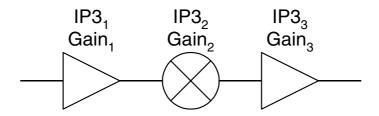
## 13



## **CASCADED INPUT IP3 CALCULATION**



The cascaded IP3 for the above is calculated using the equation

$$IP_{TOT} = \frac{1}{\frac{1}{IP3_1} + \frac{Gain_1}{IP3_2} + \frac{Gain_1 \cdot Gain_2}{IP3_3} + \dots}$$

Use the linear terms for IP3 and Gain in the above equations, not the decibel form, ie.:

$$Gain_n = 10^{\frac{Gain_n(dB)}{10}}$$

$$IP3_n = 10^{\frac{IP3_n(dB)}{10}}$$