9.2.2.13.1 Example

Reducing the peak charge current from the previous example to I_{ON-PK} = 1.5 A, requires a R_C value of:

$$R_C = 10\ \Omega \times \left(\frac{2\ A}{1.5\ A} - 1 \right) = 3.33\ \Omega \tag{13}$$

9.2.2.14 *Higher Output Current Using an External Current Buffer*

To increase the IGBT gate drive current, a non-inverting current buffer (such as the npn/pnp buffer shown in Figure 72) may be used. Inverting types are not compatible with the desaturation fault protection circuitry and must be avoided. The MJD44H11/MJD45H11 pair is appropriate for currents up to 8 A, the D44VH10/ D45VH10 pair for up to 15 A maximum.

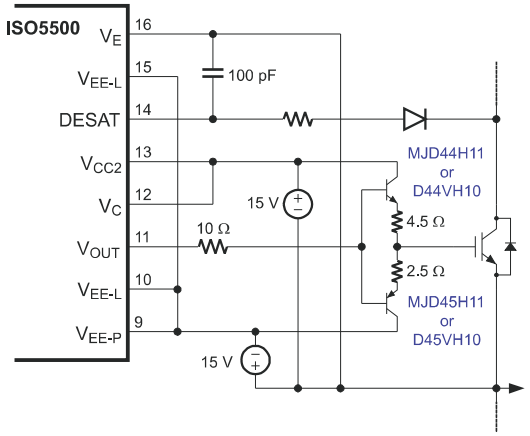

Figure 72. Current Buffer for Increased Drive Current

9.2.3 Application Curve

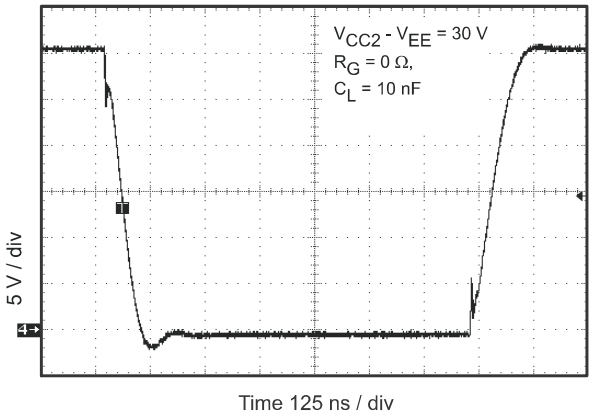

Figure 73. Output Waveform