Figure 1 This current-fed resonant Royer converter produces a high-voltage output. Amplifier $A_1$ biases the $Q_1$ current sink. This step creates a feedback loop that stabilizes the output voltage. Amplifier $A_1$’s 0.001-µF-capacitor, 1-kΩ-resistor network creates a phase lead relative to the output filter, thereby optimizing transient response. Low-leakage clamp diodes $D_5$ and $D_6$ protect $A_1$.