

## Duty Cycle Calculation

$$\begin{aligned}\text{On time} &= 65.5/121 \times 100 \times \text{pulse train duration} \\ &= .945 \text{ ms}\end{aligned}$$

Duty cycle correction = on time/ 100 ms or period, whichever is lesser

Period between each pulse train is 150 ms.

Therefore,

$$\begin{aligned}\text{Duty cycle correction} &= .945 \text{ ms}/100\text{ms} \\ &= 9.45 \% \\ &= 20 \log (.0945) \\ &= -20.5 \text{ dB}\end{aligned}$$

A -20 dB correction, because a maximum of -20 dB is allowed.