Rx*Cx)$
$F = 338.6Hz$

Wien Bridge Oscillator

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