Deliverable 15: What is the % error of the measured dutv cycle from its nominal/calculated value? If you observe a deviation greater than 5%. comment on possible sources of error that have contributed to this deviation.

Deliverable 14

$T = (0.693)(R_A + 2R_B)(C \text{ seconds})$

$T = (.693)(9.793\ k\Omega + 201.306\ k\Omega)(1.055\ \mu F)$

$T = (.693)\left[211.099 \cdot 10^3\ \Omega\right](1.055 \cdot 10^{-6}\ F)$

$T = .1543376$ seconds

$T = 154.3381$ ms

$f = \frac{1}{.1543376}$ Hz

$f = 6.4793$ Hz

$R_A = 9.793\ k\Omega$
$= 9793\ \Omega$

$R_B = 100.653\ k\Omega$
$= 1006.53\ \Omega$

$C = 1.055\ \mu F$

* $F = \frac{s}{\Omega}$

$DC = \frac{9.793\ k\Omega + 100.653\ k\Omega}{9.793^{k\Omega} + 2(100.653)\ k\Omega}$

$DC = .523 \Rightarrow 52.3\ \%$