

Claim Language	Exemplary Citations in Galaxy S									
	<p>necessarily bound the range of L. In particular, L must be less than 35μm (the length of the gate electrode), but also greater than the sum of the source³, channel and drain regions (7μm + 10μm + 7μm = 24μm), <i>i.e.</i>, 24μm \leq L \leq 35μm.</p> <p>As for the d1 dimension, as discussed above, it would be obvious to have an overlap length d1 that shields the source and channel regions but not the drain region. Applying Godo's dimensions, the minimum value for d1 is 17μm (the sum of source region and channel region lengths), and the maximum value for d1 would be the entire channel layer <u>except</u> for the drain, <i>i.e.</i>, d1 \leq L - 7μm.</p> <table border="1" data-bbox="940 654 1654 867"> <thead> <tr> <th></th> <th>d1 (μm)</th> <th>L (μm)</th> </tr> </thead> <tbody> <tr> <td>Minimum</td> <td>17</td> <td>24</td> </tr> <tr> <td>Maximum</td> <td>L-7</td> <td>35</td> </tr> </tbody> </table> <p>Based on these allowable ranges for d1 and L, the allowable range of d1/L can be determined. The minimum value for the fraction d1/L is achieved when the numerator d1 is minimized and the denominator L is maximized, <i>i.e.</i>, d1_{min}/L_{max} is 17μm/35μm = 0.48. To maximize d1/L, the maximum value for d1 is L-7μm as shown above. Substituting, the ratio d1_{max}/L = (L-7μm)/L = 1-7/L. Thus, d1/L is maximized when 7/L is minimized, <i>i.e.</i>, when L is maximized where L = 35μm. Thus, the maximum d1/L ratio is 1-7/35 = 1-0.2 = 0.8. Accordingly, using Godo's dimensions as disclosed in Fig. 20A, the resulting d1/L must be between 0.48 \leq d1/L \leq 0.8, wholly within the range as claimed in [1f]. Stated differently, any transistor that is sized consistent with</p>		d1 (μm)	L (μm)	Minimum	17	24	Maximum	L-7	35
	d1 (μm)	L (μm)								
Minimum	17	24								
Maximum	L-7	35								

³ This calculation includes only the lengths for the source region, channel region and drain region as disclosed in Godo because it seeks the lower bound for L. In other words, for a transistor to be consistent with the Godo disclosure, the length L must be large enough to accommodate the three expressly disclosed lengths, which is 24 μm .

